ATPM

About This Particular Macintosh: About the **personal** computing experience™

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Welcome

by Robert Paul Leitao, rleitao@atpm.com

'Twas the eve of this Christmas, and all through the house neither an iPod was stirring nor its companion iMac with Bluetooth-enabled mouse. iTunes-purchased music had just filled the night's air with selections from the Counting Crows' new album chosen with the greatest of care. It was now time for silence and dreams of the next day. There was no thought of the holiday credit card bills and one's ability to pay. The bills will be due in early next year's time and not to use the plastic to celebrate the consumer season some might consider a crime.

G5s under the tree if it's a tall one at all, an iSight and iBook are against the near wall. No stockings were hung because there's no chimney in the place, but the table was set with linen and white lace. Gourmet coffee and exotic breakfast fare had been planned, all purchased online over the AirPort network and house LAN. Each thing had been wrapped in papers colored aqua and chrome, and decorated so nicely as if by a gnome.

What had taken hours to wrap would be undone QuickTime indeed, the name of the gift giver few persons would pay heed. It's an annual event but each year seems new, many a gift with nary a clue. That is until the gifts are unwrapped for the entire world to see and if the items have a certain logo the recipient may giggle with considerable geek glee.

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The rhyming text above may seem apropos. But December Mac news can be a bit slow. We cover the world, our editors really do; this month we just wish to say a merry hello to all of you. This would be it except for the fact that what news there is we will report with great tact.

Now on the stuff we usually say, no reindeer, no elves, not even a sleigh.

The Cat Is Back But Where Did It Go?

The reincarnated Napster online music service arrived back on the scene in late October, but few people have apparently begun using the service. The stock of parent Roxio has fallen about 50% since the debut of Napster II and analysts have expressed concerns about Roxio's cash position and ability to fund adequate advertising exposure to support the service.

So far the new Napster has only served to highlight the success of Apple's iTunes Music service.

I Think I'm Turning Japanese

Borrowing lyrics from an old song performed by The Vapors, this thought may have been running through the minds of Apple executives as the first Apple retail store in Japan opened its doors on November 30th. The store sports five floors of retail space, and store personnel offer customers assistance in a number of languages and dialects. Apple maintains a small but growing market share in Japan and the new store will add a significant boost to the company's overall presence in the island nation.

Chicago, Chicago

Not to be overshadowed by Apple's new store in Japan, the recently opened Apple retail store on North Michigan Avenue in Chicago boasts the largest retail space of any US Apple store and reports indicate it is the most trafficked of all Apple retail locations.

Apple has added an enterprise focus to its retail store effort and offers pro Mac users special retail store programs and services with the purchase of a G5 Macintosh.

Only $400 More

That's all a consumer needs to pay to pick-up an additional three inches of screen real estate on the new 20" iMac. At the same time Apple dropped the price on the 1.6 GHz G5 mini-tower while also offering a new dual 1.8 GHz G5 configuration. The 20" iMac retails for $2,199 versus $1,799 for the 17" variety of Apple's award-winning consumer desktop product.

Apple.com Beats up on Dell

There's one place in the world at least that Apple outshines its much larger PC hardware competitor. Apple.com is pulling more unique visits than any other PC company's Web site. It's no wonder Dell and other online retailers are interested in adding a digital music service to its offerings. Thanks in part to the success of iTunes for Windows, unique visitors to the Apple Web site have increased dramatically.

Virginia Tech Mac Cluster: It's Official

Virginia Tech's Big Mac G5-based supercomputer cluster, now called "X," took the #3 spot among the world's supercomputers. Assembled from 1,100 dual-processor 2 GHz G5 minitowers, the cluster recorded performance exceeding 10 teraflops to garner the top spot among supercomputer clusters. Reportedly Apple is aggressively responding to inquiries from research facilities and universities spawned by Virginia Tech's success with the G5 cluster.

See You Next Year

We'll be back in January to start our tenth calendar year of publication. Until then please enjoy our December issue. No rhymes to ring in the New Year. We promise.

The ATPM Staff

Our December issue includes:

The Candy Apple: Learning Has Changed

Ellyn decides there are times it's good *not* to find something on the Internet.

The Desktop Muse: The New iMac

David Ozab puts the new 20" iMac up against the current G4 and G5 towers and the PowerBooks and comes up with a bottom-line view to help choose one over the other.

About This Particular Web Site

Paul Fatula returns with sampling of less-than-mainstream (dare we say "odd" or "bizarre"?) Web sites—more proof that you probably can't think of an idea that hasn't already been thought of and put on a Web page.

Report: Mac Expo 2003

Though it boasted the highest visitor turnout to date, Chris Ward reports on a somewhat disappointing Mac Expo UK.

Report: O'Reilly Mac OS X Conference 2003

Paul Fatula reports on the October 2003 O'Reilly Mac OS X Conference.

Quick Tips in Design: Part 6—Color Science

Andrew Kator continues his series of graphics tutorials. This month, he explores color science, comparing the traditional and aesthetic aspects to the scientific and technological.

About This Particular Outliner: Outliner Use Patterns

Ted Goranson continues the first stage of his survey of outliners by covering the various uses of outliners.

Cartoon: Cortland

NeoCort assists a Mac lab in danger of being overcome by "the machines."

Cartoon: iTrolls

The iTrolls get Christmas presents, are punished for a few mistakes, spend too long using Soundtrack, discover the true dawn of civilization, and redecorate the computer room.

Desktop Pictures: Vegas Hotels at Night

Lee Bennett offers nighttime views of eight Las Vegas hotels.

Review: iConquer 2.2

Eric Blair weighs in on iConquer, an implementation of Risk that uses numerous OS X technologies, and finds that it gets back to the roots of the classic game.

Review: iPhoto 2: The Missing Manual (book)

Digital photography enthusiast Christopher Turner explores the definitive work on Apple's iPhoto: *iPhoto 2: The Missing Manual*.

Review: Megalopolis Backpack

Back with still another choice for a computer backpack, Chris Lawson tries out the Megalopolis Backpack from Boblbee.

Reviews: Snood 3.0

Chris Lawson takes us on a tour of this very popular and addictive game.

E-Mail

Kudos

You guys are unbelievable! What a wealth of helpful knowledge for Mac users, and all for free! Where's the snag? Maybe there *is* a free lunch, after all!

Congrats, and keep up the excellent work, guys. Thanks a bunch!

—Ilbert Walker

Outliner Features

Thank you for all this research—very interesting and useful!

I used, and still use, MORE from versions 1.0 through 3.1 and didn't know there were so many new options. I have published 200-page internal company instruction books and have done dozens of PowerPoint-type presentations in MORE over the years because couldn't get Word to do what I wanted.

Thanks again from an outliner junkie.

—Ralph Finley

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I am a big time user of OmniOutliner. I have been using it to create Keynote presentations for my history students since August. It works like a charm.

Another interesting outliner/research tool is TakeNote for Windows/Mac from Academix. It's very inexpensive, simple to use, and reasonably effective. I have my students use it for research projects.

Love the columns.

—*David Huston*

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It's nice to find outline enthusiasts and viable software after a long dry spell (since MORE). I hadn't realized the variety of ways of displaying information until coming here.

—*Tom Swell*

Advertising and Apple

I agree, somewhat, with the comment about adding some color, although let's not go all the way back to the multicolored iMacs. I don't want to see "flavors" showing up again. It's hard to convince your Windows user cohorts that an Apple is a serious computer when it's lime green. Black is a good suggestion. That way, I can polish my shoes and my laptop at the same time.

—*Paul Barker*

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I think the biggest problem with Apple's advertising is that they only advertise a product when it's new. In other words, a new iMac is released and they you'll see TV commercials for about a month, then nothing until the next new product. Apple really needs to focus on continuing advertising for existing products.

Another thing that I've noticed while looking through the weekly sales flyers in the Sunday papers (other than the fact that Apple should start distributing these in the markets that have Apple Stores) is that Apple needs be more active in the way their resellers advertise Apple products.

What do I mean by this? Take your typical Best Buy sales insert. You will undoubtedly see the top-of-the-line Apple product (and, therefore, the highest-priced) on the same page as the bottom-of-the-line corresponding PC product (and, therefore, the lowest-priced). The

average person seeing this isn't going to compare the features of these. They're just going to think, "look how much more expensive the Macs are!" How can you sell a $2,000 iMac next to a $400 generic piece of crap?

—*George Krueger*

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Nice marketing ideas. I would like to throw in two more from the perspective of a recent switcher:

1. Direct the marketing to Web designers and developers. This is the one simple reason I recently switched. The moment I learned that OS X came pre-installed with Apache, PHP, and Perl, that G4 iBook looked more interesting than ever. And then, when I heard how easy it is to configure these services together, that was the moment I placed an order. I, like many other PC-based Web designers and developers, did not know this before someone told me about it. If OS X could somehow bundle MySQL on top of all this, it would've shaved another 15 seconds before I picked up the phone and called the Apple Store.

2. Develop and distribute a comprehensive PC-to-Mac migrating tool. I would have loved to have seen a suite of freely available tools on every Mac sold that has the ability to easily and accurately export bookmarks, e-mails, addresses, and other pertinent personal information from a PC to a Mac. If Apple spent more time developing intelligent migration tools for PC users and less time developing irrelevant and arrogant switch ads, their campaign would've been more successful.

—*Sox*

Apple sells Detto Technologies' Move2Mac which is a great utility to do what you describe.   —*Lee Bennett*

Learning Has Changed

In my Research Ethics class we talk about how important it is to protect vulnerable populations, meaning the kind of research subjects that could be more easily taken advantage of than a typical subject. The standard groups of vulnerable populations are children, prisoners, the mentally handicapped, and the elderly.

We talked recently about Japanese relocation camps during WWII, in which 120,000 Japanese-Americans were interned in ten camps, ostensibly for their own protection against anti-Japanese sentiment in the United States. The harm was incalculable, as many of those interned were never able to recover their property later. Our research ethics question was whether anyone tried to take advantage of this vulnerable population to do medical research. I anticipated that a military type would have seized on the opportunity to find out how someone of Japanese ancestry would respond to a particular biological or chemical agent. But I also expressed a hope that the willingness to protect individual liberty would have extended far enough to prevent this sort of abuse.

I spent several hours with Google and found nothing. Zip. Nada.

For that I am glad that apparently nothing happened. I said to a couple of people that the nature of the Internet is such now that if something like this had happened, it would be out there. Even if somebody just wanted to plant a rumor that something had happened, Google would find it if it were out there. Many of the people interned in the camps were children, and are still alive today. Those who have stories to tell have told them, and so far, none of those stories has included research abuse.

There is so much garbage on the Net that we must take care not to believe something just because we have found it there. Many of the hits I got during my search were weblogs and personal observations. I'm not saying these are less reliable than more traditional sources, and at some point, all of history is really a narrative rather than a list of facts. It comforted me to know, though, that neither version of history—the "official" one nor the narrative one—included the sort of research abuse I was searching for.

The nature of learning has changed. I still like books, but it is nice to know how easy the Internet makes finding things to read. I had two projects to check out for class this week: the one about Japanese relocation camps, and the nature of an HIV registry we'd heard about. Both took some time, but after wading through the reliable source Web sites, I learned lots of stuff about both. Only two of the relocation camps were in California, for instance, even though most of those relocated lived there. One was actually as far east as Arkansas. As for the HIV registry, each state has its own, plus there's a really large one administered by Veterans' Affairs. They are not accessible to insurance companies, or really much of anyone else, so we don't need to get all riled up about our privacy being invaded.

Studying for game shows the past few years has reinforced for me just how much the Net makes learning easy. When I decided I wanted a list of Best Picture Oscar winners, I had it in seconds. A map of South America? No problem. Color or black and white? With or without names of geographical features? Canadian provinces and their capitals, the table of chemical elements, 192 world capitals (I trimmed the list to 108 just to be realistic). All this stuff is easily findable and printable, and now I have a notebook full of it.

More important, it is more portable than an encyclopedia but also more up-to-date. Rather than buy a set of reference books each year, I can just check in on a set of current maps anytime I want. Someone said last month's column was "purile," which I had to look up, and then I could explain to the reader that while "puerile" is an adjective that may or may not apply to my writing, it is regardless spelled with two e's.

See, even sass has improved with the accessibility we have on the Net. Onward!

The New iMac: Where Does it Fit in?

Remember the old iMac? Remember when it broke the $1,000 barrier, though just barely at $999? Even after a major, and long overdue, redesign, the iMac was Apple's consumer desktop. Until now. The new iMac, complete with 20" display, is the first iMac to move above the $2,000 mark with a retail price of $2,199. So is it a pro desktop? It's certainly priced like one.

The Pro iMac

If Apple intends to aim the iMac at the pro market, it's important for pro users to compare the iMac with Apple's comparably priced desktop systems, the 1.6 GHz G5 and the 1.25 GHz G4. And since more and more pro users are buying PowerBooks as their primary computers, one must add the 15" PowerBook to the mix.

Model	20" iMac	PowerMac G5	PowerMac G4	15" PowerBook G4
Display	20" LCD	20" Cinema Display (add $1,299)	20" Cinema Display (add $1,299)	20" Cinema Display (add $1,299)
Processor	1.25 GHz G4	1.6 GHz G5	1.25 GHz G4	1.25 GHz G4
System Bus	167 MHz	800 MHz	167 MHz	167 MHz
Memory	256 MB (1 GB max)	256 MB (4 GB max)	256 MB (2 GB max)	512 MB (2 GB max)
Hard Drive	80 GB	80 GB	80 GB	80 GB
Optical Drive	SuperDrive	SuperDrive	SuperDrive option (add $200)	SuperDrive

Model	20" iMac	PowerMac G5	PowerMac G4	15" PowerBook G4
Graphics	GeForce FX 5200 (64 MB RAM)	GeForce FX 5200 (64 MB RAM)	ATI Radeon 9000 (64 MB RAM)	ATI Radeon 9600 (64 MB RAM)
Ports	FireWire 400 (2), USB 2.0 (3), USB 1.1 (2)	FireWire 800 (1), FireWire 400 (2), USB 2.0 (3), USB 1.1 (2), FireWire 800 (1)	FireWire 400 (2), USB 1.1 (4)	FireWire 400 (2), USB 1.1 (1)
Audio	Headphone, stereo mini jack, line-in	Optical in/out, analog in/out, stereo mini jack, headphone	Analog in/out, stereo mini jack, headphone	Line-in, headphone
Networking	10/100 BaseT, 56K modem	10/100/1000 BaseT, 56K modem	10/100/1000 BaseT, 56K modem	10/100/1000 BaseT, 56K modem
Wireless	AirPort Extreme ready, Bluetooth option	AirPort Extreme ready, Bluetooth option	AirPort Extreme ready	AirPort Extreme ready, Bluetooth built-in
Open Bays	None	Hard drive (1), optical (1)	Hard drive (3), optical (1)	None
PCI Slots	None	3	4	PC Card Slot

The iMac vs. the G5

There's no question which of these systems is the most powerful, but is the difference in price worth giving up some power? Add a 20" Cinema Display to the G5 and the package totals $3,098. What does an extra $899 add? Besides a more powerful processor, the G5 also holds four times as much RAM (4 GB vs. 1 GB, though both ship with 256 MB

installed), has three PCI slots, gigabit Ethernet, and, most importantly for audio pros, optical digital audio inputs and outputs. These optical jacks can carry both SPDIF-formatted stereo audio and encoded Surround Sound.

The iMac vs. the G4 Desktop

These two systems are much closer together. Both have 1.25 GHz G4 processors, 80 GB HDs, and ship with 256 MB of RAM. And the stock G4 only comes with a combo drive. A SuperDrive adds $200 to the price. Add a 20" Cinema Display as well, and the total comes to $2,798. What does an extra $599 add? PCI slots, more space for RAM (2 GB vs. 1 GB, and again both ship with 256 MB installed), and, most important for audio pros, an OS 9–bootable system. Anyone with a lot of income invested in legacy hardware and software will appreciate the transition time provided by a dual-boot system.

The iMac vs. the PowerBook

There are a couple of directions one can go here. The system closest to the iMac in terms of hardware specs is the 15" SuperDrive-equipped model ($2,559). The 17" model ($2,999) has a faster processor (1.33 GHz), but the display still falls short of the 20" iMac. For purposes of comparison, I'll stick with the 15" model, adding a 20" Cinema Display and a Apple Keyboard and Mouse for home use. The total price tag comes to a whopping $3,996. What does an extra $1,797 add? Portability, and not much else. A 12" PowerBook with a SuperDrive costs $1,799, so get the iMac and the laptop.

Recommendations

After writing this article, I can see where the iMac fits in. If PCI expandability, OS 9 compatibility, or pro-quality digital audio jacks aren't worth paying extra for, then the iMac is worth a look. For those of us who've been in audio for any length of time, though, and have accumulated hardware that requires PCI slots, or software that only runs in OS 9 (that list has dwindled considerably, but upgrades cost money), the iMac is not an option. So for those who need OS 9 a little longer (like me), get the G4 desktop. For those completely upgraded to OS X, and salivating over the optical ports, get the G5. For those who absolutely need portability, get a 12" PowerBook and live with the smaller screen.

And for those who have no need for PCI slots, no need for OS 9, and don't know what SPDIF stands for, give the 20" iMac a look. It's the most affordable new Mac with a 20" display you'll find anywhere.

About This Particular Web Site

by Paul Fatula, pfatula@atpm.com

DealSearch.net

Many online stores prompt you, when "checking out," to enter a coupon code to get a discount on your purchase. If you're anything like me, you haven't got one. But wouldn't it be nice to get a free widget or a 10 percent discount or free shipping on your order? On DealSearch, you can type in the name of the site you're shopping on and see a list of coupon codes for that store. (Sometimes they're expired, but it doesn't hurt to go through the list and try.)

Mad Ape Den

If you are one who can not yet jot too big (or if you do not yen to), the Mad Ape Den may be for you! Or if you are a fan of our one- or two- or (one and two)-bit rap, go and see all we can say in the new wee way. And do say hi to us all as you go in.

Antishift.net

There are lots of places online for hosting images, but somehow Antishift feels more like a community than most of the others. Perhaps because it's fairly small. Hopefully, the torrent of new users that will result from my mentioning the site here won't change that. In addition to hosting pictures, the site lets you post log entries, and track favorite users, archives, and images.

Forthright's Phrontistery

This site offers a series of word lists specializing in rare or obscure words which have all but vanished from not just the English language, but also the Internet itself. Words are listed in categories such as Bearing and Carrying Terms and the new Euphemisms for Death and Dying. Scrabble players and visitors to the Mad Ape Den alike will appreciate the site's list of two- and three-letter Scrabble words.

Paul McCartney Really Is Dead

No, friends, I have not left you just yet. This site, which is about a different, possibly more famous Paul, offers undeniable photographic (and other!) proof that Paul McCartney was replaced with a look-alike in 1966. The site also attempts to explain how all the people involved in this scheme were induced to keep quiet about it, and why so much trouble was taken to cover up the real Paul McCartney's death. The site's theme song, Uberkinder's Badwrong FalsePaul, is definitely worth a listen.

Mac Expo 2003 (London)

I'm sad to report and admit that the UK Mac Expo this year was a little lack-luster, and unfortunately, I'm one of the many who share this opinion. The Mac-related lists I lurk on are also full of disappointed UK Mac addicts. Apparently, stand prices were hiked this year, thus ruling out a lot of the smaller companies and leaving only the big boys to ply their trade, and with most of the bigger companies such as Apple, Adobe, and Macromedia having already announced their major product releases earlier in the year, there really wasn't much to talk about.

While Apple has achieved almost blanket marketing and advertising across London with its current iPod campaign in an attempt to woo countless iPoders currently roaming the streets of London into buying other Apple-related products, it has yet to be proved that this strategy will work. Anyway, enough talk of the Mac industry's state of play. Here are a few of the more interesting items I noticed on my wanders:

For budding developers, Metrowerks has announced its usual update to CodeWarrior to accompany a major Mac OS release, again with little change to the user interface but with a marked improvement in Cocoa support. Another more intriguing tool is Eggplant from Redstone Software. Although I'm a little vague on exactly how Eggplant works, its premise is that it allows developers to remotely control and monitor applications, including Web applications, running on a variety of platforms.

Final Draft from Velocity, the *de facto* choice for professional screenwriters, with pre-defined templates for radio, TV, and film, is now in its sixth incarnation. It takes the hard work out of the formatting of scripts, allowing writers to get on with what they're good (or bad) at.

I'm sure you all know about Adobe's new Creative Suite range of software, but for those of you in the UK who don't or who want to know more, Adobe is holding an Adobe CS Acceleration Tour hosted by design guru Guy Gowan.

As always in the Mac market, it's the smaller companies with the most interesting products and the best values. CS Odessa, a small company based in the Ukraine, released Concept Draw V, a schema and diagram design package pulling together aspects of its existing product line into a feature-filled package including cross-platform compatibility, a vast collection of library and wizard objects, database connectivity, scripting, and an array of powerful drawing tools.

Finally, Extensis was out in full, showcasing its ever-expanding range of software including new versions of Suitcase, Portfolio, and its suite of Photoshop plug-ins, which are now also available bundled into Imaging Suite. The highlight of this suite has to be pxl SmartScale. Many programs claim to be able to increase the resolutions of images without a loss of quality. They use a variety of tricks, which usually involve a mathematical representation of images as opposed to a pixel-based representation. All have their own advantages and disadvantages and none is able to increase a photo taken on a £99 camera to billboard size, but where pxl SmartScale excels is in its interface and integration with Photoshop, maintaining a smooth and simple workflow.

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This year's UK Expo wasn't the most inspiring of occasions, but according to the organizers it recorded the highest visitor turnout to date, and rest assured that the Mac presence is slowly but steadily increasing in the UK and Europe. With an ever-growing number of expos, conferences, and seminars appearing throughout the continent, it may not have been an exciting Expo, but it was certainly far from discouraging.

O'Reilly Mac OS X Conference 2003

I face an interesting challenge, writing an article about the O'Reilly Mac OS X Conference. The article won't be published until a bit more than a month after the conference took place. Most anyone interested in what happened at the conference would have read about it in real-time, more or less, back in late October. MacSlash, for example, posted detailed articles about many of the conference sessions. The conference itself and the winners of ORA's Mac OS X Innovators contest were well-publicized on most major Mac news sites. A month later, what's left to say?

Preface

The conference was actually a three-day gig, Tuesday through Thursday. The odd timing is because the day before the conference offered some optional tutorials, available at extra cost. My plane landed on Sunday. My press pass was good for the tutorials as well as the conference proper, and as they received relatively less mention in the press than the rest of the conference, I'm going to get a little specific.

My morning tutorial was *Introduction to AppleScript*, and it really was an introduction. I suppose in spite of the title of the course I had expected something a bit more towards the intermediate realm of the spectrum; after all, this was an O'Reilly tech conference, geared towards Mac professionals. The course was taught by Sal Soghoian, AppleScript Product Manager, and not only was he (obviously) knowledgeable, he was also a terrific speaker. But the tutorial was made not only for people new to AppleScript, but also for people who were new to programming. Over the course of the conference, this tutorial would come to seem increasingly strange and out-of-place: just about every session I attended was aimed at significantly more advanced computer users.

For example, the tutorial on *Custom Mac OS X Setup via AppleScript Studio and Command Line Tools*, which followed the lunch break (see below). I suppose I figured this tutorial would take off from where the first one left off, but it turned out to be far more advanced than that, as though the middle ground had quietly been forgotten. Will Jorgensen moved quickly through Interface Builder (which reminded me a lot of FaceSpan,

if any of y'all remember that) and then showed off the (AppleScript) code, a chunk at a time, for his MHPSetup program. The code is nine pages long, quite a jump from Sal explaining what an if-then statement is and how easy it is to use, just like English. That's not a complaint; far from it, this session was much more along the lines of the rigor I was expecting to find at the conference, and it's largely what I got.

This needs to be said at some point, and I may as well put it here, because it's on the first day that I made note of it: the professionalism with which this conference was put on was simply astounding. I was in the middle of the second tutorial when it struck me that these presentations were being given with computers running PowerPoint or Keynote, various other applications, the whole thing being projected onto a big screen, speakers with wireless mics…and it all worked—no glitches. No sitting around for half an hour while some hotel lackey tried to figure out how to change a bulb in the projector, no "Well, I guess I'll just try to speak loudly" from presenters whose microphones didn't work. It should be unremarkable, really, that everything went as smoothly as it did; this paragraph should not need to exist. But such professional training as I have had has almost always fallen victim to a variety of technical glitches. It deserves to be said that O'Reilly's staff does it right.

Facilities

The conference took place at the Westin Santa Clara, the most expensive place I have ever stayed at by a factor of two. Take a look:

I'd love to tell you how I got there; it's a great story, but it's much too far off-topic. About the location, though, I will say this much: a good proportion of the conference attendees came from out of town; those who came into town by air and then to the hotel by shuttle, taxi, or public transit didn't have cars. The Westin Santa Clara, luxurious as it is, is more or less in the middle of nowhere. I walked around a lot. I like walking, and other than a few restaurants (marked on a crude photocopied map provided by the hotel receptionist) there is just about nothing to do within walking distance of the hotel. When I finally found a café, the sign said it closed at seven—for shame! A better location would have offered places to go at night, things to do other than sit around the hotel lounge or spend 45 minutes on public transportation.

The entire conference area was equipped with wireless networking, and a solid majority of the conference attendees had laptops, mostly PowerBook G4s, running Mac OS X 10.3. I did spy one lone Pismo, and unsurprisingly I was the only one with an AlphaSmart Dana, having decided I preferred its two-pounds and 20-plus-hour battery life to my eight-pound

two-hour Wall Street, which at any rate will live out the remainder of its quiet days on good ol' OS 9. Conference session floors were strewn with power strips, by the way, so those whose batteries ran low could plug in and recharge.

For those without computers in tow, the Apple Developer Connection sponsored the Rendezvous Lounge, where iBooks, PowerBooks, iMacs, and G5 towers all awaited use. There were enough computers in the room that I was always able to find a free machine.

Breakfast and lunch were provided, the former featuring some pretty amazing cream cheese. As for the lunches, two out of four were simply a salad bar. I know this was California, but heartier fare would have been much appreciated by myself and nearly everyone I ate with who voiced an opinion.

Keynotes

The keynotes, two per day for three days, were (especially the first two days and double-especially Andy Ihnatko on Wednesday) more entertainment than content: they were warm-up sessions to get you going for the day ahead.

Tim O'Reilly's keynote opened the conference Tuesday morning with *O'Reilly Radar*, talking about what he saw coming next and generally about how great technology is. The point of it was, I suppose, to get us thinking, and it did. But here's the thing: the very idea

of a computing technology conference is in a sense paradoxical. Here we all are, most of us having travelled hundreds or even thousands of miles, having paid somewhere in the neighborhood of $1,500 for hotel, airfare, and conference pass…can anybody think of a piece of technology that would allow us all to save a lot of money and get this content while sitting in our respective offices where we are much more accessible to our respective employers? Sure, there's QuickTime streaming, Internet Web sites, Web boards, even good old-fashioned books and magazines: all free or, at any rate, considerably less expensive than a conference pass, and all chock-full of high-end content.

I knew what I was doing there; I was covering the conference. But I began to wonder what everybody else was doing there. As David Pogue and Adam Engst gave their respective keynotes on what's new in Panther, conference attendees nodded knowledgeably, having already read about the blue Expose blob and the dreaded FireWire Drive problem on their favorite Macintosh Web sites. If most of the content, of not just the keynotes but even the sessions themselves, was easily found on the Internet, why were all these people here?

Andy Ihnatko's Wednesday keynote, "The Big Rethink," pointed me to part of the answer to this question. His speech was, I'll not mince words, flippin' hilarious. It was nothing short of a stand-up routine aimed at Mac geeks. I won't bother telling you what it was actually *about* because it would seem boring and mundane, but I'm really not exaggerating when I say everyone in the audience had a blast. All the over-the-top geekdom, which 10 or 15 years ago was getting high-school nerds shoved into lockers, was suddenly transformed into the epitome of coolness. Andy carried himself like a rock star, as though unaware that just about any other audience would be laughing at him instead of with him.

So is that it? Is that the answer? At the end of the day were people at the O'Reilly Mac OS X Conference to have fun, to feel good about themselves and their chosen profession? No, at least, I don't think so. I don't think that's *all* it is. But I have to assume that most of the conference attendees know that they could get much of the pure content of the conference, alone and unadorned, from their computers and books at home or at work. So fun is definitely part of it: I don't think people would go back if they didn't on some level have fun, and I think anyone who thinks he goes to a conference purely and solely for the nitty-gritty content is guilty of a bit of self-deception in light of the Internet age.

Sessions

The above sounds like a conclusion, and yet I haven't even mentioned the content of the conference, the sessions themselves. Hour-and-a-quarter-long sessions in which an expert (or a panel thereof) expounds on a topic about which she knows just about everything. These were the interesting bits: don't let my thoughts in the above section imply otherwise. With exactly one glaring exception (which ORA's press liaison assured me it strives to avoid), the sessions were excellent. Dense chunks of well studied practically useful information on topics ranging from setting up Mac OS X computer labs, to home automation, to a spectacular double-length session on Xcode. And while I'm not a professional programmer, I enjoyed learning about *Incredibly Obvious Software Development Secrets*, if only because it gave me some idea of how one company (I'm deliberately resisting the urge to plug, here) manages to do it right when so many others get it wrong.

Perhaps because Panther was so new, having come out just days before the conference began, the sessions and keynotes on OS X itself largely repeated the same things: everyone was impressed with the same new features, and had discovered pretty much the same handful of cool tricks. That's really nothing more than a timing issue, I think, but it's worth mentioning. The OS X Conference's strengths were where it went beyond just OS X.

One session-that-wasn't-a-session is worthy of specific mention, because with due respects to Andy's sense of humour, it was my favorite part of the conference. Tuesday night Srinidhi Varadarajan gave an hour-and-a-half long presentation on the G5 supercluster at Virginia Tech. To say I was "geeked out" does not begin to describe it. While I'd read about the supercluster before attending the conference, I frankly wasn't astonished by it until I heard Dr. Varadarajan speak, outlining the entire process of putting it together, from getting funding and picking out a processor (and placing a rather large order from the Apple Store) to building the facilities, designing a cooling system, connecting all the machines, and writing the requisite software. ORA had let him know he could get technical and told him his audience wasn't laymen but cream of the crop computing professionals: and so he let loose with a lot of detail I hadn't seen elsewhere. Cannonball's write-up on MacSlash isn't eloquent, but it's thorough. If you're curious check it out, but let me add that reading about it is not the same as being there.

Attendees

A big part of the conference, the second chunk of the *Why are we here?* question, is not, like the feel-good fun, listed in the events booklet. It takes place during the lunches and the breaks, even during the sessions and keynotes in whispers or in messages from one iChat user to another. A big part of the conference is the opportunity to interact with other high-end Mac geeks. Sitting around tables with random strangers, I met a few freelancers also covering the conference on press passes, talked a bit about publishing, writing, how they make a living outside of writing. I met a couple of folks from Apple and talked a bit about infrastructure, my curiosity whetted from the Development Secrets session, and things like why public betas just don't really work for a company as big as Apple with a product as big as OS X. And I talked with various people about making the leap from OS 9 to OS X, how to automate the process and do it quickly rather than one machine at a time.

Curiously enough, a big part of the conference isn't the content itself, but rather people who attend. You're not there just to learn about OS X and its various offshoots and related topics, or even to learn about them from experts; you're there to learn about them *among* experts. Because in spite of the promises of technology, and in spite of my inability to put it into words to my satisfaction, there is something to face-to-face impromptu conversations which cannot be replicated with iChat and Web boards, something to information delivered in person that gets lost on Internet sites and video conferencing. Whatever that something is, we believe it has value, and it's really that which pulls people in to a conference. At the end of the day, this high-tech Mac OS X conference depends on a difficult-to-describe shortcoming of technology for its very existence.

Conclusion

At last… and there are still things I didn't cover, events and activities I didn't even mention. I left the hotel and took a train to San Francisco and realized when I got to Fisherman's Wharf that the air no longer smelled like Macintosh. For four days I had eaten, breathed, and slept Macs. It was, for me at least, a very long continuous chunk of time spent in great depth on only one of my interests.

As I walked barefoot on the sand at the edge of the Bay and an old man sang mumblingly in a language I didn't know, I decided that Macs are for me just a means to an end, not an end in themselves. I don't think I love technology as such in the way that many of the conference attendees do. No longer enclosed by the high-end Mac OS X world, I felt free,

and it was refreshing. But if you're a Mac geek who lives for technology, who loves the bleeding edge and seeks like-minded people, I seriously doubt you'll find a better opportunity than O'Reilly's Mac OS X Conference.

Part 6: Color Science

As art and science progressed, techniques for using color were developed into reliable systems. Color wheels, based on the colors red, yellow, and blue, were created by Newton in 1666, Mayer in 1755, and Harris and Gainsborough in 1788. By the 19th century, advancements in chemistry and chemical processes developed into manufacturing improvements for color pigments, which led to greater availability and consistency of paint color and more precise discussions about color. In 1839 Chevreul, a chemist and carpet dyer, combined art and his science background to create the completed traditional color wheel discussed in part two of this series, Using Color.

There are differences between color theory and color science. Color theory uses generalizations that can used throughout different media to create aesthetically pleasing results. What science has accomplished, using traditional color theory in the arts as a starting point, is a more objective and exact description of color that can be used for consistent reproduction and color mixing. Scientific color principles are very important because they are the basis for how visual art and design can be reproduced for mass communication.

The science of color (and some other scientific discoveries as well) developed from art, and eventually surpassed the limitations of artistic color descriptions. Unfortunately science continued using art terms and adapted the definitions to fit the science, all while some artists continued with traditional methods. This co-development has lead to a great deal of confusion and debate.

Understanding how to apply both traditional color theory and the science of color equips the visual artist with more tools to create and communicate. The traditional color theories still work very well when actually creating visual art instead of just reproducing it, but it is also important to know color science. Color science is what is used by computers for viewing, creating, and printing images, as well as the mass reproduction of visual imagery in print and video.

There two types of color, additive and subtractive. Additive color is emitted from a light source, such as the sun, a light bulb, or a television set. Subtractive color is reflected light, the color of an object like the green of grass.

Additive Color and the RGB Process

The 20th century brought readily available electric power and abundant artificial lighting. These technologies were necessary for advances in the scientific understanding of color. Additive color is how light is mixed to create color. Every time additive color is mentioned, think of the world "light." The most common method used to explain additive color mixing is the flashlight model.
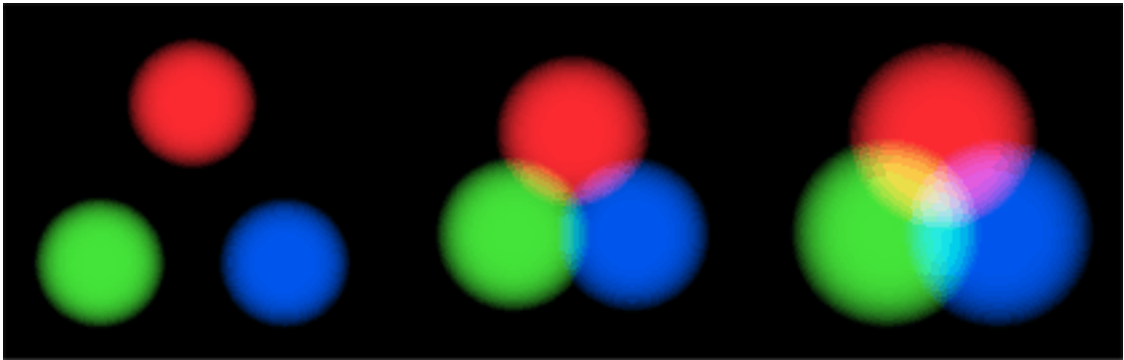
The beams of red, green, and blue flashlights mixed together create other colors. All three together create white. This is the basis for RGB color systems.

This method is called the RGB (red-green-blue) process because those are the primary colors used to mix visible light. This is the color system used by televisions, computers, color CRTs, LCDs, plasma screens, stadium mega-screens, and stage lighting.

Mixing equal amounts of all three RGB primaries together will create grays or white depending on how much light is added. Black results from the absence of all light.

Of all of the color mixing methods, RGB is the most accurate and most versatile. The color seen is a product of light and is coming straight from the source. Additive color doesn't rely upon the reflection of light off of objects to reach the eye and isn't affected by the

reflective surface as with subtractive color. Additive color is not changed by glossiness, scratches, dirt, or other material textures because it is coming from the light source into the viewer's eye without interference.

The terms Additive Color, RGB, and Light are often used interchangeably. For example "Light Complements," "RGB Complements," and "Additive Color Complements" all refer to the same thing.

PRIMARY COLORS

RED + BLUE = MAGENTA
RED + GREEN = YELLOW
GREEN + BLUE = CYAN
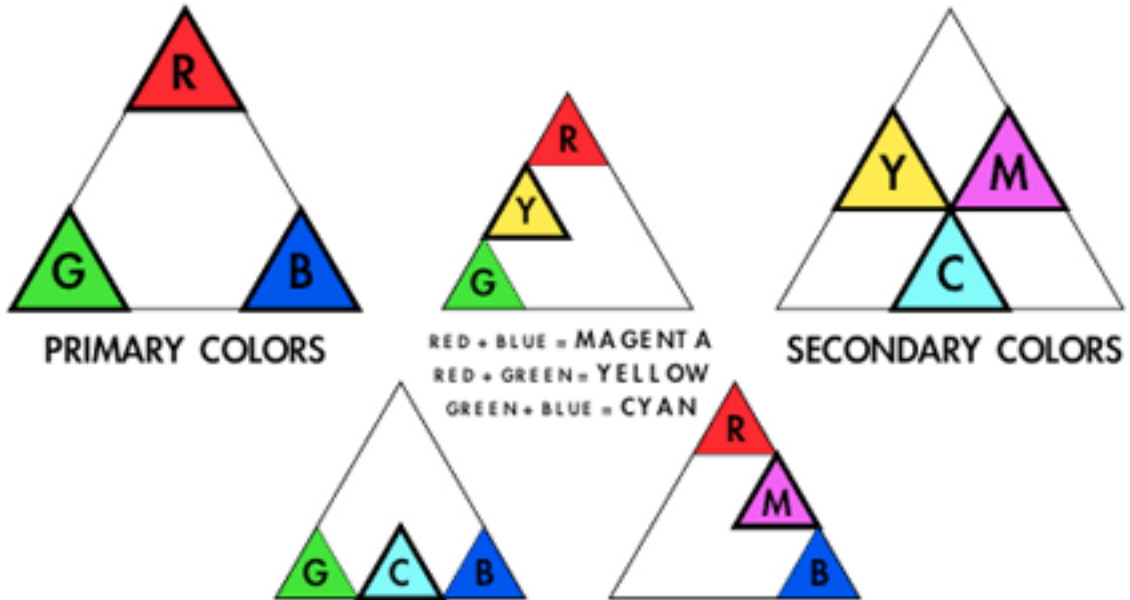
SECONDARY COLORS

The secondary colors of light are cyan, magenta, and yellow (CMY). The tertiary colors are created by mixing equal amounts of a primary and adjoining secondary color.
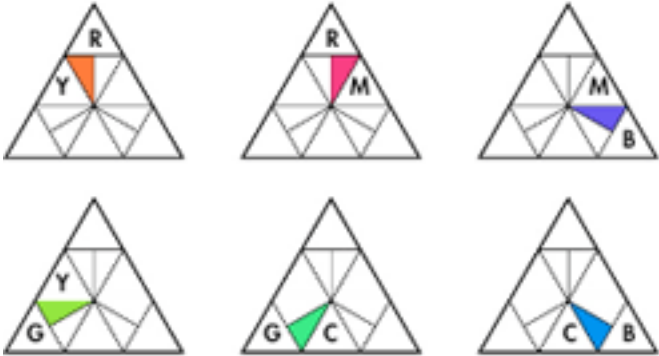
RGB Tertiary Color Mixing   Tertiary Colors in Triangle

Just as with the subtractive (traditional) color system, the complements of the primaries can be found directly opposite on the color triangle. As with the traditional complements, the modern complements create a visual energy when used alongside one another. The similarity between the traditional aesthetic definition of complements and the science ends there.

PRIMARY COLORS

YELLOW + MAGENTA = RED
MAGENTA + CYAN = BLUE
YELLOW + CYAN = GREEN

SECONDARY COLORS
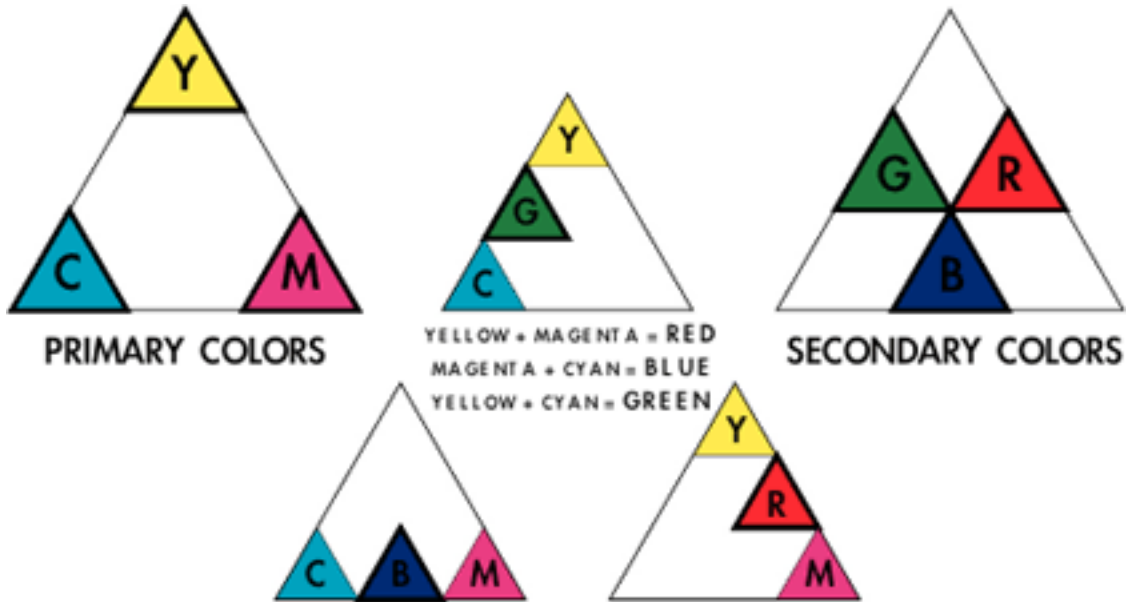
The modern complements balance each other by canceling each other out, meaning when equal amounts of color are mixed they create gray. This gray and its shades toward each of the colors are called chromatic grays. This principle does not work with traditional complements, since they define a system of subjective color usage explaining

psychological effects and the interaction of the colors. When mixed, the traditional complements produce a "brownish" color that has hues of the colors used to create it. Don't confuse the two systems, even though they share terminology.

Middle Gray (50/50 White/Black)

Chromatic Grays from mixing RGB complements Red/Cyan

Additive (RGB) primaries and their split complements

RED / Aquamarine
RED / Cerulean Blue

BLUE / Orange
BLUE / Green-Yellow

GREEN / Fuchsia
GREEN / Violet

The completed RGB color triangle shows the basics of color mixing using light. The actual colors can only be viewed on an RGB device or projected from a light source.

Additive (RGB) Color Triangle
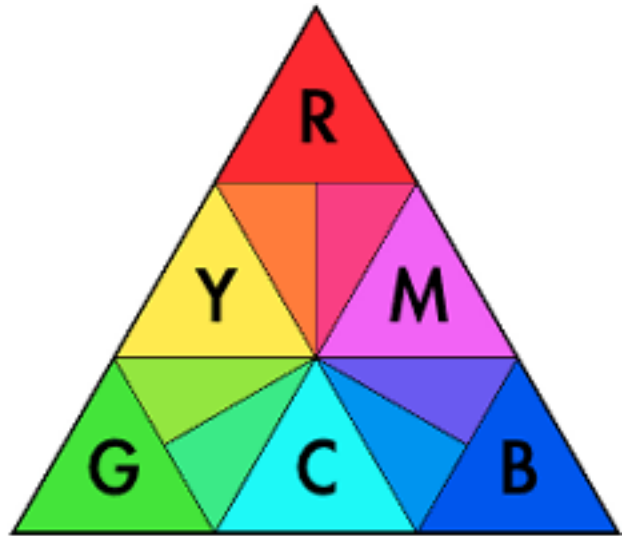
Subtractive Color and the CMY(K) Process

A problem with traditional color theory is that while RYB (the traditional red-yellow-blue primary colors) color mixing creates aesthetically pleasing results, it will not create every color necessary for mechanical reproduction of photographs and other "full color" images. This is because red, yellow, and blue are not the true primaries of color. Traditional color theory is effective for art, but it is subjective and not well suited for the science and technology needed for mass media.

While the understanding of additive color was growing, many people worked on methods for efficient and consistent color image reproduction. This eventually lead to the defined cyan, magenta, and yellow (CMY) color process, used today in most color reproduction from large printing presses to inkjet printers.

The science of subtractive color can be a little confusing. When we say that grass is green, it really isn't. When white light hits the grass, all of the other colors of light are absorbed by the grass but the green light reflects. We see green grass because that is the only color

of light left to bounce off the grass and into our eyes. Even though we say grass is green, in reality grass is every other color but green. This is why the color of objects is called subtractive.

PRIMARY COLORS

YELLOW + MAGENTA = RED
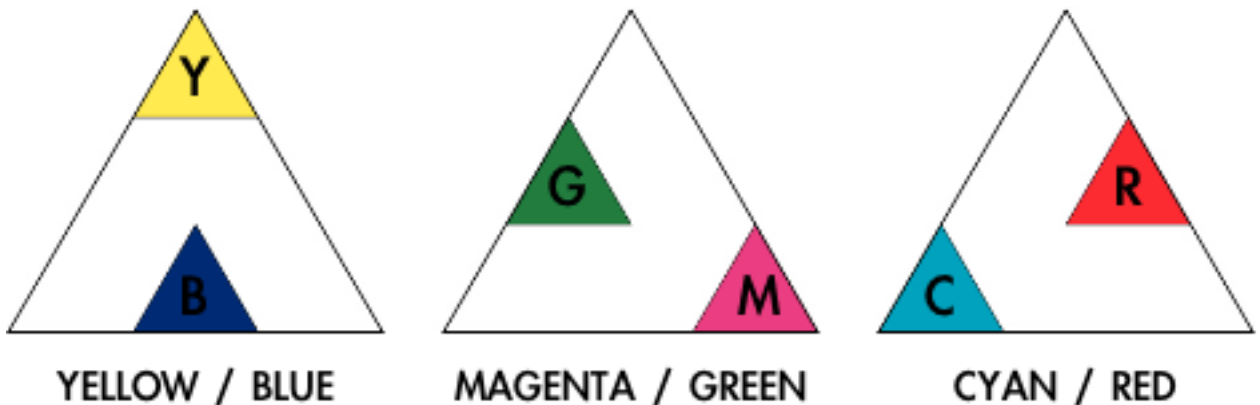MAGENTA + CYAN = BLUE
YELLOW + CYAN = GREEN
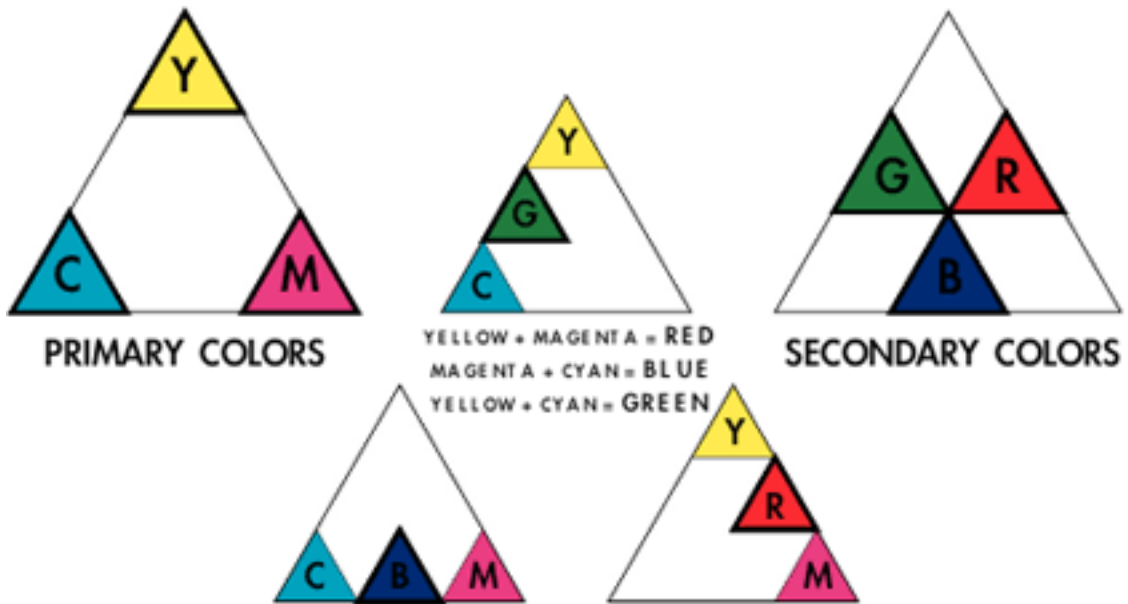
SECONDARY COLORS

The additive secondary colors, cyan, magenta, and yellow, which are also the complements to the RGB primaries, are the subtractive primary colors. As with additive color, the CMY primaries can be mixed in exact amounts to create any color. When all three RYB primaries are mixed together they create gray or white, but when CMY

primaries are mixed together they create gray or black depending on how much of all three are mixed. As with RGB complementary color mixing, the subtractive complements can be mixed with each other to create chromatic grays.

CMY Tertiary Color Mixing   Tertiary Colors in Triangle
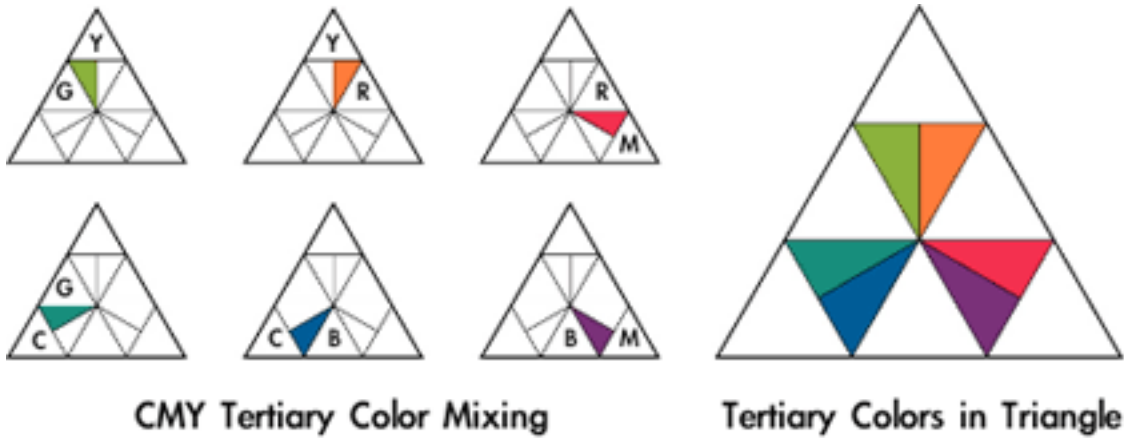
In real world applications such as with inkjet printers, the black created by mixing CMY together is not as dark as black ink because the optimal inks for printing the best color are not the best for creating black. The result is usually a dark gray. It is also less efficient to use three inks to create black, especially for type and B&W images. To compensate, color printing and reproduction processes use black (K for "key") along with the subtractive primaries (CMY) to create the CMYK process.

Subtractive (CMY) primaries and their complements

YELLOW / BLUE   MAGENTA / GREEN   CYAN / RED

Subtractive primaries and their split complements

| YELLOW / Violet | MAGENTA / Yellow-Green | CYAN / Orange |
| YELLOW / Cerulean | MAGENTA / Blue-Green | CYAN / Fuschia |

It was because people finally figured out that the science of color and aesthetic color theory were different that the explosion in color print reproduction and electronic RGB devices could exist, but as late as 1955 scientists were still trying to combine traditional color theory with empirical science. Perhaps this was because the traditional RYB color system was visually pleasing and had worked in traditional media for so long.

Subtractive (CMY) Color Triangle
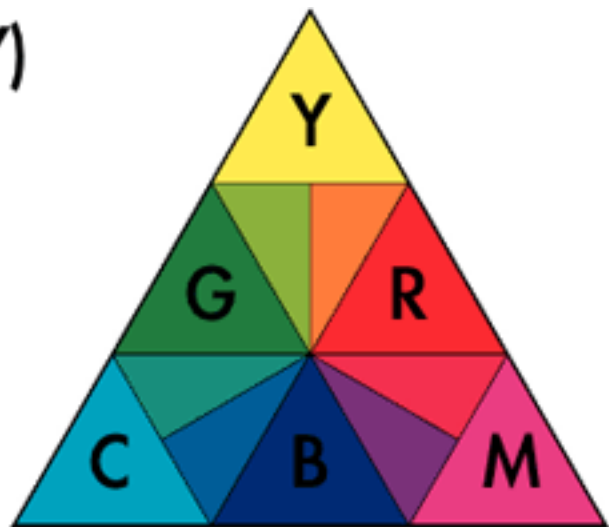
The CMYK color process is the most common color mixing process used today for subtractive color because it is the most versatile, offering the widest range of reproducable colors using only the CMY primaries and black. This versatility makes the process invaluable for inexpensive color reproduction, creating the availability and abundance of printed color images that surround us in the modern world. The CMYK process is often applied not to actual color mixing, but to the creation of halftones and dithered patterns of ink dots that we interpret as full color. Color halftones create color images the same way that black and white lines and shapes can create a range of value.

Images using halftone screens appear to be "full color" but are really patterns of CMYK dots that are blended by our brains to form full color images.

Color Debates

There is an ongoing battle in art about color principles, with the majority of modern color disagreements divided by those who use traditional color theory versus the scientific approach. Heated debate about color principles and color usage is documented well before the Renaissance, so it's no surprise that color continues to evoke conflict.

Science has proven that the CMY color system is better than RYB for creating the greatest range of color, but there are some reasons for still using RYB. Traditional color theory is an old standby that can create satisfying results by hand. The same reasons red, yellow, and blue may have been originally chosen, because they create a satisfying visual reaction, still apply to RYB even though we have the scientific color mixing system. The traditional color

system provides working methods for the aesthetic and emotional application of color, whereas the modern color system does not include human reaction within the scientific principles.

Because CMY is a better system than RYB for the creation and exact reproduction of the widest range of reflective colors, there are those who claim the RYB system is useless, that it doesn't work, or that it never worked. The logic behind those conclusions is faulty because (1) RYB color mixing can be done, right now, with decent quality traditional materials and media, and (2) if it could not be done thousands of oil paintings and artworks in museums would not exist because the artists could not have used the techniques to mix color, and (3) those artists would not have taught their apprentices and students the concepts, who then effectively used the principles and passed the process to others for over 500 years. As with most aesthetic principles, traditional color systems are not science. Treating them as such is making the faulty assumption that art and design are science.

The cause for most of the current debate is that science is sharing traditional art terminology that is similar enough in meaning to cause confusion. The scientific principles are exact; traditional color theory is not. People get upset when they get confused. Unaware of the history, sources, and reasoning for these aesthetic principles, the misinformed assumption is that the traditional color theory system is wrong because it doesn't match the modern, scientifically modified definitions of color terminology.

Scientifically, a primary color is a color that cannot be created by combining any other two colors. That ability and restriction is not part of the traditional definiton for primary colors, but added when science adapted the artistic terms to fit scientific principles.
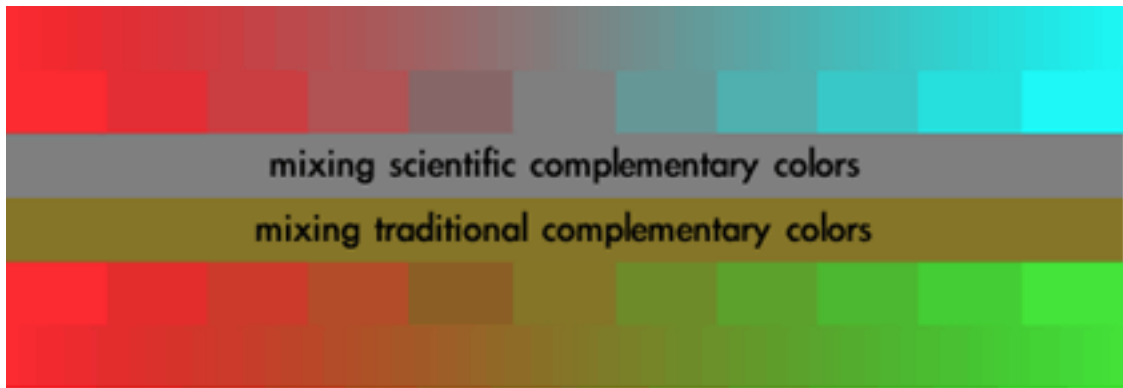

Traditional complements are an aesthetic description color interactions and do not discuss the creation of gray. Color science uses chromatic gray as an application of complementary color. Do not confuse the two separate color systems.

Complementary color is another area of confusion. The traditional complements are obviously not the same as those used by color science. The definition for complements was originally used to describe aesthetic color interactions, but science adapted the term and it now requires that complements must mix to create gray. Because of the differences people get extremely frustrated when trying to apply the concepts, since all systems use the same terminology.

Unfortunate attempts to blend the traditional system with the science use the traditional color wheel but with cyan renamed blue and magenta renamed red. This leads to the principles of both systems being compromised and even more confusion. It is best to leave the traditional and scientific systems as separate methodologies for color use.

A solution to minimize confusion is to pick the methodology that will create the desired aesthetic results and stick to that system until it is comfortable before experimenting with another. It doesn't matter whether traditional or scientific color mixing methods are chosen; if the user isn't familiar with how the system works it won't be effective.

In many cases there is no choice for which method is used to create color, but that doesn't restrict creativity to what methodology will be used to make color choices. Video uses RGB for color, so obviously the RGB system must be used for creating the colors used in a video. The RGB system must be used for actually creating the work, but the traditional methodology for color can be applied when making aesthetic decisions.
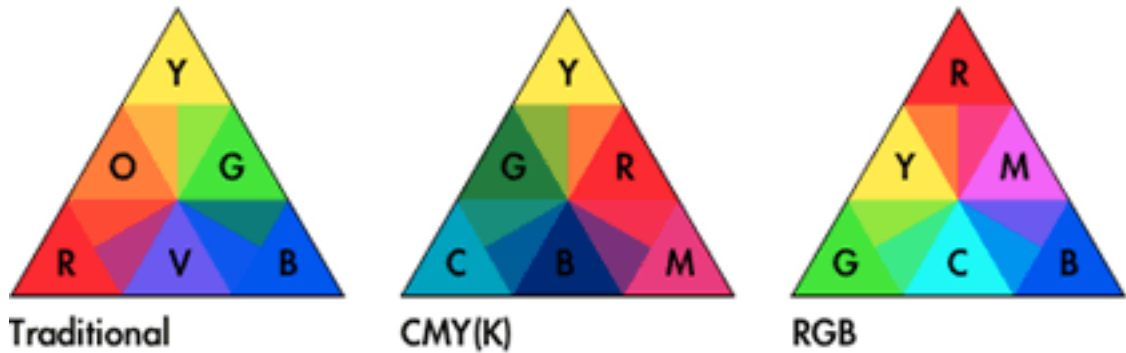
Another reason to be familiar with traditional color theory is when trying to understand or stylistically reproduce work that was created using traditional technique. For example, most art created before the 20th century relied on traditional color theory. If the goal is mimicking an Impressionist painting that used RYB for primaries and complements, it will be easier to understand and duplicate the artistic style if the same creative process is applied while making the new image.

As with value, color similarity is a strong gestalt tool.

CMYK is the best method for print reproduction of the widest range of different images, but better results can be obtained when using specific inks matched to a specific image. When reproducing an image there may not be a need for the same wide range of color that is necessary to reproduce a photograph. The reproduced image will look much better if the inks are specifically matched to the original art. An example would be if the art had far more blue than other colors. The best reproduction would use a blue ink, or even multiple blues, that would better represent the subtleties of the original. The use of several optimally chosen inks for printing will make the reproduction far more accurate with richer colors than the generic CMYK process. Lithography is one process that uses "tuning" ink selections to the original image to create more accurate reproductions. The resulting images may be better, but the added complexity of these processes make them less suitable to mass media because of the added expense.

Color Matching

One of the problems with color creation technology is the number of variables that can affect results. RGB is the most accurate and most versatile, but even RGB devices cannot consistently create the same images. Devices from difference manufacturers using different technologies all change the way they display the exact same color. Even two computer monitors from the same company may display color shift.

When producing video on a computer, it is important to view the project on a television monitor before distribution. Even though LCDs and computer CRT monitors are RGB devices, they use different methods than NTSC and PAL televisions for displaying video signals. The best method for video proofing is to view the work on a professional studio monitor. Unlike standard televisions, studio monitors are made to stricter standards with better calibration. CRT displays of every type will change alignment depending on environmental conditions and how long the CRT has been running. Studio monitors are less susceptible to these changes, but also allow for easy user compensation and recalibration. If a professional studio monitor isn't available, viewing the video on a consumer television will give a more accurate idea of how most people will see the images. This allows for some color adjustments before the product is reproduced and distributed.

CMYK printing devices share similar problems, based on differences in inks, printing media, and software.

The color matching problem grows when images created using RGB devices are reproduced on CMYK devices, such as creating an image on a computer and printing it on paper. There is no possible way for a printed image to display the full color of an RGB image. It is impossible for subtractive color to look the same as additive, no matter how good the printer is. That's a problem with creating images on an additive color RGB device that are destined for reproduction with subtractive color.

The current solutions to the descrepencies between RGB and CMYK devices are color calibration and color matching. Before images are created, the RGB screen to be used is adjusted to match a color standard. Any variations from that standard are stored in color matching software, along with the information for print reproduction devices. When the finished product is printed, the software will attempt to use the RGB and CMYK information to make the results appear as close to the RGB screen image as possible.

Apple's ColorSync is one such technology. Pantone is an example of yet another color matching system, intended for reproducing color with inks. Color matching was a problem long before most art and design were created on computers. One solution is to have physical swatches of Pantone colors available when creating images. Picking the Pantone color from the swatch and specifying that ink will guarantee (almost) that when the image is reproduced by the printing house, the printer will use the same ink and it will match the color chosen by the designer. This gives the designer more control over color matching.

The same process is used with graphics software when a designer picks the swatch color, specifies that color in the computer image, and the ink color information is sent to the printer instead of the color that appears on the computer screen. The way the colors appear on the RGB screen is only an approximation, and no longer as important to maintain consistent reproduction.

Outliner Use Patterns

Outline users are to other Mac users as Mac users are to those of Windows. They are enthusiastic about the freedom that their tools provide, and part of that is the innate capability to take the tool and bend it to support individual cleverness. Outliners are at the heart of this notion. But their flexibility works against them. Indeed, outliners are the least well defined product category in all softdom. It drives the industry—including reviewers—a little batty. How do you compare OmniOutliner, NoteBook, Tinderbox, and Inspiration, for example?

Outlining is a feature rather than an application category. Actually, it is a collection of features that we have been surveying the last couple of months. The idea behind that survey was to help you decide on the best marriage of mind and tool for your particular outliner. This month we turn to all the various things that people use outliners *for*. Between the two, the "what" of features, and the "for" of use patterns, you should be able to characterize the applications we'll review in due time. Then you can select your own particular outliner(s).

And what a variety! We'll quickly look at the four main use patterns. Then, rather than list all the others, we'll explore the dimensions of the entire outliner user space. We hope you'll be able to locate yourself in one or more places in this space, then match your needs to features and products. It's much better than the other way, a philosophy characterized by a dark software merchant we know.

The four main use patterns—those that have several products that target them—are: long document generation (with some variants); notetaking, scrapbooking and journaling (that's one category with these three functions); snippet management; and list management, including to-do lists. In a sense, these form small software categories within which one can actually compare products.

Long Document Generation

Our first column traced the [history of outliners](), noting that the heritage of the method came from collecting notes on note-cards and fitting them into a nested framework. The idea is to take collections of small pieces of source material and flexibly evolve them into a logical structure that flows naturally. Following this notion, the first use of outlining on computers was in writing program code using much the same idea.

So I guess the one use pattern that can claim to be the oldest child of outlining is long document generation. Like all the use patterns, this one requires certain features, while others don't make much sense.

For instance: elegant control over outline levels is a must, together with clever leverage of the user interface. Good control over styles is required. The outliner has to either be embedded in a word processor or have extraordinary export capabilities. Scripting helps. Folding could be nice.

Depending on your work style, integration with the Finder could be important both within the Finder outline view and the ability to link to or incorporate documents. The ability to manage embedded media, especially graphics, could be a big deal too. Notes about notes ("rewrite this…" and "deadline for this chapter is next Tuesday"), including outlines about outlines turn out to be pretty addictive and useful. Some users report that the ability to "see" and manipulate the layout in a graphical view is useful as well. Snippet management is essential if you borrow from or cite others rather than write from scratch.

On the other hand, some features just don't seem to make much sense: cloning, internal agents, columns, and events aren't normally associated with this type of work.

Outliners that target this mode of working are Inspiration, OmniOutliner and [Word](). You'll find that many outline programs target more than one use pattern, as do both OmniOutliner and Inspiration. That's a good thing too, because competing with Word is a tough business. Inspiration and OmniOutliner handle this by offering alternative outlining experiences that export to Word. However, Inspiration's Word export is imperfect. OmniOutliner's export to Word is through XML (like Tinderbox's) and requires an XLST style sheet, which is a hassle but allows rather fine control. Fortunately, the OmniOutliner community is very helpful in this regard.

Almost any outliner can be used for long document work, but only these three emphasize it in their design.

Word and Inspiration are one-pane outliners, meaning that the text and headers are all in the same pane, resembling the finished document. One-pane outliners are rare—these are the only two I know—and that is odd: only in a one-pane outliner can you see as much of the document as you wish, which is one of the key things that outlining is all about. The Omni Group has announced that the next version of OmniOutliner will have an option for a one-pane view. The screenshot shows all three, with OmniOutliner in front, Word behind that, and Inspiration in the back. Inspiration doesn't support smoothed text, something that is not obvious because I shrank that screenshot.
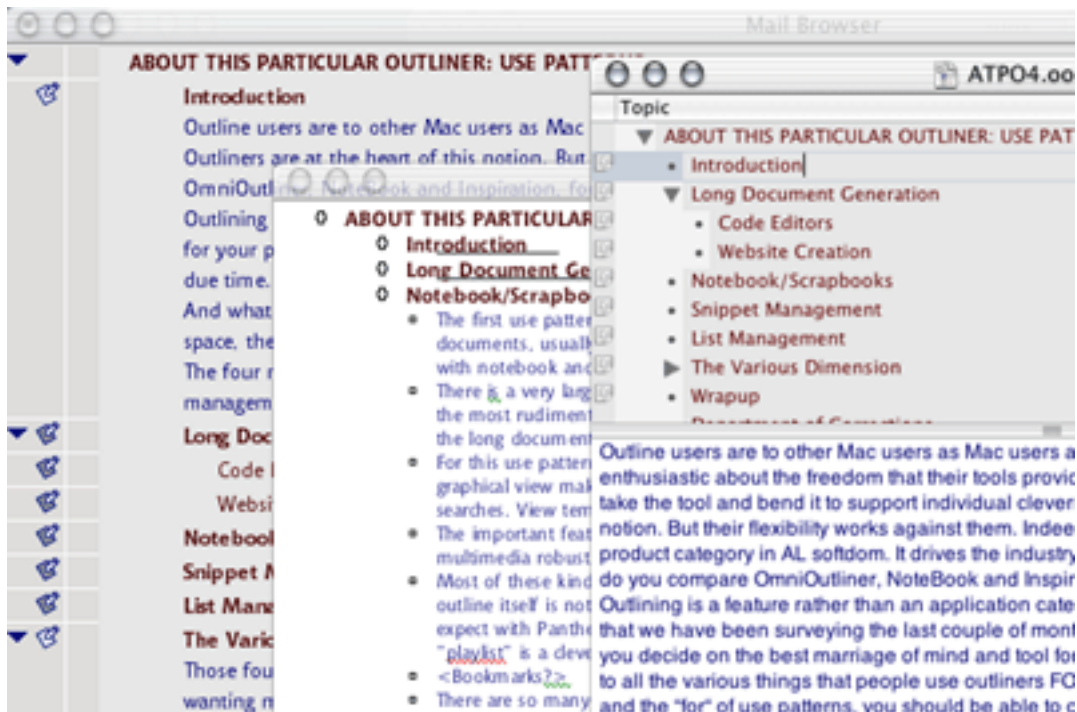
OmniOutliner, Word, and Inspiration

They have radically different approaches to user interface. (I may make user interface philosophies my next column if the votes for a review of legacy outliners don't win in the voting.)

Of the three, Word alone has named styles.

Code Generation

Surprisingly, there are more outliners in the coding world than the word processing—and of text editors more in the open source community support outlining/folding than their commercial counterparts. We continue to bring this up because some of these can be handily used for long documents without requiring mastery of all their geek niches. Many of these are free and some have much more active development than any of the "straight" outliners.

Programming is an interesting case study in outlining because nested structures are a handy intersection between the way that humans and machines think.

- The modular inheritance characteristics of object oriented programming are to a large extent an expression of outlining.

- Python, an open source language that is arguably the fasted growing language, uses outline-like nested indents to convey meaning. (Other languages do too.)

- Programs often use "includes." That's where you put a marker that says: "in this spot, include the code that we have put elsewhere and named such-and-such." Includes (sometimes called "functions") are virtual outlines and are sometimes displayed in outlines.

On our list of outliners to be explored in a future column is: Emacs (with extensions), jEdit, Leo, and Vim (with extensions). These are all free but come at the cost of a learning curve and loss of WYSIWG.
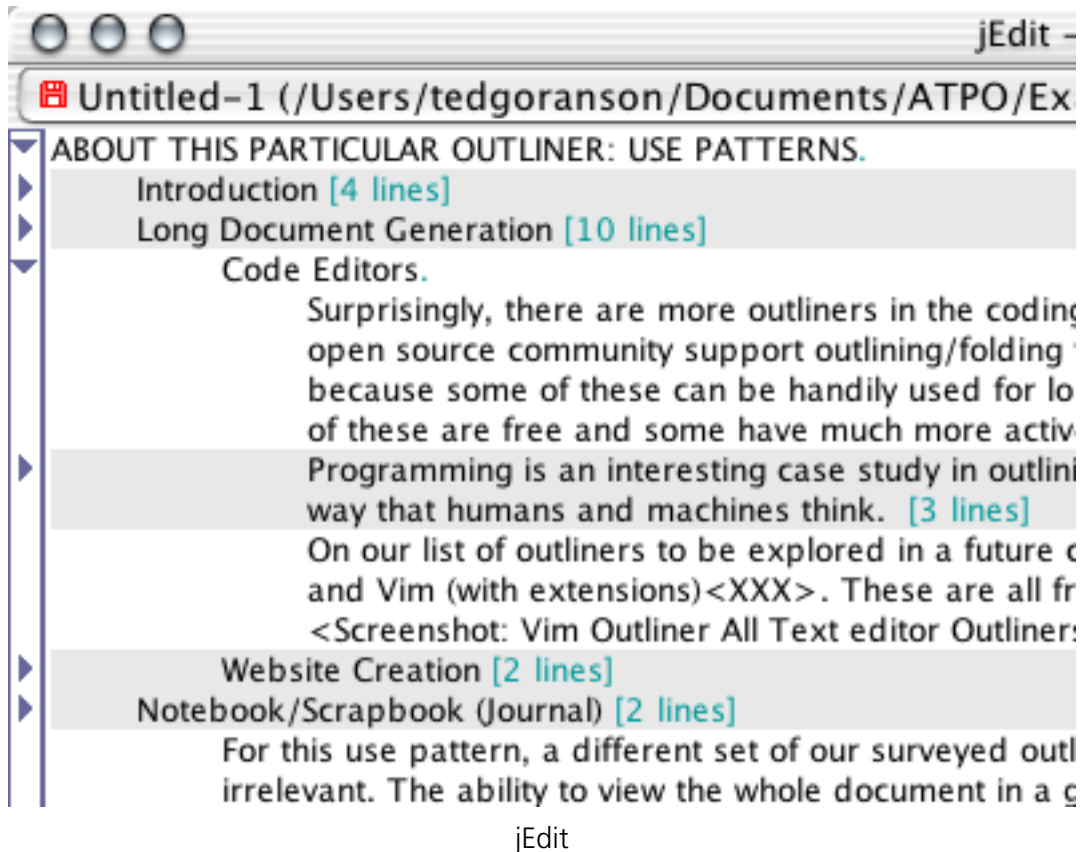
jEdit

The screenshot shows jEdit, which you owe it to yourself to explore. It is free. Unlike the others, you don't have to be a supergeek to set it up and use it; Mac-like preference panes are used. It lacks a few of the writer-friendly features of non-code editors. But it is beguiling. Look at the way it tells you the size of the collapsed text, and colors the "lines" that have collapsed children. Also, recall that two months ago, we noted this as being one of the few outliners with folding. It also allows split panes, hoisting, and has a way cool outline view of search results.

I think this one deserves an official review. We'll do one in due time.

Web Site Creation

All of the major WYSIWYG Web site editors (Dreamweaver, Freeway, GoLive) use outlines to help design the file structure of a site. But two tools are bona fide outliners that deliver content, much in the fashion of creating a "long document": Radio/Frontier and Tinderbox.

They have significantly different models. Radio is an outliner within a neutered scripting environment that shares information with a similar non-neutered "mother ship" version, Frontier, on a server. It is sold for blogging only. Frontier started as the first scripting system for the Mac, and when it quit, it was still the best: more Mac-like in ways than Apple's AppleScript. Some people have reported to me that they have been able to use Radio/Frontier for its first purpose: as a simple outliner with extraordinary scripting capabilities.

Perhaps we will do a column on this, if we can get these poweroutliners to come out of the woodwork. The screenshot shows a typical Frontier outline and its unique "object database" which is an object store for all the content and scripts in Frontier.

Frontier
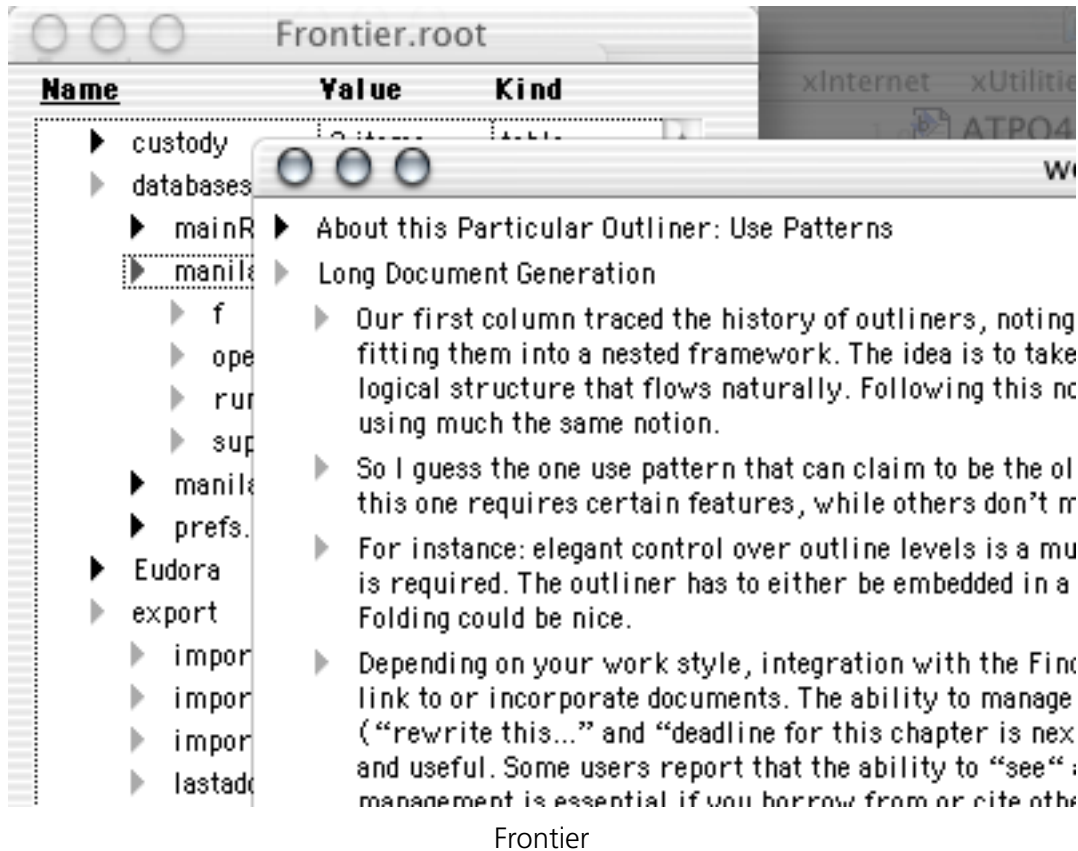
Tinderbox is a whole different beast. It is an information manager that uses three powerful organizing techniques, one of them outlining. The others are named links and an extremely robust implementation of attributes. The three are integrated in several graphical ways and more importantly by a system of agents. Tinderbox is for deep organization of information…and it supports publishing, which is nominally to a blog. But it could as easily be to any XML-friendly system, like LaTeX. Our first real review will be of Tinderbox, I think, as it really pushes the outline paradigm. The screenshot shows a simple

Tinderbox outline (my custom help files being created for the review) behind the HTML export preference. You select a template, which is XSLT-like, but with Tinderbox placeholders for headers and children and links and such.
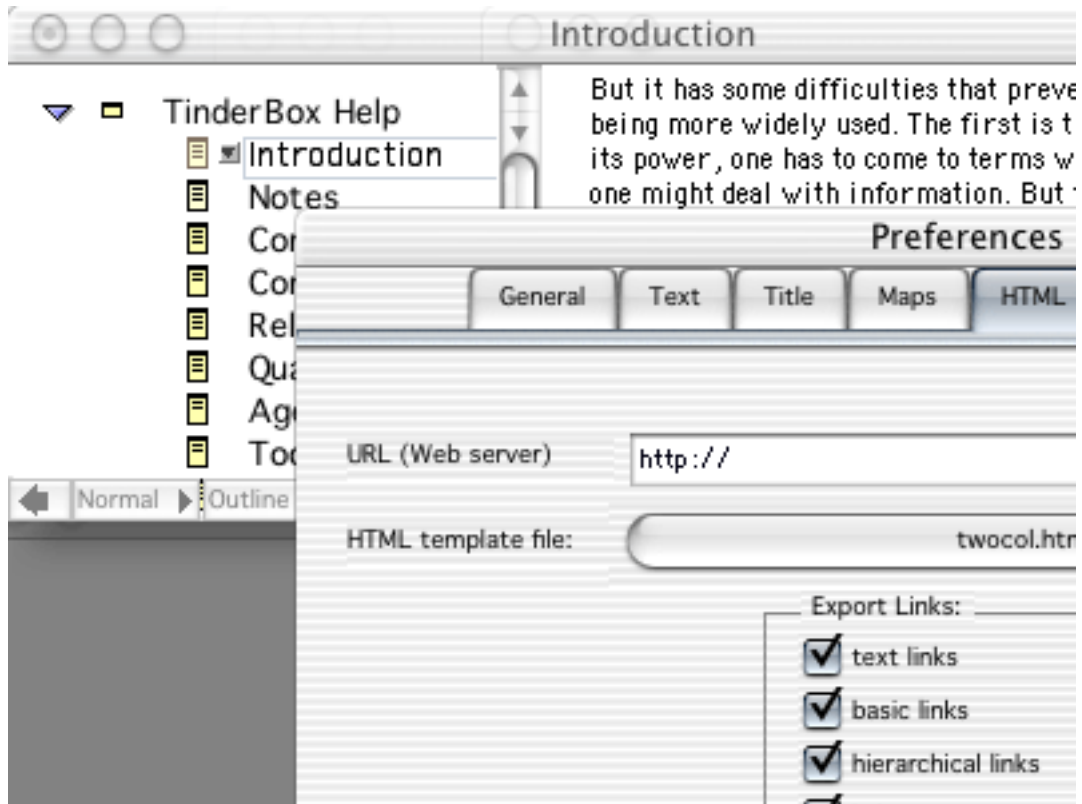
Tinderbox

Notebooking, Scrapbooking, and Journaling

The first use pattern used outlining to navigate a document as one coherent whole. This second use pattern is the reverse. It assumes that you will have lots of small, possibly unrelated documents, usually in the form of "notes." The outliner is there to help you locate and possibly organize these. The focus is on the components and not the whole. Early Macs shipped with notebook and scrapbook applications, and this use pattern simply combines and extends the functions of those archetypical applications.

A very large number of applications exist for this use. Several have even appeared just since we started the series! Quite possibly this is because they can be relatively easy to write: the most rudimentary have a Finder-like pane and a TextEdit-like pane. My mail suggests that most outline users by number are of this type, with the most vocal powerusers mostly of the long document type.

For this use pattern, a different set of our surveyed outliner features doesn't make much sense.

Hoist and folding are completely irrelevant. The ability to view the whole document in a graphical view makes less sense. As the notes are not destined for coherent publication, named styles don't matter so much. Scripting and agents aren't used except to support searches. View templates and columns come into play in other use scenarios, but not here.

The important features are keywords, tagging, and indexing; Finder integration (especially linking or importing files); searching, sorting, and "gathering;" and (for most users) the ability to handle multimedia robustly.

Most of these kinds of outliners distinguish themselves with different user interface strategies (including the literal "notebook" metaphor) and indexing and search tools. Usually the outline itself is not much different than a Finder list view, and that's the point. Lots of these outliners, especially the newer ones, are exploiting Aqua user interface conventions. I expect with Panther, we'll begin to see the use of the iTunes playlist paradigm, already in use with Safari bookmarks and appearing in Apple's new Xcode programmer tool. This "playlist" is a clever use of clones, where a note (song) can be in different headers or folders (playlists). It cleverly combines the notion of categories, outlines, and columns.

The screenshot shows Safari itself, scripted as an ersatz outliner of this type. Fun, huh?
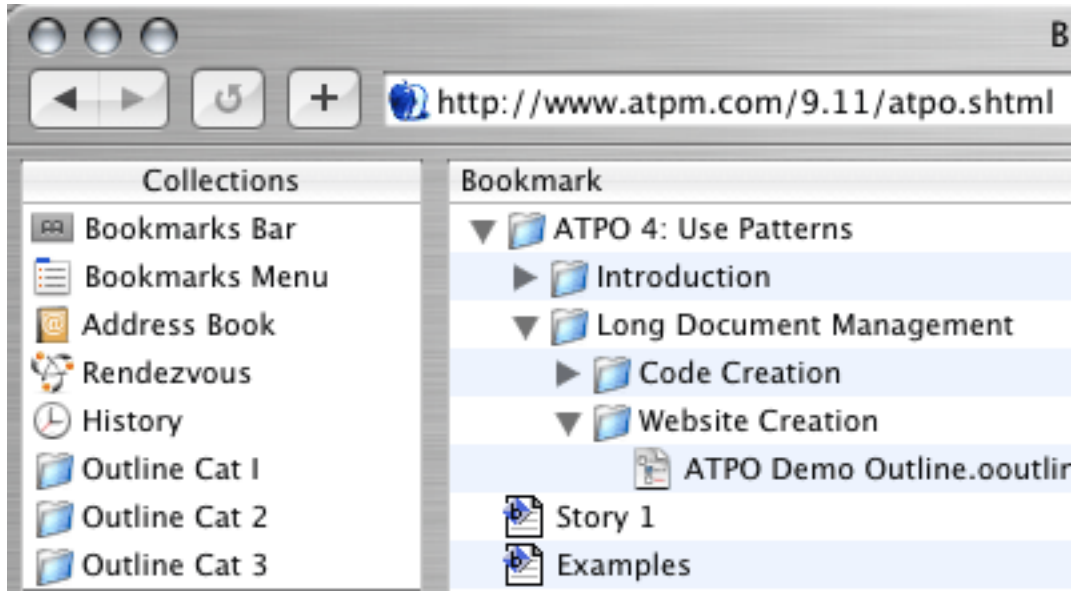
Safari as an Outliner

There are so many outliners targeting this use pattern—good ones too—that they deserve a dedicated column to sort out. We'll do that. I think we'll do a column on NoteBook and Notetaker, and another on Skinkhunt Notes which is interesting because it is a native Java outliner, Hog Bay Notebook, Outliner4X, the "skinnable" PocketNotes, the oddly named

Sh-Out!MyBrain, the free Caboodle, IdeaSpiral, NotePad Deluxe, and NotePod. No two of these are quite alike, but all are variations on the same idea. The Windows world has nothing like this variety.
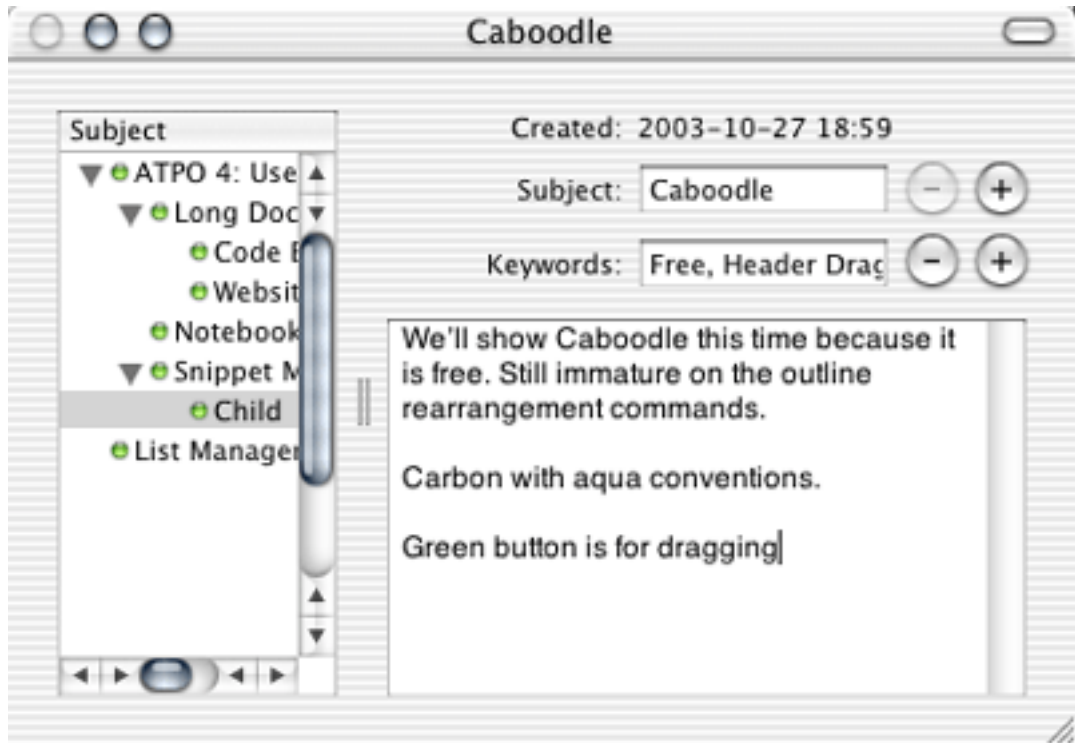
Caboodle

Snippet Management

Our third use pattern is deceptively similar to the notebooking/scrapbooking one. It also is a bottom-up use, with an emphasis on indexing, finding, and re-organizing. But in this case, the notes aren't created by the user, rather scoured from all sorts of sources. They are snipped and often imported wholesale. They can include a wide variety of formats. They may not be completely imported but entered by reference. This is more of a database than a document. In a sense, it is something like the Finder, whose purpose is to store files and give you various means of organizing and finding them. But these outliners add structure and search capabilities that the Finder cannot.

The features that are important for this use are just as listed above, but with the addition of extreme ease concerning importing, referencing, and indexing. Depending on the philosophy of the outliner, Finder integration and tailorable views are useful. By "tailorable views" we mean just the sort of thing that FileMaker was invented to do, but which no maintained outliner currently supports.

DEVONthink seems to be the most popular and strongly developed outliner that targets this category, but NoteBook and NoteTaker span both this and the previous use patterns. They have pretty strong capabilities as well. It is odd that we have so few strong players in this area that are also outliners. We had many more in the pre–OS X days.

We've already shown screenshots of these, so here's a neat alternative idea. The ordinary products expect you to locate something interesting outside of the application by your own cleverness, and then snip or import it. Tinderbox and Radio can scan for and automatically receive RSS feeds from the Web. RSS is primarily used for news and blogs and is not generally the kind of thing you snip. The sort of thing you normally search for has already been indexed for a hundred years by research librarians. That's their job.

Endnote is a mature database application, developed over 15 years (Mac first) that does searches on many hundreds of these online indexes. (Many of these require special access codes, but huge indices are available to anyone.) It is set up to support "index card" research the way the big boys do it.

The screenshot shows in the very back the library of 331 citations found at a research library in Australia that have "outline" in their title. We could have searched the NIH libraries and gotten abstracts or even articles that were filtered by tons of criteria and gotten the full articles, graphics and text. The pane just in front of that is an "index card"

for the citation that contains a large number of prefabricated data fields. You can of course add more. Keywords and categories are supported. The prefab reference types are shown in the popup on the top.

Endnote

Yes, you say…this is a proactive way of searching and filtering information, better in many ways than opportunistic snipping for some uses. But it is ordinary database stuff, not worthy of mention in an outlining column. You would be right. But EndNote integrates with Word—and Word's outline function—like lipstick on a MaryKay convention. This integration of database to outliner is not for everyone, but is one of the tightest in some ways than you will find anywhere. I know people who do all their collection and snipping in EndNote and all their outlining in Word. If Word is your outliner, consider it.

## List Management, Including To-Do Lists

The final use of the big four bears almost no resemblance to the others except by the use of outlining. This exploits the organizational foundation of outlining to order data, often as lists and sometimes as to-do lists. This is where all of the organization-related features become important: columns, the ability to have outlines of outlines, folding, tailorable views, and clones (for sure). As with the others, search is essential, but here you are likely to need to select all instances of something and collect them in some way, perhaps under a newly cloned header. Hyperlinks and new types of children in the outline are extremely liberating here.

List management is so demanding that few outliners that target this area also target others. OmniOutliner is the exception; most others in this area just bear down on the problems of lists, displays, and views. This is a troubled area in terms of supporting software businesses. Two of the most advanced desktop applications of any kind targeted this area on the Mac: InfoDepot and INcontrol—they both went out of business. Shortly, we'll do a column on older outliners like these. You'll really be surprised at how novel they are, and that they still run under Classic!

For to-do lists we've previously mentioned the bigtime Schedule, which can be adapted for personal use. Also in this category are Slacker, Brainforest Deluxe which syncs with its Palm edition, and Liner. There are many others that don't use outlining. While useful, these programs are pretty obvious in how they work, so I'll put my overview on them at a low priority unless there is reader demand—or unless something interesting happens.

General list management is something else. OmniOutliner's columns trump all comers for most uses. It does what the little guys do and more, because of the scripting, XML export and columns. We've shown lots of screenshots of OmniOutliner already, so this month—in

keeping with this month's theme of highlighting free outliners—we show Deep Notes. It is a simple, solid Cocoa list manager with great keyboard control. It lacks sorting, hoisting and any style control in addition to more sophisticated features.
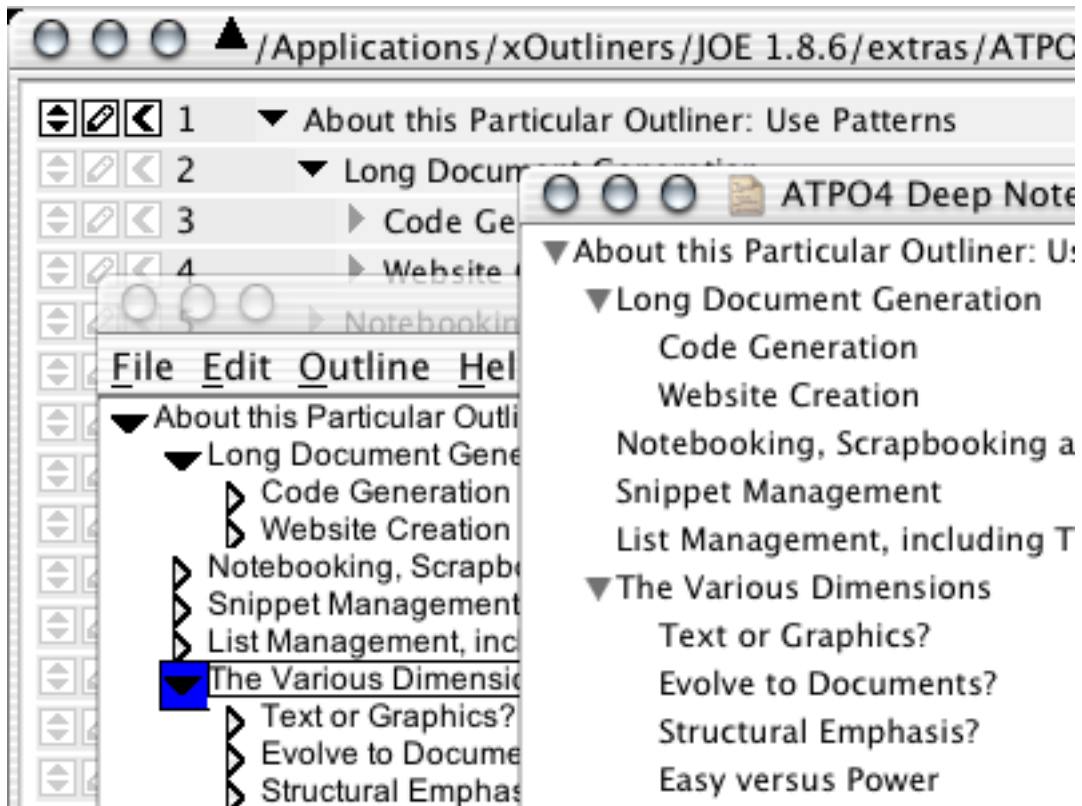

Deep Notes, JeraWorks and JOE

The screenshot also shows two other interesting, free list managers if you are of the Java persuasion. (That means you can tolerate decidedly non-Mac interfaces.) Just behind Deep Notes is JeraWorks and then JOE. Both of these should be considered works in progress.

The Various Dimensions of Outliner Users and Use Patterns

Those four are the top use patterns, but there are others. Rather than marching through them all, a tedious business, I've devised a quiz for you. It'll help you locate yourself on the use pattern map. You'll probably find yourself wanting more than one kind of outliner; most of us do.

- Do you intend to stick to text, or will you need graphics within the outline? Some good outliners are text-only, like OmniOutliner. Others may accommodate graphics but be less graceful in handling them than your needs require. The icons of those that support graphics are shown in the screenshot. ("Notes" is Skinkhunt Notes.)
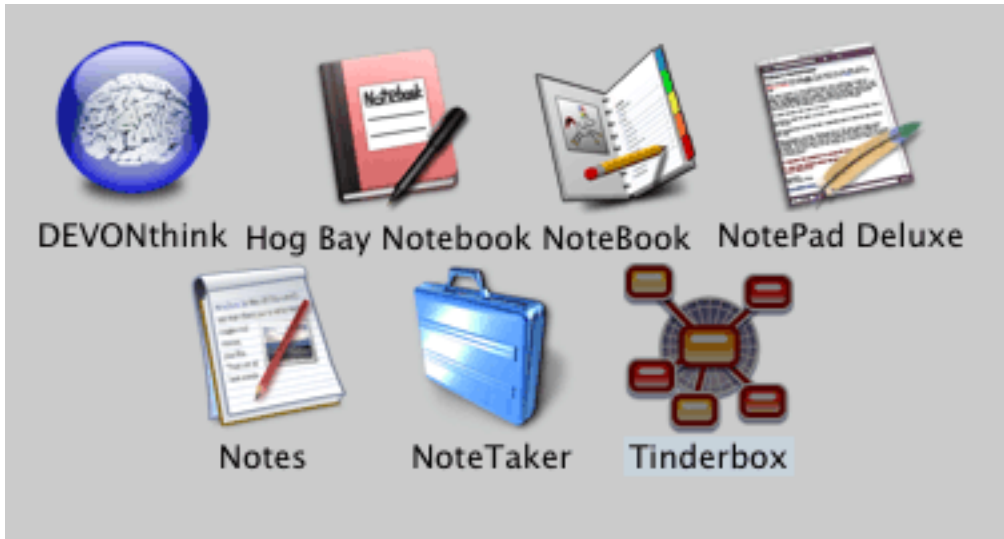
Outliners That Support Graphics

- Are you planning on evolving your outlines into documents that you will publish in some way or export to others? This is a key discriminator among outliners. A related problem: is your use of outlining an end unto itself, or is it part of a larger workflow

that integrates several applications? If you need to get information in and out while maintaining the value you added, you'll have to look at outliners that deal with this thorny problem.
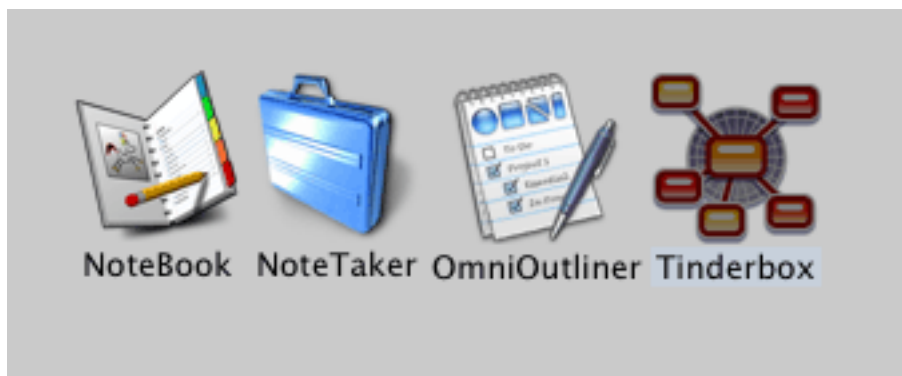
Outliners That Play Well With Others

- Is your notion that you will constantly be improving the structure of your outlines, or just use outlining as one way to help get a handle on organization? If you want structure, you'll want all the power of structuring you can get: clones, links, etc.

Outliners That Work Well With Structure

- Do you want something that is easy to learn and use immediately, or something that over time will continue to offer capabilities as you learn and adapt? In my experience, these two are generally contradictory: ease of use vs. power. Perhaps it need not be.

Users are generally squarely in one camp or the other on this. Most outliners can be usefully learned in minutes. But others like Tinderbox and Frontier are clearly on the power end. OmniOutliner is on the list because of its open-ended scriptability.

Outliners With Deep Capabilities

- Are you prepared to pay? I find it amazing that this is a discriminator, but it is. People who gladly pay thousands for their hardware often balk at paying $50 or more for a tool that makes that hardware expand their lives. I suppose people think outliners are simple and Photoshop is complex, so they adjust their consideration of value

accordingly. Oh well, many people *do* think over $50 for a basic tool is a lot. Many of the simple outliners are cheap; some that we have described today—plus the legacy outliners—are free.
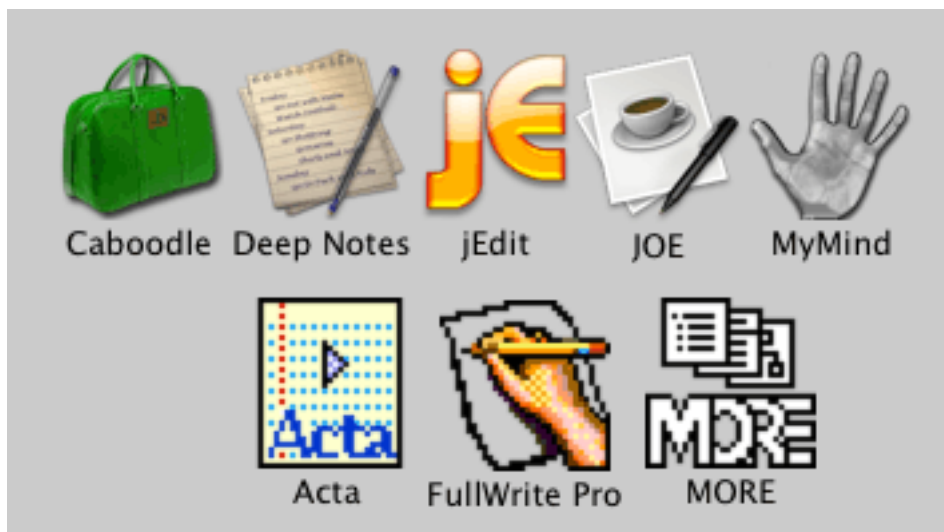
Outliners That Are Free

- Do you want to have one outlining product that serves several of your use patterns, or are you inclined to use several programs, each for its best application? Again, this is a matter of personal philosophy. Some people prefer to have one application that they learn thoroughly, that they get used to, that stays open all the time, and whose forums they frequent. Others revel in more special-purpose outliners that do each thing perhaps a little better than the all-in-one guy. (These users often use something like iKey or QuicKeys to harmonize keystrokes among several outliners.) In a sense, nearly every outliner is a general purpose tool, but OmniOutliner is probably the only one that can be pressed to do everything without unduly getting in the way.

- Are you a visual thinker? If so, you may appreciate many of the outliners that provide a graphical display of the structure. This again is a notion where Mac users fall clearly in one camp or the other. People are different, and Mac outline people are among the most creative around; that means they use their minds in all sorts of different ways. Some like the world of words and appreciate how outliners can manage the

structure of words. Others like to think in terms of pictures or spatial relationships (a key notion behind the invention of the Mac in the first place, by the way). The screenshot shows Inspiration, MINDMAP Pro, MyMind, NovaMind and Tinderbox.

Outliners With Graphical Displays

- Do you require keyboard navigation? This is not an issue with the high-end outliners, but many of the newer, smaller, cheaper ones can only be interfaced with the mouse.

- Are you worried about longevity? This is a serious issue for some. They may have extremely valuable information with all sorts of value-added structure in their outlines. What if the company goes away…or you want to convert for other reasons? This dimension has two components: the first has to do with the stability of the company and expectations that the product will be updated. Remember that the history of outlining is strewn with the carcasses of fine dead products, and some of these were abandoned by big companies. The other dimension concerns the format of the data and export capabilities. Some outliners export to standard formats, and

these may not necessarily be related to the workflow integration noted above. The only real guarantee you have at the moment is the export of XML or the outline-specific version, OPML. Of course, Word format can't be killed, no matter what.
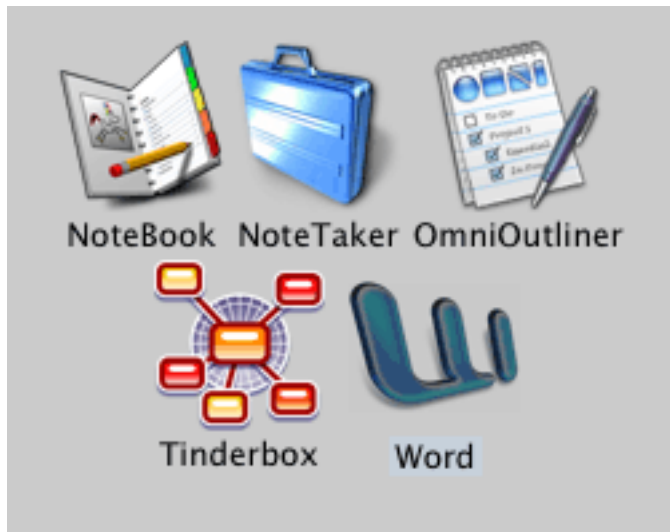
Outliners That Can Produce XML/OPML

- Are you at all interested in scripting? Don't answer automatically. If you have no experience with AppleScript but still are in the "grow into an application" bucket we mentioned above, you might want to think about this. You can start by using scripts from others. Simple scripting isn't that hard, compared to the payoff, and maybe something will happen soon that makes it easier. (You never know.) OmniOutliner is

highly scriptable, and NoteTaker and Hog Bay Notebook are introducing AppleScript support. Just having the capability in the background could be an incentive to explore it.

Scriptable Outliners

- Will your outline be shared, circulated, even coauthored? If so, you may be concerned with transportability across platforms.

Multiplatform Outliners

I hope this helps you. There is no single, clean product category for outliners. That means you are free to decide how you want to work, and then fill that need. I hope this survey of use patterns has helped.

Department of Corrections, Apologies, and Additions

Since last month, ConceptDraw has added ConceptDraw Project to their suite of products. Previously, they bought and repackaged a MindMap application (ConceptDraw MINDMAP) which creates a graphical view of an outline, but oddly cannot display that outline. It appears that this aggressive Ukranian company may have a product in Project that outlines simply, has columns like we displayed last month for Schedule, but that also can show a graphical, "mindmap" view.

Also, after this column went to press, we were advised that Outliner4X has been discontinued. The developer, MacOS GURU, is creating a successor that should be available in the first quarter of next year.

Next month we'll do a thorough review of all the outliner user interfaces, philosophies, and foibles—pretty interesting stuff when you consider how intimate you get with these things.

Then we will finally produce the much-requested overview of legacy classic outliners that you can still run—and are each better in at least one way than anything else still published. These outliners are Atca, FullWrite Pro, INcontrol, InfoDepot, MORE, and Palimpsest. I have received more mail on this topic than any other. If you can help with this, now is your chance. Don't delay, because these columns take a long time to assemble.
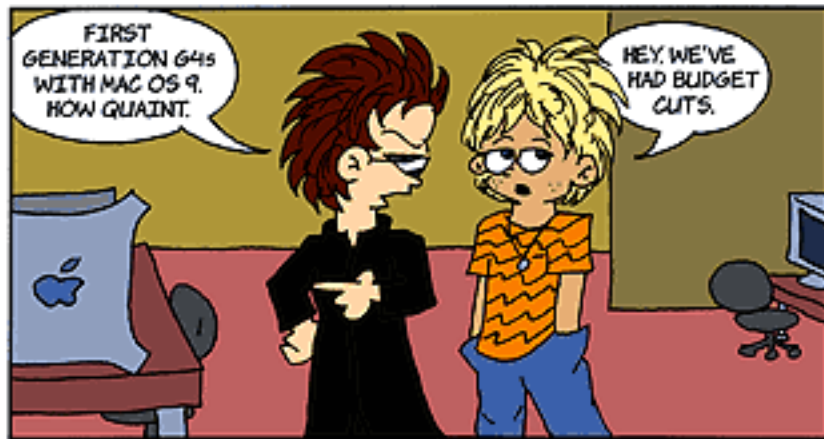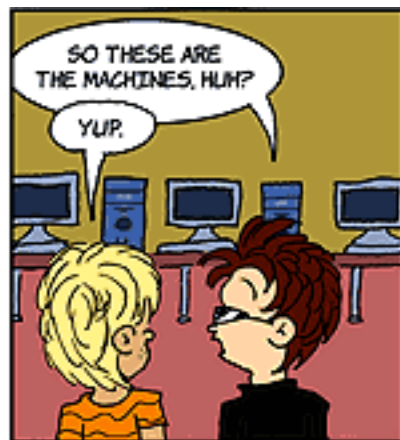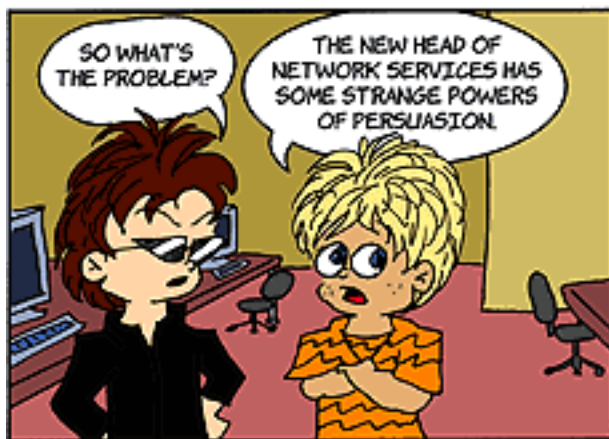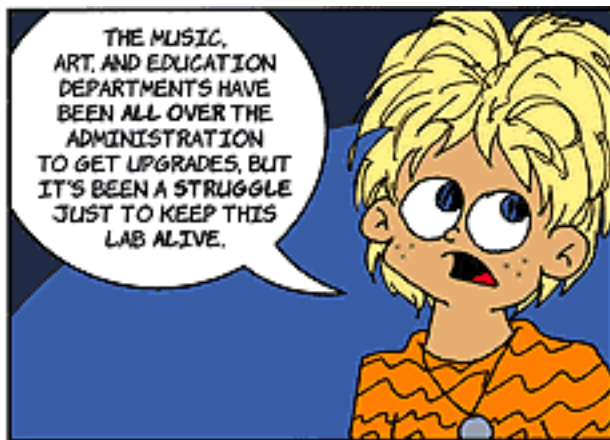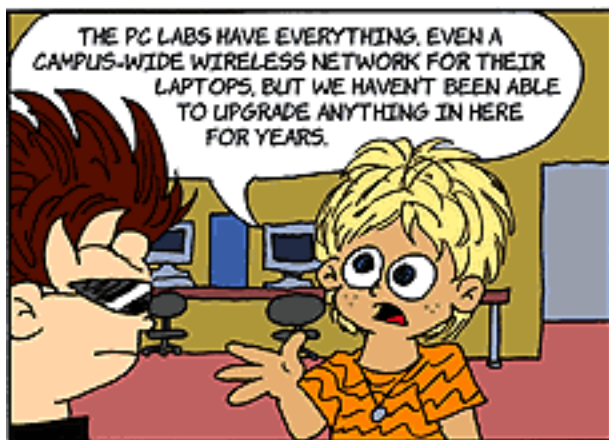
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Vegas Hotels at Night

Vegas Hotels at Night

These desktop pictures were taken by Lee Bennett while attending the 2003 National Association of Broadcasters Convention. There are 12 images featuring nighttime views of the Mirage; Bellagio; Ceasars Palace; Mandalay Bay; Luxor; Venetian; MGM Grand; and New York, New York hotels. Additional photos of Vegas and the convention are in Lee's online album. All images were taken with an Olympus C-5050. Resampling and minimal retouching were performed with Adobe Photoshop 7.01.

Previous Months' Desktop Pictures

Pictures from previous months are listed in the desktop pictures archives.

Downloading all the Pictures at Once

iCab and Interarchy (formerly Anarchie) can download an entire set of desktop pictures at once. In iCab, use the Download command to download "Get all files in same path." In Interarchy, use HTTP Mirror feature.

Contributing Your Own Desktop Pictures

If you have a picture, whether a small series or just one fabulous or funny shot, feel free to send it to editor@atpm.com and we'll consider publishing it in next month's issue. Have a regular print but no scanner? Don't worry. E-mail us, and we tell you where to send it so we can scan it for you. Note that we cannot return the original print, so send us a copy.

Placing Desktop Pictures

Mac OS X 10.1.x and 10.2.x

Choose "System Preferences…" from the Apple menu and click the Desktop button. With the popup menu, select the desktop pictures folder you want to use.

You can also use the pictures with Mac OS X's built-in screen saver. Choose "System Preferences…" from the Apple menu. Click the Screen Saver (10.1.x) or Screen Effects (10.2.x) button. Then click on Custom Slide Show in the list of screen savers. If you put the ATPM pictures in your Pictures folder, you're all set. Otherwise, click Configure to tell the screen saver which pictures to use.

Mac OS X 10.0.x

Switch to the Finder. Choose "Preferences…" from the "Finder" menu. Click on the "Select Picture…" button on the right. In the Open Panel, select the desktop picture you want to use. The panel defaults to your "~/Library/Desktop Pictures" folder. Close the "Finder Preferences" window when you are done.

Mac OS 8.5–9.x

Go to the Appearance control panel. Click on the "Desktop" tab at the top of the window. Press the "Place Picture..." button in the bottom right corner, then select the desired image. By default, it will show you the images in the "Desktop Pictures" subfolder of your "Appearance" folder in the System Folder, however you can select images from anywhere on your hard disk.

After you select the desired image file and press "Choose," a preview will appear in the Appearance window. The "Position Automatically" selection is usually fine. You can play with the settings to see if you like the others better. You will see the result in the little preview screen.

Once you are satisfied with the selection, click on "Set Desktop" in the lower right corner of the window. That's it! Should you ever want to get rid of it, just go to the desktop settings again and press "Remove Picture."

Mac OS 8.0 and 8.1

Go to the "Desktop Patterns" control panel. Click on "Desktop Pictures" in the list on the left of the window, and follow steps similar to the ones above.

Random Desktop Pictures

If you drag a folder of pictures onto the miniature desktop in the Appearance or Desktop Pictures control panel, your Mac will choose one from the folder at random when it starts up.

DeskPicture

An alternative to Mac OS's Appearance control panel is Pierce Software's DeskPicture, reviewed in issue 5.10 and available for download.

Review: iConquer 2.2

by Eric Blair, eblair@atpm.com

Developer: KavaSoft
Price: $13
Requirements: Mac OS X
Recommended: Mac OS X 10.2 (for Rendezvous and iChat support)
Trial: Feature-limited (works for 7 days; some plug-ins require full version)

When I was younger, I grew up with a variety of board games, including games like Monopoly, Stratego, and Risk. While I usually had fun playing these games, sometimes it could be hard finding the time and the people play in a full game. These are just some of the reasons that such board games were natural candidates for conversion into computer games. Can't find enough people? Play against the computer. Don't have enough time? Save the game and come back later.

iConquer is the latest incarnation of Risk for the Mac. Many years ago, there was a black-and-white version of Risk that I used to play on a friend's Macintosh SE. That was followed a few years ago by Risk II, a colorized version of the classic game that offered several additional play options.

Whereas Risk II built on the original Risk by adding new concepts to the game, iConquer takes the opposite approach—start with the original idea and use every tool at your disposal to build a top-notch implementation of it. While iConquer has none of the newer game modes from Risk II, it takes advantage of many OS X features to craft a high-quality game play experience.

Game Play

When you launch iConquer for the first time, it comes across like a fairly standard version of Risk. When you start a new game, you pick how many players will be in the game, how many will be human, the temperament of the computer players, and whether you want to

choose your starting countries or have them randomly assigned. The map looks exactly the same as the map in the original Risk—6 continents, 42 territories, and, when the math works out correctly, each player starts with the same number of territories.

The basic iConquer map.

The game play proceeds as one would expect with Risk. Players place their armies for the first few rounds then attack neighboring territories. If you gain at least one territory in a round, you get a card that can be used towards gaining additional troops in a subsequent turn. If you hold an entire continent, you are rewarded with bonus troops. To the surprise of no one, the goal of the game is to vanquish your enemies and rule the world.

When you are playing against computer players, you can choose from among six types of players—aggressive, anti-human, cheater, defensive, unpredictable, and vindictive. Each type has different characteristics and these characteristics influence the decisions made by the players. Also, you can choose to have the player types randomly assigned or kept secret.

iConquer also features an optional statistics window that helps you keep track of the game. It displays the number of countries, cards, and armies each player possesses, as well as the number of armies they get per turn, the number of victories, and the number of defeats. Additionally, it displays the number of turns that have been played and the value of the next card set. This information can prove useful over the course of the game and it's nice to have it in one location instead of tracking it by hand ("Wait, how many countries does purple have again?").

Name	Type	Countries	Cards	Armies	Income	Victories	Defeats
Eric	Human	3	4	2	3	10	14
Mao Zedong	Aggressive	8	1	3	3	20	19
Slobodan Milošević	Aggressive	8	4	0	3	11	10
Joseph Stalin	Unpredictable	4	3	1	3	6	9
Napoleon Bonaparte	Defensive	10	4	3	3	10	7
Bill Gates	Anti-Human	9	1	3	3	12	10

Turn 5 • Next card set: 7 armies

Keeping track of the game's flow.

Expandability

One of iConquer's major strengths is its expandability. It supports plug-ins for providing both new maps and new player types. To my knowledge, there currently aren't any new player types available. However, there are at least 20 different maps available for iConquer. Getting these new maps is very simple because iConquer features a plug-in manager that is able to download and install plug-ins from the Internet.

Name	Author	Type	Version	Status
Squares	Big Daddy	Map	1.0	New
Switzerland	KavaSoft	Map	1.0	New
Tenochtitlan	Martin Doudoroff	Map	1.2	32%
Silicon Valley	KavaSoft	Map	1.0	Coming Soon
Circles	KavaSoft	Map	1.0	Installed
Digital Conquest	Logan Davis	Map	1.1	Installed
Europe (Large)	KavaSoft	Map	1.0	Installed
Europe (Medium)	KavaSoft	Map	1.0	Installed
Fourtress	Grant Neufeld	Map	1.0	Installed
iConquer World (Small)	KavaSoft	Map	2.0	Installed

Tenochtitlan
Martin Doudoroff
Version 1.2 (1.3 MB)

Tenochtitlan is a map based on the geography of the center of the Aztec empire (now completely covered with Mexico City) at the time of Cortes.

The iConquer plug-in manager.

The plug-in manager shows you all the plug-ins that are registered with KavaSoft. A drawer connected to the bottom of the window shows a preview of the selected map with a brief description. Clicking Install downloads the map, which is immediately added to the Map menu and is available for use.

Currently, there are a number of different map types available. Some maps focus on different regions of the globe, like Europe or the contiguous United States, while others are completely fanciful, like a series of intersecting circles or the periodic table. Since the different maps bring different geographies, changing the map can completely change the dynamics of the games. For instance, some maps have easily-defensible locations while others have territories that are bordered by at least three other territories. Personally, when I'm playing against the computer, there are some maps that I absolutely dominate. There are also some maps where the computer mops the floor with me. The variety of challenges ensures that iConquer has a high replay value.

Network Play

iConquer offers options for joining games hosted on the local network or on the Internet. Also, network play is one of the places iConquer really earns it stripes as a well-rounded Macintosh application.

If you're running OS X 10.2, iConquer gains several useful networking features. First, it uses Rendezvous to find any iConquer servers running on the local network. Second, it integrates with Address Book and iChat so you can start a chat with the folks in your game by clicking a single button. If you're computer is the one hosting the game, you can also initiate chats with individual players from inside of iConquer.

My one complaint about iConquer's networking support is that it doesn't support GameRanger. It seems like a lot of thought went into making it as simple as possible to play iConquer over a network, so it seems odd that support for what is likely the largest Macintosh online gaming service is missing. This omission makes it rather difficult to find a game on the spur of the moment.

Help's on the Way

Even though iConquer is a fairly easy game to pick up, it still has a very extensive help system. In addition to explaining how to do application-related tasks (start a new game, turn on the iConquer server, etc.), iConquer has contextual help for dealing with in-game situations (placing armies, attacking, fortifying, etc.). Honestly, I wasn't expecting to see much when I looked at the Help menu, but I was pleasantly surprised.

Conclusion

I'm going to make this very simple. If you like Risk, buy iConquer. If you've never played Risk but like strategy games, try iConquer.

It's not often that you find an enjoyable game with high replay value for under $15, but that's exactly what you get with iConquer. I had enough fun playing around against the computer before I tried out the network option and started downloading new maps. Once I began using those two options, it was clear that I had a new time-consuming vice in my life.

Author: David Pogue, Joseph Schorr, and Derrick Story
Publisher: Pogue Press/O'Reilly & Associates
Price: $25 (list)
Requirements: iPhoto 2
Trial: Sample Chapter

O'Reilly & Associates, Inc. has long been known for its outstanding technical manuals for Unix, Linux, networking, programming, and Internet-related protocols and languages. Since Mac OS X arrived on the scene, O'Reilly has embraced the new operating system. Partnering with long-time Mac author David Pogue, they created the Pogue Press imprint and the Missing Manual line of books. For while Apple and Microsoft have created some empowering software for Mac users, documentation on how to use those applications is rather scarce.

As part of its Digital Hub strategy, Apple released iPhoto as the "digital shoebox" for digital photos. The problem is, there's not a lot of material in the Read Me or from the Help menu that lets the average user fully exploit the application's abilities. Enter the Missing Manual line, and a book for iPhoto.

I was a budding photographer in high school. I worked on the yearbook staff, took tons and tons of black-and-white photos, and learned to develop them in our school's darkroom. Unfortunately, I left those photography roots behind when I graduated from high school, and did not get the photo bug again until three years ago, when, with the purchase of a Nikon Coolpix 950, I began to explore the world of digital photography.

Organization of my digital photos has consisted of dumping them into designated folders, such as "Pets," "Christmas 2001," "Hawai'i 2001," and others inside my Pictures folder. If I wanted to view any of the pictures, well, that's one of the many reasons I'm a registered GraphicConverter user.

Enter iPhoto, which allows one to both organize and view digital snapshots in one handy package. Best of all, it's free, though you need to be using Mac OS X. Right about the time I decided to start using iPhoto (after the program's 1.1.1 release), O'Reilly published the

previous edition of the Missing Manual series. I was immediately hooked into using the program, through the clear and witty writing of the book's three authors. This latest edition for the latest version of iPhoto continues to inspire and doesn't disappoint.

The book is divided into four sections:

1. Welcome to Digital Photography

To me, this section is worth the price of admission alone. I read through this section of the book just before my trip to the Garden Isle of Kaua'i last year, and the tips and hints offered made a tremendous difference in the quality of my shots. Before even getting into the basics of iPhoto, the authors choose to lean heavily on Derrick Story's photography knowledge and distill that into a book within a book. (Methinks a non-iPhoto user would benefit greatly from Story's Digital Photography Pocket Guide.)

Types of digital cameras are discussed, taking into account users' needs and wants, and tips and tricks are offered to enhance the digital photography experience. I find myself reading through this section again and again.

2. iPhoto Basics

Digital photography tips are great, but you're buying this book to learn to use iPhoto effectively, right? Pogue and company do not disappoint. The second section is an overview of the application, discussing the compilation and organization of digital photos within iPhoto. The authors discuss iPhoto's controls, complete with screenshots and diagrams, as well as how to get pictures from the camera into iPhoto.

The iPhoto Library, the core of the digital shoebox, is explained and discussed. The authors talk about organizing photos into film rolls, as well as sorting and displaying through multiple rolls. They cover giving photos titles, sift through the photo Info panel, and walk the reader through adding comments, yet another variable by which film rolls can be searched.

Even though the digital shoebox is full of individual rolls, users can create their own albums in iPhoto, and the Missing Manual authors spend a great deal of time discussing all aspects of iPhoto albums.

The last chapter of this section is devoted to editing photos. Cropping, brightness and contrast, red-eye, and black-and-white are all covered in great detail, as the authors guide the reader through iPhoto's tools in each of these areas. I converted about two dozen photos from my Kaua'i trip using the black-and-white feature, and it brings out a very Ansel Adams-like quality to the landscape shots. Finally, they cover how to use external applications, such as Adobe Photoshop, to edit digital pictures.

3. Meet Your Public

Now that you've got your digital photos imported, organized, and edited, what are you going to do with them? Show them off, of course! With iPhoto, this is possible in many ways. The first chapter of this section covers the iPhoto Slide Show, handy for showing off pics in a montage, with its own soundtrack.

Chapter 8 of the book is all about making prints, and it runs the gamut from doing it yourself to ordering online. The authors thoroughly discuss the do-it-yourself print process, noting paper grade, printer types, and print sizes. This is a great complement to the first part of the book; the authors seek to assist the reader in getting the best picture possible, from the time it is taken, to the moment it is printed.

This section of the iPhoto Missing Manual also covers e-mailing photos, posting them online via .Mac, and exporting from iPhoto in to HTML for publication on your non-.Mac Web site. Pogue and company look at third-party utilities that enhance the latter, and offer tips on burning what they call "Pro-Caliber Photo CDs."

4. iPhoto Stunts

As you become an iPhoto power user, you will want to extend your abilities, perhaps by building a custom screen saver or myriad desktop pictures. I have all but given up on collecting third-party screen savers for OS X, since I created two custom screen savers of of my own: one from our Kaua'i trip, the other of our infant son. Switching between the two keeps me happy, and draws pangs of jealousy out of the Windows users at work, as well as the one at home I share my life with.

In this section, you will also learn how to export your pictures from iPhoto, including how to get them on to your Palm organizer! The authors also explain how to extend iPhoto's abilities through AppleScript.

Finally, an entire chapter is devoted to iPhoto's file management, with attention to building and burning iPhoto CDs and DVDs, as well as making backups and disk images. The authors delve in to managing multiple iPhoto libraries, a must for someone like myself with enormous amounts of digital pictures. (Budding digital photographers will soon learn that you take a *lot* more photos with a digital camera than you would with film.) Again, there are manual ways to do this, but the authors note third-party software that assists in this area.

I'm still getting to know iPhoto, but I'm getting to know it faster and easier thanks to Pogue, Schorr, and Story, and this outstanding volume in the Missing Manual series. If you're serious about using iPhoto as your own digital shoebox, this book is a must-have.

Developer: Boblbee
Price: $189

I hate walking everywhere. Cycling is so much faster, and anything that lets me slap the snooze button one more time before I get up in the morning is a good thing in my book. Unfortunately, commuting by bicycle or motorcycle is not without its dangers. Aside from the obvious personal safety

risks, it is quite important to ensure the safety of any items you might be carrying with you. Anyone who has ever dropped a laptop computer, even one in a carrying case, can attest to the damage that can be done by even a moderate impact.

Outside

That's why, when I got my TiBook last year, I immediately began searching for a backpack (read: case that straps securely in place and out of the way) that would allow me to carry it on a bicycle, and occasionally a motorcycle, without the risk of severe damage in the event of a crash. I wanted something that could also double up as my main laptop case. Enter the $189 Boblbee Megalopolis, an ABS-and-nylon hard-shell backpack, which fits a 15" PowerBook or smaller laptop perfectly.

The Megalopolis comes in a range of colors, all of which are very "hip" and showy, meaning you won't blend into a crowd wearing this pack unless the crowd is watching the X-Games. A chrome finish—yes, chrome is actually available as a color—costs an extra $20. I got mine for $119 on sale from a local outdoor equipment retailer, proving that it pays to shop around for the best deal.

The design of this pack is at least partly functional. The shape claims to offer lumbar support and superior weight distribution, an endeavor aided by the inclusion of a chest strap and (supposedly included, but absent from my unit) waist belt. The Megalopolis also includes a very useful external cell phone pocket that clips onto the shoulder strap, and a waterproof "rain fly" that can be quickly thrown over the pack to protect its contents from the elements. While the pack doesn't advertise the presence of a laptop computer, it is unusual enough that it might still attract the attention of potential thieves.

Outside with PowerBook

Boblbee claims the Megalopolis "accommodates all major laptops." In reality, if your laptop is significantly thicker than a TiBook, good luck. The 14" by 10" by 2" maximum dimensions are somewhat generous in the thickness department. There's no way, for example, that the retaining straps inside the pack would accommodate my Wall Street

PowerBook G3. However, with a "shell" case (like the [Brain Cell](#)), any laptop that physically fits into the opening will be well-protected, albeit at the expense of a great deal of the internal storage volume.

Inside

There are plenty of pockets inside the pack, including six that are almost perfect for CD jewel cases and one large, flat zipped pocket that would hold a file folder or two quite nicely. The single external zipped pocket, on top of the flap, is plastic-lined and should

prove to be nearly weatherproof, making it ideal for carrying your PDA or calculator and a writing utensil or two, or other small accessories that would be easily lost in the depths of the larger internal pockets.

Inside with PowerBook

Although a hard-shell pack is probably unnecessary for ferrying the laptop in the back seat of the car, I have no problems tossing my TiBook, CoolPad, various AC adapters and a large pair of headphones into the bag for vacations. If I'm going to class, I can take out

the AC adapters for my cell phone and iPod and throw in two or three notebooks or binders instead. I can then hop on either bike (motorized or not) and I'm off with all the essentials.

Tie-Downs

One of the most interesting, though probably little-used, features of the Megalopolis is its multiple external mounting points. Nylon straps on top of the pack allow for the attachment of anything up to the size of a bed roll, and with a few dollars' worth of hardware and some ingenuity, a great deal of "stuff" can be strapped on near the waist of the pack, in the lumbar indentation area. Boblbee's Web site (which leaves something to

be desired, unfortunately) shows a number of users engaging in extreme sporting activities with such items as skateboards, snowboards, skis, and mountain climbing gear strapped to their packs.

Pocket

Like Tom Bihn's [ID messenger bag](), the Megalopolis is lacking in one major area: internal cargo volume. The Megalopolis won't work as a "take-your-office-with-you" backpack, though if you're in this demographic you probably don't have a two-wheeled commute to work, nor would you associate yourself with the "extreme" image Boblbee tries to present.

Back

Compared to a Zero Halliburton or Pelican case, the Megalopolis is cheaper, wearable, and in general much more versatile. For two-wheeled commuters, students who tend to toss bags around, or for the chronically paranoid, the Megalopolis bag offers peace of mind and value found in few other products.

Review: Snood 3.0

by Chris Lawson, clawson@atpm.com

Developer: David Dobson
Price: $15
Requirements: Mac OS 9 or Mac OS X
Trial: Feature-limited (levels, graphics, difficulty, etc.)

Bearing in mind that I am of the age where sending Virtual Crack to people is still funny, allow me to introduce the game known as Snood with this quote from a friend:

"Snood: Healthier than Crack."

Let's ignore for the moment that Snood's state of physical well-being is irrelevant here. While I am told that playing Snood is indeed nearly as addictive as crack cocaine, Snood doesn't require that the user be involved with law enforcement, shady drug dealers, or bad neighborhoods full of Snood houses.

Those of you who remember 1980s pop culture will probably recall such arcade games as Puzzle Bobble, which seems to be one of the primary inspirations for Snood. You control a "Snood cannon" that shoots colorful face-like icons called "Snoods" at a giant arrangement of more Snoods. When two or more Snoods of the same color on the game board are hit by another identical Snood fired from the cannon, all three (or more) Snoods vanish. If, by making Snoods vanish, other Snoods are no longer connected to the top of the board, the disconnected Snoods will fall off and disappear. Once the board is cleared, the game is won.

There's a catch, of course: when each Snood is fired, a "DANGER!" indicator increments, and when the indicator is full, the top of the game board drops down by one row, decreasing the working room you have to fire Snoods. The only way to lower the danger level is to drop Snoods off the board; the more you drop, the more will be taken off the indicator. If the field of play drops far enough to allow any Snoods to descend below its lower edge, the game is lost.

Snood offers a multitude of options for game play. Beginners are advised to start out on the Child level, which offers a "gunsight" of sorts by default and lets the player get a feel for how shots will work out. This sight is particularly useful for practicing bank shots—Snoods fired at the walls will bounce off until they contact the Snoods in the play area. Four levels of increasing difficulty are available after Child; in order, they are Easy, Medium, Hard, and Evil. The difficulty is increased by varying the size of the Snoods, the size of the game board (and thus the total number of Snoods to clear), and the inclusion of skull Snoods. Skull Snoods must be dropped from the field of play, as no skull Snoods are ever loaded into the Snood cannon.

Beyond the basic five difficulty levels, there is a Custom level, which allows the player to set the game board size, the initial number of rows of Snoods, the danger level increments, and the presence/number of skull Snoods. There is a Puzzle level, whose default puzzle contains 50 different levels of artistic or geometric arrangements of Snoods on various-sized game boards that must be cleared. Custom puzzles can also be created and edited with SnoodEdit, a separate (and Windows-only, unfortunately) application.

Finally, the Journey level allows the player to start on Child and work his way up until he loses a game. High scores on all levels can be verified by the application and submitted to the Snood Web site to record your achievements for posterity, or simply for bragging rights.

The application appears perfectly stable on Panther, and a beta version was used several months ago on earlier versions of OS X without problems. Stability under versions of Mac OS prior to X was not tested, though previous Snood versions (1.x and 2.x) presented no problems whatsoever.

Version 3.0 introduced some new features, most notably graphics sets and the various "magic Snoods." Previous Snood versions for the Classic Mac OS could have new Snood graphics inserted via ResEdit, but the new method is far easier and more expandable. The classic Snood icons can be replaced with any of 13 included sets of Snoods, or you can create your own by following the included instructions. (If you really want a challenge, play the Evil level with the Monet Snoods. It's guaranteed to drive you absolutely batty.)
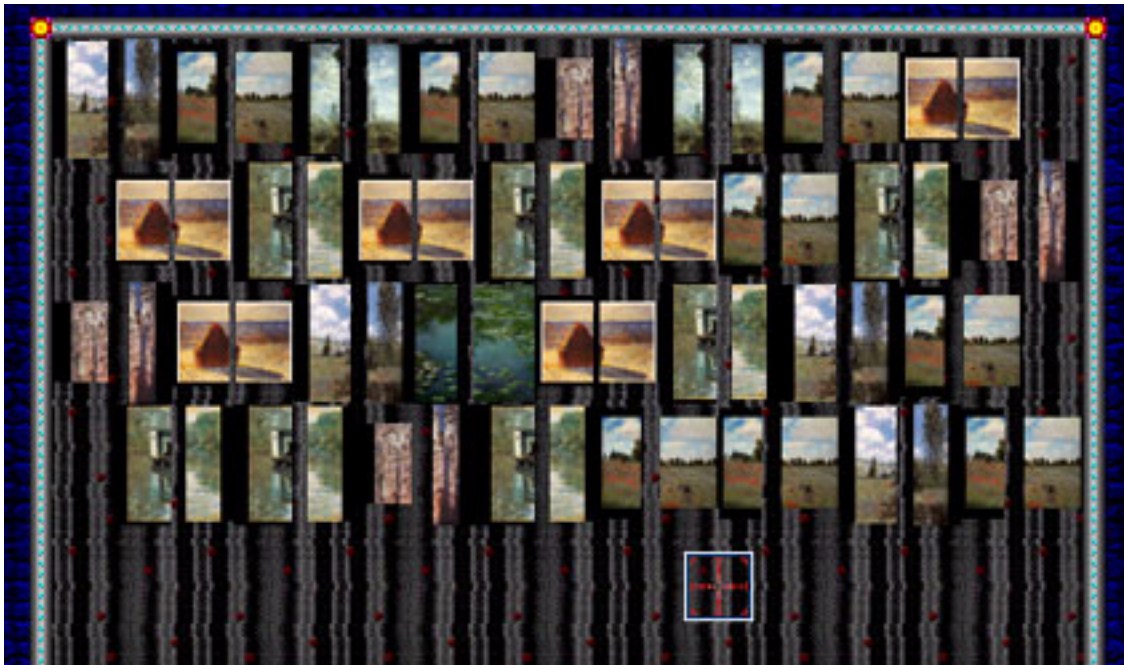
The three magic Snoods include a wild-card Snood; row-builders (five identical Snoods expand horizontally from the impact point of this Snood); and "Stone Snoods," which have three small "satellite" Snoods that destroy everything within a one-Snood radius, including Skull Snoods. However, the animation associated with them is very drawn-out, and this negatively impacts game play. While I am a "fast Snooder," some players prefer a slow, methodical approach, and the slowdown as a result of the Stone Snoods will likely not bother such players.

This leads nicely into perhaps the biggest fault of the application: while the game's graphics are extremely simplistic, the animation and redraw speed slows noticeably when tasks such as checking e-mail start happening in the background. This is only a minor annoyance, however, as it does little to reduce the addictive qualities of the game.

FAQ: Frequently Asked Questions

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About This Particular Macintosh (ATPM) is, among other things, a monthly Internet magazine or "e-zine." ATPM was created to celebrate the personal computing experience. For us this means the most personal of all personal computers—the Apple Macintosh. About This Particular Macintosh is intended to be about your Macintosh, our Macintoshes, and the creative, personal ideas and experiences of everyone who uses a Mac. We hope that we will continue to be faithful to our mission.

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