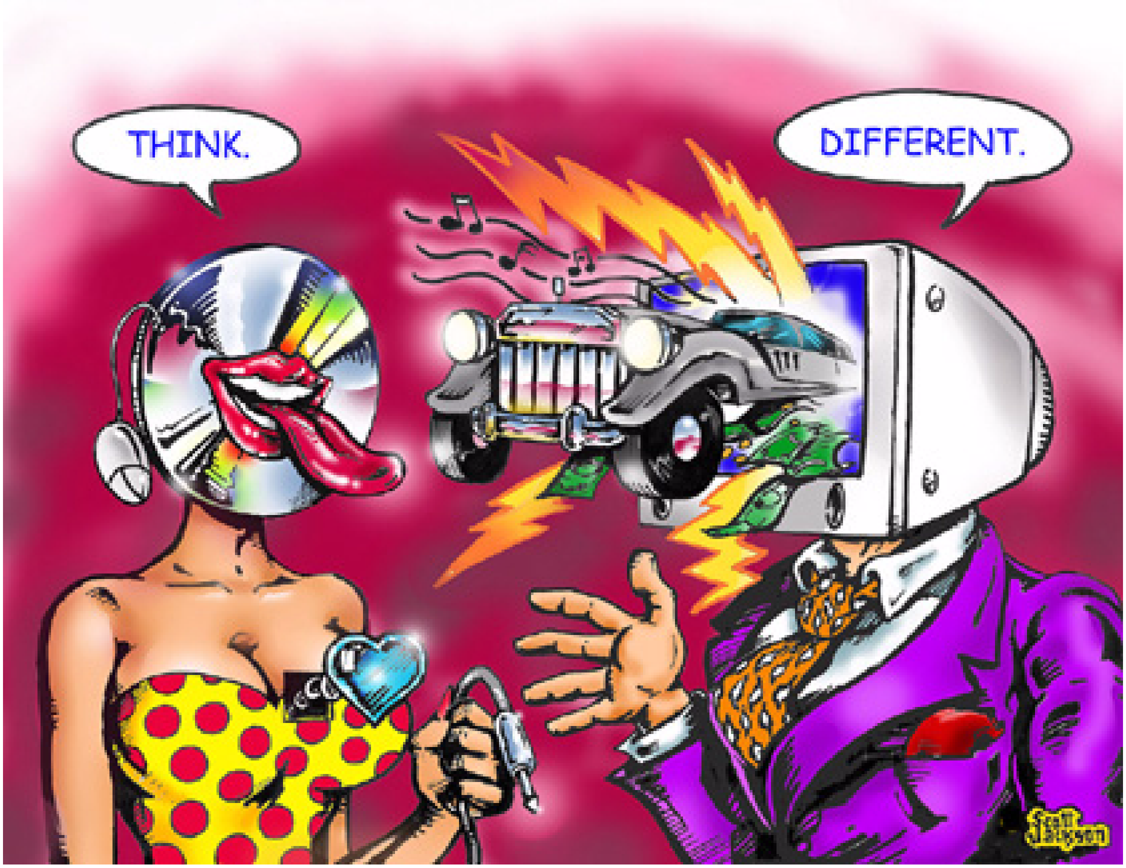
ATPM

10.04 / April 2004
Volume 10, Number 4



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Welcome

by Robert Paul Leitao, rleitao@atpm.com

Our April issue includes:

The Candy Apple: Living With Technology

In which Ellyn agrees with a writer who says we can co-exist with technology and not let it rule us.

The Desktop Muse: Sitting in on the Jam

In which David unwraps his copy of GarageBand and completes a CD in one week.

Bloggable: The Usability Month

Wes Meltzer is pining for some reader response—anything to break up the onslaught of spam he receives. As fodder for some comments, this month's Mac blogosphere scouring has turned up a lot of discussion about Microsoft Word's downward spiral that started with version 6. Additional blogosphere topics include wishing for a modern Mac Portable, CUPS, the value of AppleCare, and three unusual iPod stories.

About This Particular Outliner: Announcing the FORE/1 Outliner

This month, *ATPO* announces the debut of a new advanced outliner, FORE/1.

Web Accessibility: Part 3: Color and Type

How does colorblindness affect the perception of your Web site? How can you accommodate your users' text size preference? It's not as hard as you think.

Cartoon: Cortland

NeoCort and some friends use an unexpected weapon to defeat The Consultant.

Cartoon: iTrolls

The iTrolls search for yellow-capped Pepsi bottles, whine about a now-famous American Idol reject, endure tag teams in forums, explain why GarageBand is getting such great reviews, and poke fun (yet again) at Steve Ballmer.

Desktop Pictures: Volcano National Park

Managing Editor Christopher Turner offers photos from his 2001 visit to Kilauea Volcano National Park on the Big Island of Hawai'i.

Review: AppleScript: The Definitive Guide (book)

Gregory Tetrault favorably reviews a new, detailed book about AppleScripting.

Review: iBreeze

MacMice's iBreeze laptop stand attempts to solve both the cooling and ergonomic issues with laptop computers, but fully succeeds at neither.

Review: The Mouse

What Windows users wish Apple's Pro Mouse was.

Review: Sambucus X 2.3.1

Andrew Kator is pleased with this time/billing software's interface, but is discouraged with its handling of data entry and inability to import iCal calendars.

Review: Soundsticks II

Evan Trent pits the Harman Kardon Soundsticks II against real world audiophile equipment.

Review: Swap 1.2

It's Bejeweled but in pastel shades.

E-Mail

Clutter, Clutter Everywhere

Spam is a nuisance sure, but with most e-mail programs having some capability to delete it automatically, it isn't as bad as it once was. Sure, you may have to spend a little time training your e-mail program to recognize spam, but you can cut down the amount of spam you have to deal with quite drastically.

It sure beats letting someone else decide for you what you should receive.

—Paul Barker, London

• • •

Americans' scepticism of national government often amazes me. Why the agro? I thought you had a democracy?

But I am humbled by your willingness to accept spam. To me it is a severely irritating limitation of my freedom use my time as I want to. Spam is also sand in the machinery of effective production, locally and worldwide, because it produces something a lot of us don't want. That people are employed in a business is no great argument for not regulating it; crime offers "jobs" too. If a private solution can be found, great. But I would think it is more efficient to get governments to do this. And anyway, I think government is partly there to defend me when I want it to.

—Chris Brown, Norway

• • •

I agree that 57 million telephone numbers being registered in the Do Not Call Registry is a lot, but your arithmetic is confusing:

> Fifty-seven million Americans is a lot of people to say they want something stopped. We get only a small part of that many to vote in general elections—they must feel strongly about this issue!

In 2000 about 105.5 million US citizens voted (about 67.5% of registered voters, or about 51% of voting-age people). 105.5 million is a lot more than 57 million.

A better comparison would be the 57 million registrations to the total number of households (80 or 90 million, I think).

About your statement:

> We can fix this, without government intervention. All you bright people, economics people, techies, figure it out and let us know.

I must reply:

No! If you think that it can be solved without government intervention, then *you* figure it out. *You* supply the answer. Don't try to dump it onto "techies" (an insulting term with its diminishing sense), the "free market," or anyone else. Otherwise you're just avoiding the responsibility for providing a solution, which is about the same as asking the government to supply a solution.

—*fips152*

Legacy Outliners

I really appreciate all the good work you have done in this series of articles. I've learned a great deal.

I vote for the NoteBook/NoteTaker comparison. I've tried both. I keep going back and forth because they are both so similar but each has features I like that the other doesn't. I would really appreciate an in-depth review/comparison of both of them to help me make my decision on which one to commit to.

—*Nick Black*

• • •

This is a fascinating article. Great work. I only switched over to the Mac from Linux in the last year and from Windows before that. What kept me in Windows till about 1997 was a single outlining program which ran my entire life—EccoPro. It was a fantastic outliner-based PIM, and I am still looking for a replacement to it to this day. I assume you're familiar with it. I was curious what you think could replace it on the Mac these days.

Looking forward to future installments.

—*Daryl*

• • •

I have a theory about the great extinction—an impressionistic theory, to be sure, based only on personal experience. My theory is that output technology drives the development of outlining software.

Computer outlining is most useful when accomplished on screen, where the user can exploit the ability to manipulate of headings. Outlining on the Mac flowered because the Mac supplied ultra-sharp black-and-white monitors. PC monitors weren't as sharp, but they had color before the Mac, and color is useful on screen, but not useful when printing in monochrome. On-screen editing back then was much faster than printing because that was when most of us had dot-matrix printers. Printing out a document was a major hassle, both because printing was inherently slow and because dot-matrix printers often suffered from paper jams.

Then came laser printers, and suddenly editing on a 13" Mac screen was what we tried to avoid. It was nicer to have the pages before oneself, at 300 DPI.

Outlining is once again flowering. What's new? Large, bright, sharp LCD screens. Now you can not only have the manipulation of headings that outlines afford on screen, but you can actually see more of the document at once there than on the printed page. And we may differ here, but I see more development of outlining today on the PC than the Mac, because the prototypical Mac is the 15–17" iMac, where the 19" screen is becoming the norm on the PC.

—Stephen Diamond

The Candy Apple
by Ellyn Ritterskamp, eritterskamp@atpm.com

Living With Technology

For too long I've been reading thinkers who say technology's ills may outweigh its benefits. They say it opens up too many possibilities for us to separate ourselves from other people. They say we are prone to replace an activity with a technological alternative, rather than only to supplement it. I don't dispute their point of view; these are legitimate warnings about human nature and our tendency to take the path of least resistance.

Rather than cave in to the gloom, though, I want to resist. I want to say we can choose not to allow technology to rule us. We can choose to ride a bike to the store instead of driving the car. (Even though a bike is still a technology, it puts us in a less removed position from the world in which we wish to live.) We can turn off the TV and the computer now and then, and go outside. We can write a handwritten letter rather than typing an e-mail. All these approaches are not as efficient as their more advanced siblings, but there comes a time when efficiency is not the point.

In this mindset, I was thirsty for a writer who had something positive to say about co-existing with technology, and I finally found one. Albert Borgmann acknowledges that we have at our disposal many technologies that separate us from each other. His initial distinction is between the Thing that we were doing, and the Device that we now use to do it. This example of his best illustrates what he means: a water well is a thing. It is a place we went to draw water to use at home. There we used our muscles to draw water and carry it home. There we sometimes interacted with people from our community. Now, we have chosen to arrange for clean water to be available at our homes, with the turn of a handle. The engineering and effort that make it possible is hidden from us, and we are removed from the work that makes it possible. The well is the Thing, and the spigot is the Device. Borgmann's *device paradigm* shows us a way to think about the ways in which we no longer interact with the core Thing.

Another great example is a music CD. We do not arrange for a group of musicians to play for us; we just buy a CD with music on it. We can play it anytime we like, but we are removed from the musicianship and the production efforts and all the stuff that goes into the creation of this device. All we know, most of us, is that we pop in this shiny thing, and we get fulfillment from it. As good as the recording may be, it is still not the same experience we have when we listen to live music. It is more consistent, but that is not the same as being fulfilling. I don’t mean to say that we should toss our CDs and only attend live concerts. I mean, and I think Borgmann means, that we can acknowledge the separation that comes with this device, even though it increases our options.

The great revelation from Borgmann is that he says we are further separated from the Thing, and we are further separated from each other, but we can mend some of that distance. His solution is a concept he calls Focality. A focal idea, for him, is one that does not involve a Device. It places us in contact with something that is of value purely on its own. Some of the categories he discusses are sport, art, and religion. Each of these avenues gives us a way to connect with a Thing, and with each other, in ways that Devices often do not. It is telling that baseball purists are very resistant to a new machine that calls balls and strikes, rather than leaving that task to human umpires. The computer may be more accurate, but players and fans prefer the human element regardless.

If you have that one focality, that one activity you do that gets you back in contact with nature, or with other people, or yourself, you know what I’m talking about and what Borgmann is talking about. You spend time with your dog, and it’s not about going faster or scoring more or being efficient. It’s just about spending time with your dog. I don’t like dogs, and even I get it.

Copyright © 2004 Ellyn Ritterskamp, eritterskamp@atpm.com. Some of the ideas discussed in this column were not originally my own, but I have adopted them as a result of reading Pieter Tijmes on Borgmann, in American Philosophy of Technology *(1997), and a class discussion which resulted from that chapter.*

The Desktop Muse

by David Ozab, dozab@atpm.com

Sitting in on the Jam

In last month's column, I introduced the growing GarageBand community. This month, my column takes on a more personal tone as I discuss my own experiences both with the application and with the various online GB sites.

One Busy Week in February

My adventures with GarageBand began during the first week of February, when my copy of iLife '04 arrived. I had been intrigued with GB since the Macworld S.F. keynote and couldn't wait to try it out. Well, only a few hours after installing, I had a complete song on my hands (titled "Espionage" thanks to the inspiration of the "Secret Agent" guitar loop). Creating "Espionage" was such an enjoyable experience that I kept experimenting. Before I realized it, I had two songs, then three, then four, then five. As I kept exploring the loop collection, more and more ideas hit me.

A Song Gives Rise to a CD

Once I had five or six songs (in only about four days), an idea struck me. At the pace I was going, I could make a whole CD in about a week. And I did. When I got to the tenth song, I stopped and calculated the total length: 53 minutes! And I had owned GB for only seven days.

A CD Gives Rise to a Band

The GarageBand preferences include fields for playlist, composer name, and album name. The defaults (e.g., "David Ozab's Album") were pretty dull. About this time I decided that my GB venture needed a name. I already have a CD out under my own name, so I decided to make up a virtual band for my GB efforts. I've always been fascinated with orthodox icons (I own a couple of small ones), and one in particular I had seen online just recently had stuck with me. It was titled "Synaxis of the Saints of America" and featured a group of Russian saints who lived back when the Russians still owned Alaska. I'm not sure why, but the name immediately struck me as being great for a band. So Synaxis of the Saints of America was born.

A CD Needs the Right Packaging

After mixing down the tracks and selecting the correct order, I had to design the CD package itself (by this point I had decided to go all out). I had CD insert paper (for use in submitting audio portfolios) and templates, and I came up with a design that was simple yet distinctive. And it was all done with fonts. After designing the CD package, I set up a simple Web page using the same artwork. Eventually, the page will grow in complexity, but for now it serves its purpose. With CDs in hand I was ready to go, but how to get the word out?

Getting the Word Out

First, I put up a PayPal link on my new page. This was handy for people who already know where to look (mostly my friends), but what about everybody else? Well, I had just submitted my "serious" CD to CD Baby (an online retailer), so I submitted Synaxis of the Saints of America as well. I also explored the GarageBand online community.

I began by looking at three sites (all of which were mentioned in last month's column): MacBand, MacJams, and iCompositions. I also investigated MacJukebox, but sadly that site had shut down since last month's column. (I skipped MacIdol—I just can't stomach anything even remotely connected to reality TV.) I posted two songs on each: the aforementioned "Espionage" and "Julia's Song" (these tracks are also posted on the Web site). Both tracks were well received on all three sites, but I only received comments on iCompositions. I also exchanged a series of interesting messages (iCompositions also includes private messaging) with a singer-songwriter named Rhonie, who is definitely worth checking out. I have since uploaded two more songs ("The Navigator" and "Triple Double"), which are only available through iCompositions.

What's Next?

Well, I plan on uploading one or two more songs, and I may enter a song contest, too. And I have another CD completed. This one took a little longer (a month instead of a week) and includes loops from Apple's Jam Pack as well as two other loop sets I found online (from Access and Bitshift). I'm keeping this new CD under wraps for a little while longer, though, so that the first one can gain some attention.

Bloggable

by Wes Meltzer, wmeltzer@atpm.com

The Usability Month

You might remember that February was abuzz with talk about the HP iPod and a headless iMac. In March, Mac bloggers wrote extensively about usability: the Mac Portable versus laptops, CUPS and adding printers, AppleCare, and, in a blast from the past, all about Mac Word 5 and 6. That's our theme for the month.

But first, no one bothered writing last month. I was, I will admit freely, a little disappointed. So this month, I'm giving you an incentive to make it all the way to the end of the column. Then, you can scroll down just another tap or two and leave me a comment, or click on my e-mail address.

Probably the single biggest discussion of the past month was that last bit I mentioned, all the talk about Mac Word 5 and 6 and what it means to be "Mac-like." Rick Schaut starts with an important premise, Mac Word 6 sucked, and builds from there into something a little more elegant, a discussion of what made Mac Word 5 so much better and what constituted "Mac-like" to users who disliked Word 6. He also explains a lot of the trade-offs in building a modern word processor like, yes, Word 6 for an architecture with significant CPU and RAM limitations (the Motorola 68K Mac). Microsoft wanted to integrate the Windows and Mac codebases for Word, and was considering a rewrite, only to can it and port over the Windows codebase. Mac users hated it.

I have two disclaimers here before we discuss any more: (1) I had only just recently learned to touch-type when Mac Word 5 was released and was in second grade, so my analysis is purely secondhand; (2) Rick Schaut is not just some guy expounding on Mac Word, he's with Microsoft's Mac Business Unit, and his opinion counts for *something* at least.

What ensued from Rick's commentary was nothing less than a desert sandstorm of interest in what he had to say. The comments on the essay itself suggest two different threads: people who thought that Word 6 was a disaster because it was basically a Windows program that happened to run on the Mac, and people who thought that the added features like inline spell checking which couldn't be done with Mac Word 5 made it well worth the while and the money. Later, Rick clarified his definition of "Mac-like" to explain what the Mac BU encountered, which was, in essence, "how Mac Word 5 worked."

Others got in on the commentary thing, too, and it may serve you well to read them. Derek Miller insists that every version of Word from version 6 up has been bloated beyond what he needs: "Word 5.1a, from 1992, with the addition of inline spell checking (the squiggly red underlines) would cover almost everything I really need to do." Pierre Igot thumps hard on Rick and the Mac BU for paying too much attention to additional features and not enough to things that would genuinely improve the user experience, like integrating the Word and OS X spellcheckers. This leads to, yes, 61 comments, many of them dialogue between Pierre and Rick about the points in the article. Michael Hanscom insists that although Word is usable now, Word 5 was perfect and Word 6 the perfect word processor—for a Windows user. Jay Shao excuses the grotesqueness of Word 6 on some level, saying that the steps backwards involved in completely rewriting Word's codebase might have been a tradeoff MS couldn't have afforded at the time. (Imagine that: something Microsoft couldn't afford!) And, I should observe, Kirk McPike named Word 5 "[t]he best word processor any platform, ever," and yes, he used the "Mac-like" moniker, too.

Now, moving on to what else happened in the Mac blogosphere this month, on that same usability theme:

- Charles Moore at MacOpinion wants Apple to bring back the Mac Portable. He thinks that, although the PowerBook is great if you want to be consistently mobile, a computer that you could take to work with you, sit on your desk and then take home with you would be nice for people who don't need the features compromises of an inch-thin aluminum beauty. After all, the thicker G3 PowerBooks could take swappable bays and the like, which would be more than a little challenging in the titanium or aluminum models, and some people don't want to be road warriors. There are some PC laptops that do this, mammoth beasts weighing in the same 15-pound range as the old Portable. Why not Apple? (Part of me asks, "What about the Xserve?" I'd think you could fit that in a briefcase pretty well and take that home with you, if you had a monitor in both places. Like in the olden days, with laptops and docking stations. But I digress.)

- Eric S. Raymond (yes, that ESR, for you FSF fans) tried out CUPS and its GNOME GUI to connect to a shared printer, and found it rather lacking in ease of use even for a Linux geek. He says that it's just too complex to make sense, and in order to use it as its instructions indicate, one has to first hack the CUPS config file—rather the opposite of "Aunt Tillie could handle this just fine," as he put it. But, lest we Mac users become too smug about our own CUPS handling, Jon Udell of InfoWorld tried out OS X's Printer Setup Utility for the same task and finds it, too, to be more difficult than necessary, although not making mistakes quite as egregious.

- PJ Doland complains of AppleCare being much too user-disoriented for anyone to bother using and not worth the money anyway. Doland says, "All you get with AppleCare is free phone support and three years of sub-standard wait-and-see mail-in repair service." Not quite the ease of use we've come to expect from Apple.

In case you found all of that boring and still want your Easter egg, I've got lots of fun news on the iPod front this month! Yes, if you thought last month was strange, then try *three* unusual iPod stories in one month: an iPod homicide (apparently a hoax, gratefully); from UC-Berkeley's The Daily Californian, the iPod tribe, of sorts; and, from Engadget (original link not available), a Craig's List posting an iPod in exchange for *pretend* love (yes, you read that right; she was to be there just to show off to his parents). To boot, Wired (via As the Apple Turns) claims that these iPods-in-exchange-for-something ads are unique to New York City, something I'd buy, and that there, you can get an iPod in exchange for all kinds of things, and, bizarrely, some people will exchange sex acts for an iPod. Apparently an NYC thing.

I'm going to take a cue from radio shows here and say: if you have any interest in being mentioned in next month's *Bloggable*, think my idea from last month of a companion blog for this column is great/stupid/terrible, or want to praise me or pillory me for something I wrote, please contact me and let me know. Because I'm tired of just getting spam at breakfast.

Copyright © 2004 Wes Meltzer, wmeltzer@atpm.com. Wes Meltzer is enjoying the temporary warmth of sunny Scottsdale, Ariz., but is still disappointed by the lack of e-mail each morning. He will reward you richly in words if you e-mail him.

by Ted Goranson, tgoranson@atpm.com

Announcing the FORE/1 Outliner

Regular *ATPO* readers probably know I worked with NSA, followed by a lengthy involvement with ARPA (now DARPA). One of the labs I worked with during these decades has developed an advanced outliner for their own use, and will now release it for free. This month, *ATPO* reviews some of the key features of this application named FORE/1.

The lab in question is one of those that still officially "doesn't exist," which makes open source licensing a little problematic. So they intend to just release the outliner through the major peer-to-peer file sharing networks as a "free" product including source code. They think it may actually spread faster by that channel anyway. Because they must keep their identity secret, they have retained the firm SAIC to act as spokespeople. Sri Golubula of the McLain office of the Suffolk, Virginia office of SAIC gave us a detailed overview of the product, which we report here.

Architecture

(This section is a little more technical than we like to get in *ATPO*. Some *ATPO* readers may want to skip a couple paragraphs about the *how* and go directly to the *what*. Just look for the "User Interface" header below.)

FORE/1 is based on the notion of cells like NoteTaker and NoteBook. This notion goes beyond the two traditional types of outline header and paragraph text. Like Tinderbox each cell has any number of attributes. Each cell has a position in an outline.

FORE/1 is novel in extending that notion to agents. Each cell has at least one agent that controls the display, but many agents are possible, including agents that move about. Agents can modify the display, change and generate the existence, type, and contents of cells; and arrange cells in the outline structure.

FORE/1 agents are based on functions, coded using the functional language Haskell, which for five years has been maintained as an open source project largely via courtesy of Microsoft Cambridge Lab. This approach—radically different from normal programming practice—allows the agents to be loosely coupled, stateless, and distributed. (This summer, Microsoft will be introducing a .Net version of the FORE/1 agents in F#.)

Execution of functions in this structured context allows the most advanced state-of-the-art concept modeling, said Golubula, but some of these capabilities have been removed from the lab version of the application for open distribution. (The version that allows distributed outlines/outlining, including assistance by remote agents, is called "FORE/n," pronounced "foreign.") We'll mention one or two of these impressive capabilities when we review the features.

Golubula noted additional novel elements of the architecture:

- "FORE/1 is essentially an outliner GUI for Emacs. Leveraging the existing capabilities of Emacs allows us to take advantage of the stable code of thousands of person-years of coding and even more of review. It is the most complex and capable single application in existence," he said.

  During the three months I have been using it, there was no time when the I needed to "drop back" into Emacs or even be aware that it was running. FORE/1 used the stock Emacs supplied in Panther as a background process, invisibly installing the necessary extensions (which include OSAXen—AppleScript extensions—in Emacs Lisp).

- There are essentially two applications: the outliner itself, which is written wholly in AppleScript; and the agent space, which is written in Haskell. The source code for both is completely visible and editable in the outliner. The user interface is created in FaceSpan using a free runtime component, which Golubula says was a tough call. They could have done it using AppleScript Studio, which is free. That would have allowed anyone to edit the entire application, including interface widgets. But AppleScript Studio is difficult to use, even for small changes.

AppleScript Studio brings AppleScript to Cocoa, while FaceSpan is more rooted in AppleScript, simply adding interface elements. This way, a novice can more readily tweak anything at all except adding new interface widgets; for that you'll need to purchase FaceSpan at $150, or more likely send a request to the developers through Golubula.

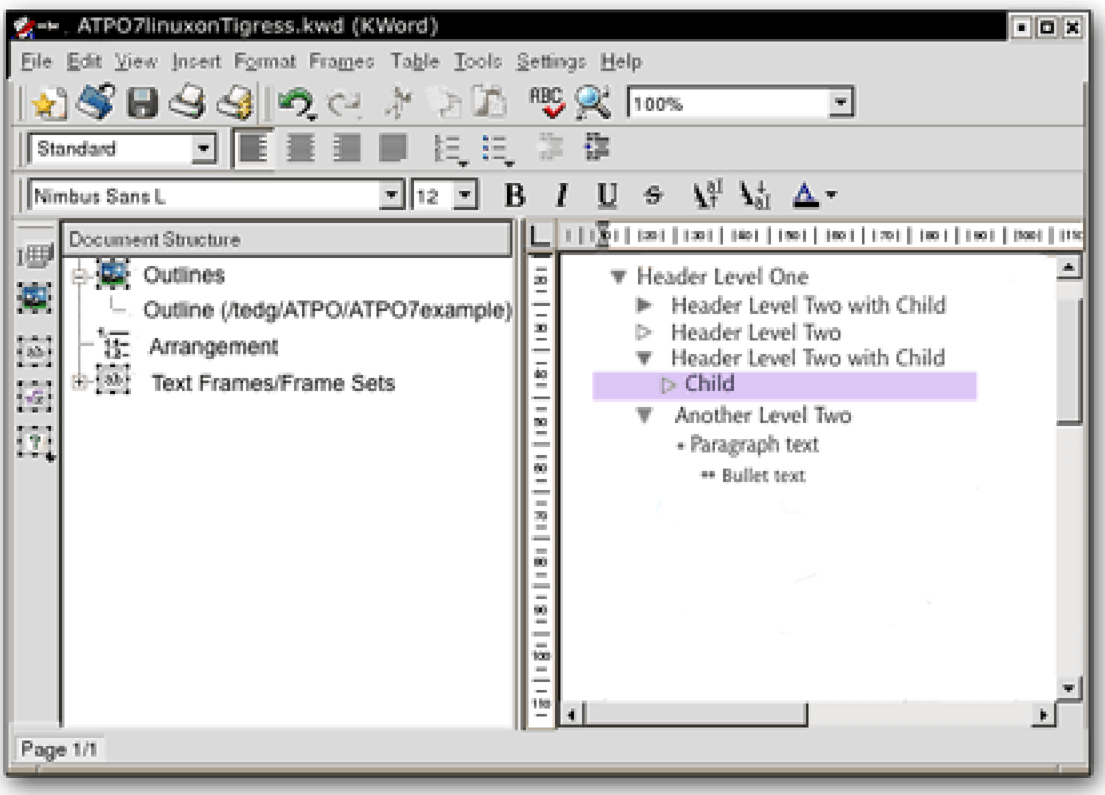
- The structure of the Haskell functions is based on a novel application of group theory to information, a formalism that allows the history of each cell to be presented internally in terms of a mathematical "shape." This representation allows unexpected bindings among cells but more importantly allows higher level abstractions to guide writing and associations. Golubula avoided mentioning the lab's application, but the demo cells contained unstructured and structured text, unstructured and structured media as both input and presentation drivers, and similarly structured (literate) and unstructured code as content and the application.

- FORE/1 was developed and primarily fielded on Mac OS X. That's because the lab extended the OS X kernel (xnu) to allow cell functions to control the Power architecture (the basis of the G4/G5) at a very fine level for FORE/n. Something like that was always planned when the lab in question helped fund the Mach project on which OS X is based.

  However, Golubula stressed that the IBM/Apple Taligent partnership resulted in code developed for the similar NuKernel that IBM is using to extend the Linux kernel to support similar functionality on IBM's high-end workstations.

- IBM is interested in adopting the KDE desktop for its next generation Linux enterprise desktop. It is already committed to speeding progress on KWord as a replacement for the popular FrameMaker which Adobe is abandoning. KDE employs a component embedding technology, KParts which is an updating of OpenDoc, a technology jointly created by IBM and Apple. Apple's forthcoming "Tigress" employs a modified version of Kparts for its interdocument services.

Because FORE/1 uses KParts, it can embed in KOffice—or any other KDE application—like the KDE Web browser on which Apple’s Safari is based. All of the KDE applications are coming to OS X/Tigress as a cross-platform competitor to Microsoft Office, with FORE/1 as the outliner component directly competing with Microsoft’s Notebook in its Office suite.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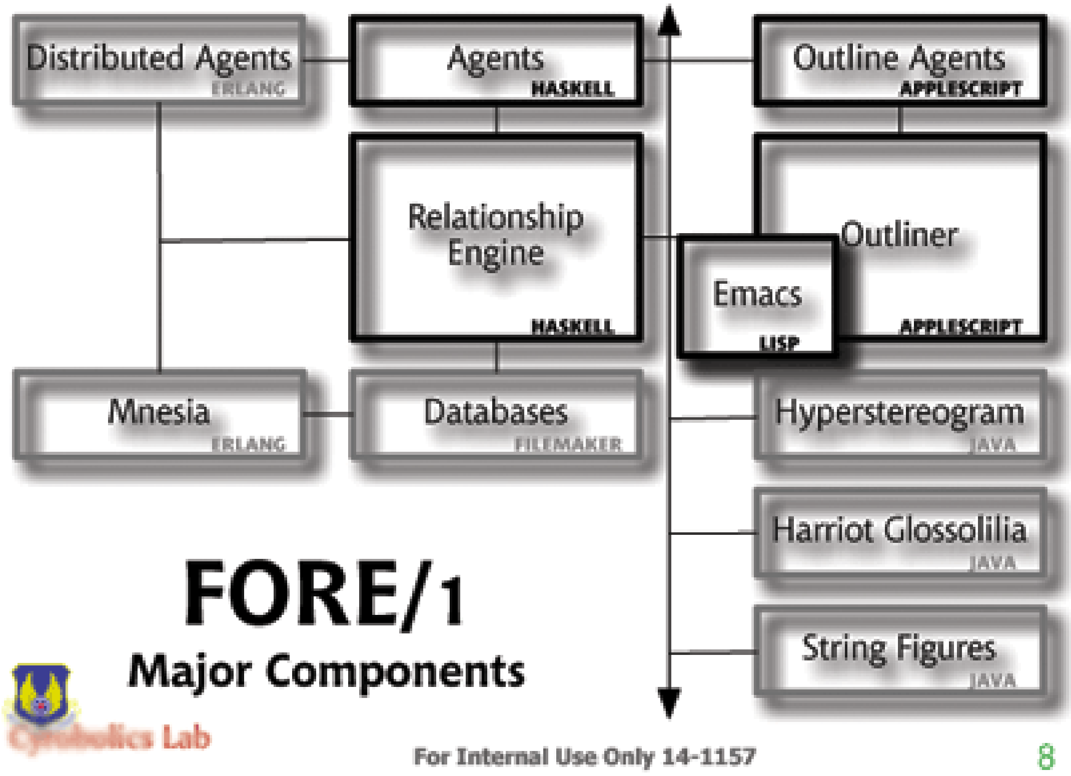
▷ Child
▼ Another Level Two
• Paragraph text
•• Bullet text

FORE/1 Outline Embedded in KWord

The overall architecture is showed in the following slide that Golubula supplied. Only the elements in the darker boxes are provided in this release. The novel visualization modules are having some classified technology removed and will be available later. They employ concept lattices, hyperstereograms, a novel input/manipulation device based on string figures (cat's cradle), and the soft logic of Thomas Harriot.



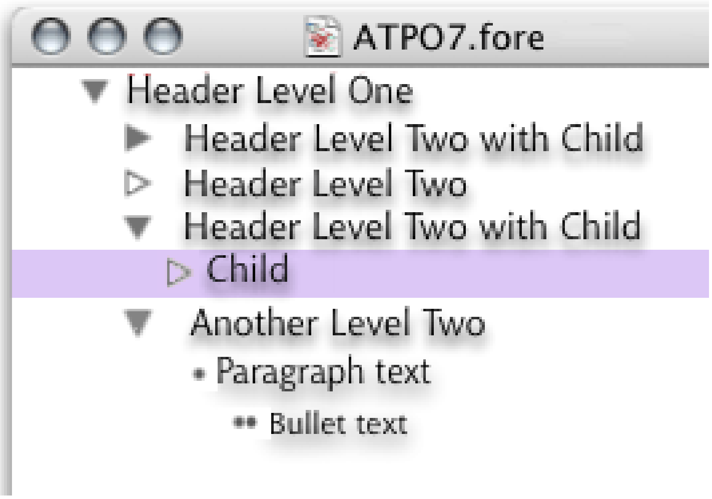
FORE/1 Architecture

User Interface

Detoured readers can rejoin us here; after all, what matters is what you can do and how comfortable you feel. So in this *ATPO* installment, we'll review the user interface, which is the very best I've seen for an outliner. In future columns—if there is interest, perhaps in the "mind-mapping" column—we'll look at some of the extraordinary things the agents and graphical visualizers can do.

At first glance, the outliner is fairly ordinary looking. It comes with all the advanced features hidden; in this mode you use it just like you do OmniOutliner.

There are some differences. The text can be translucently shadowed (which makes an amazing difference), the drag indicator is like we described for NoteBook in ATPM 10.02, but like NoteTaker (and unlike NoteBook and OmniOutliner) you can copy cells by Option-dragging.



▼ Header Level One
- ▶ Header Level Two with Child
- ▷ Header Level Two
- ▼ Header Level Two with Child
  - ▷ Child
- ▼ Another Level Two
  - • Paragraph text
    - •• Bullet text

Simple Outliner View

You'll note that it uses an ACTA-like triangle convention. A hollow triangle denotes a cell with no child. There are two primary cell attributes: headers (denoted by triangles) and paragraph text (denoted by bullets and multiple bullets). When exported to Word or applications that accept Word format, these have the appropriate named paragraph styles.

The bullet-labeled cells are effectively outlines within outlines. When exported, they become bulleted lists within the document.

Even in this simple mode, FORE/1 rocks. Each cell can be rich text as shown, an HTML/XHTML item (including a table which essentially gives outliner columns), a number/date, a QuickTime element, or a list or pop-up item. With Apple's KParts (code named "slide"), publish and subscribe returns! Each cell can contain any document, terminal, spreadsheet, or even other outliners!

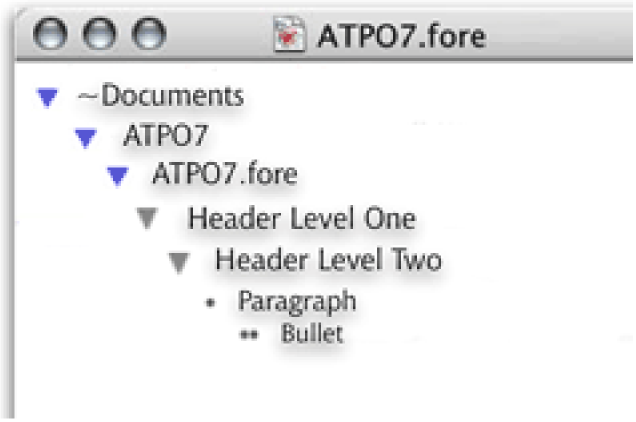
Each such external item can be embedded in the outline or referenced from another file or URL, using agents we'll describe later. Or it can be the result of a structured query to a database. In fact, each reference is a kind of direct link of the type normally used in hypertext. Predefined direct links are mirrored clone, directional clone (a change in the parent changes the child, a change in the child breaks the link), reversed clone, and copy. All of these extend to links inside the outline, across outlines, URLs (including mirrored clones via FTP), and to certain file types of other applications.

FORE/1 supports the normal type of hoisting, where you can "lift" a branch so that only it displays. But you can go the other way as well, "Finder dehoist." That's right, you can go on beyond zebra and walk on up the Finder outline. And get this: you can promote or drag an outline header to a Finder header. In this case, that part of the outline becomes a new outline file.

You can drag among open outlines or between panes of the split window of the same outline. Bulleted paragraphs are included in this as well. So we have three levels of outline in a single pane: the outline of files in the Finder, the outlined structure of one of those files, and the bulleted outline within that file. Any element in one can move to the other.

There's a "horizontal hoist" that I will get to in a moment.

Dragging a selection (which can be discontinuous) to the Finder creates a new document with that nested content according to the last-used nesting rules. Dragging from the Finder or any element in another application's document opens a dialog asking what type of clone or reference you wish.

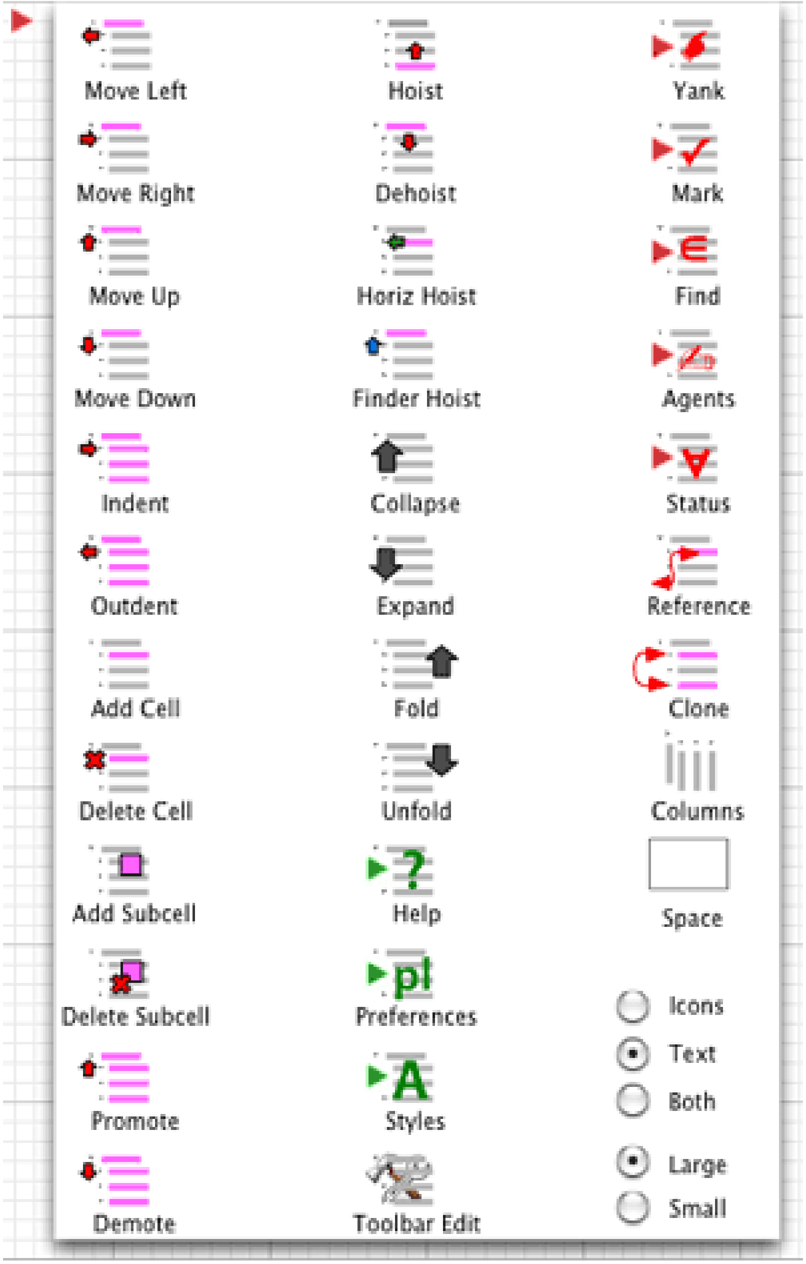


Finder Dehoist

Almost everyone will use this free outliner in this "simple" mode, where it can serve as a notebook/scrapbook and/or the ultimate writer's outliner.

The designers were rather obsessive about having every operation controllable by the keyboard and through the outliner window alone. As a result, the menus as delivered do not have all the commands, but that is user-tailorable: the menus can be created and extensively edited like Frontier's. Keystrokes are equally fluid, including the ability to have context-sensitive keystrokes and to have compound sequences like Control-S, then B. This feature is decidedly un-Mac-like (but quite Unix-like).

There also is the requisite toolbar, but you won’t really need it once you learn a couple of things.

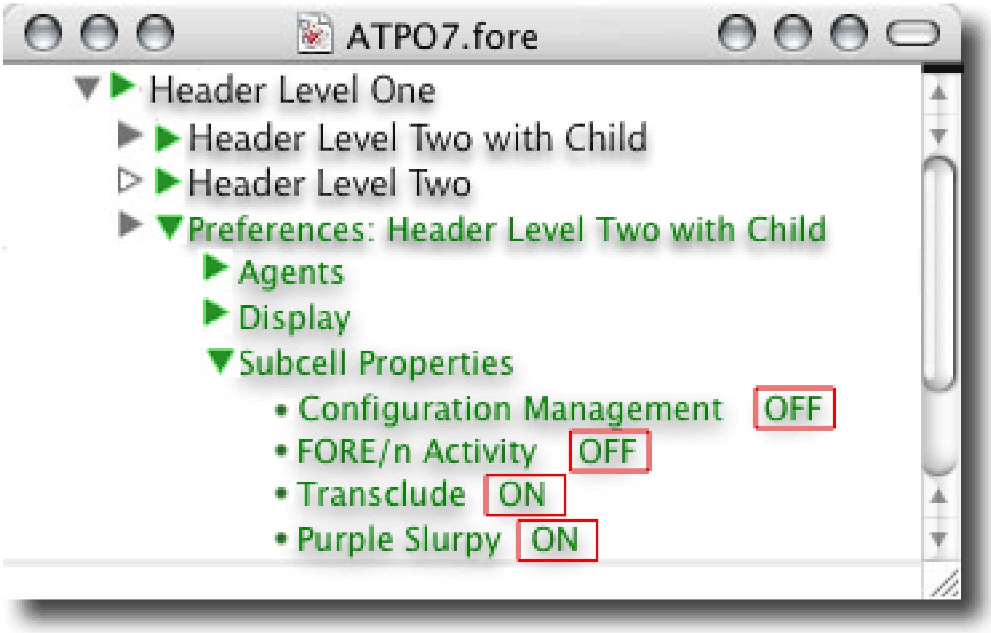


○ Icons
● Text
○ Both

● Large
○ Small

Toolbar Editor

You'll notice that everything you need is in or on the window. And I mean everything. For instance, look at how the preferences are displayed and set. As an outline! Skip over for a moment how you get to that preference outline (by "horizontal hoist"). You'll also appreciate that all the controls are optimized for a one-button mouse. More than that, all the developers work on PowerBooks.



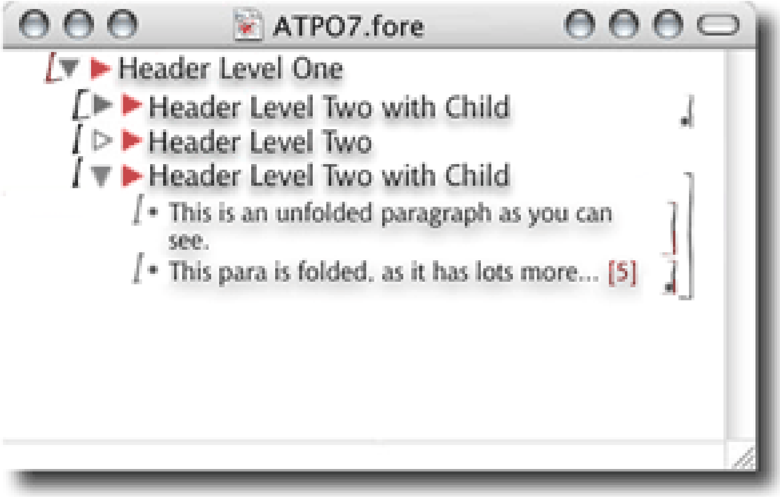
ATPO7.fore

- Header Level One
  - Header Level Two with Child
  - Header Level Two
  - Preferences: Header Level Two with Child
    - Agents
    - Display
    - Subcell Properties
      - Configuration Management OFF
      - FORE/n Activity OFF
      - Transclude ON
      - Purple Slurpy ON

Preference Outline

The Advanced User Interface

Now it is time to introduce you to the full-blown user interface that you can access by toggling a preference in the "as-delivered" mode. In the screenshots that follow, we'll briefly touch on how each element works. In doing so, we'll stick mostly to ordinary black rich text to make the use of the controls clearer, except for the next screenshot. The screenshot shows all the widgets we'll review. Each widget obviously has a purpose; most convey meaning with some change in color or shape, and most have hover pop-ups in addition to their own contextual menus.



Header Level One

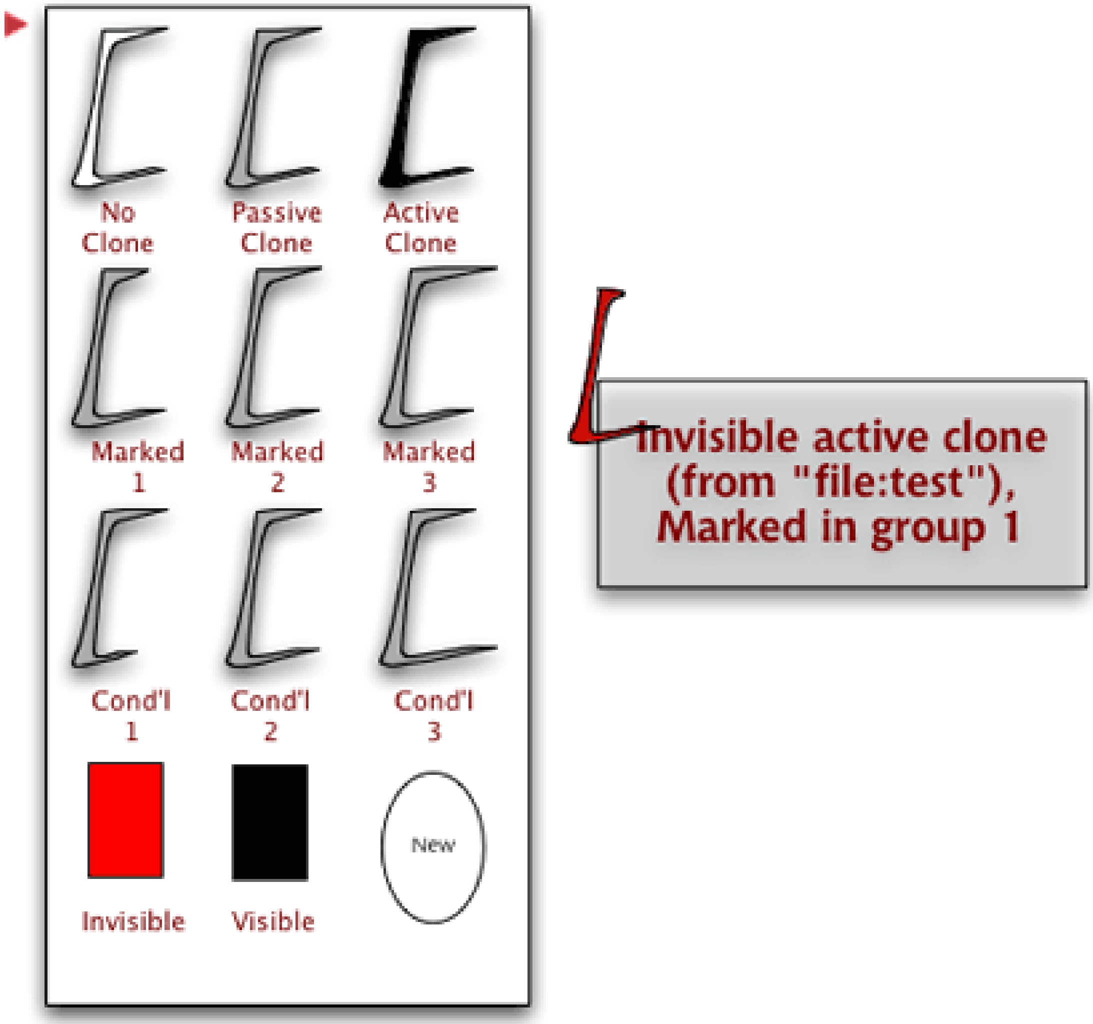
Header Level Two with Child

Header Level Two

Header Level Two with Child

- This is an unfolded paragraph as you can see.
- This para is folded, as it has lots more... [5]

All the Supplied Widgets



There are three controls on the left: the State Widget, The Outline Flippy, and the Attribute Flippy.

The State Widget

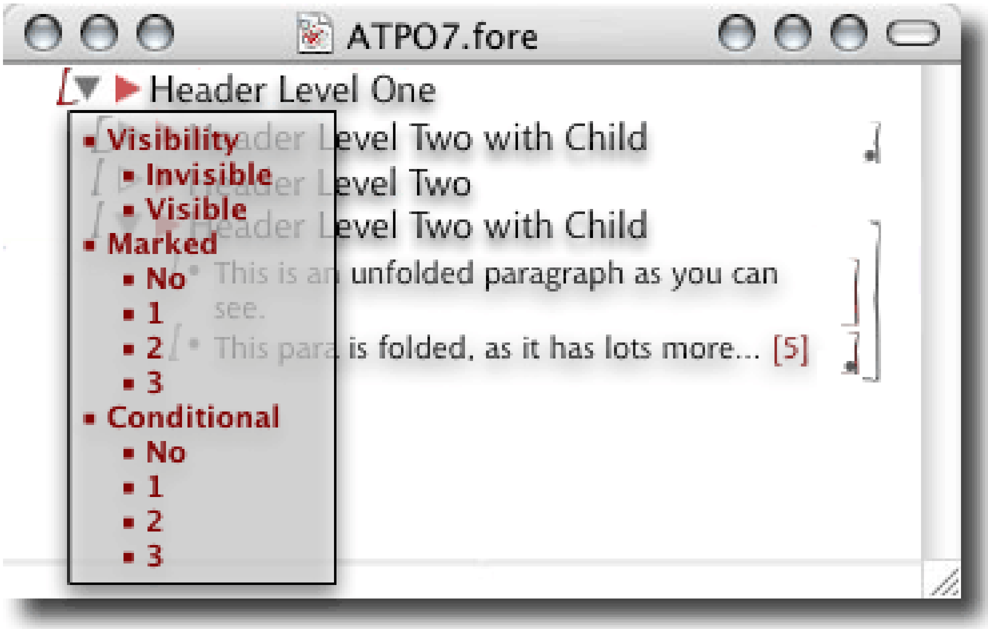
The first one designates the "condition" of the header. A header can be an original or a clone parent, sibling or child with several conditions. A header can be "marked" with one of the default markers. There is a "yank" stack into which marked cells can be yanked similar to a multi-clipboard. If you have a set of marked headers, you can yank that state to the stack, pushing the list of previously marked ones down a spot. The default is that 15 marked sets are saved.

The default markers are three types of “mark.” You can mark manually, by one of several “finds,” or through an agent. Also noted are three types of “invisible” (that are set by default to be progressive), and three types of “conditional headers” that are displayed or marked when certain conditions apply. Those conditions could be simple: “on 18 Jan remind me to buy a birthday present,” or complex “if these three links elsewhere were followed in sequence, make this section visible as part of the narrative and activate its links.” But any number of any types of markers can be defined.

The order in which you mark cells is remembered, so that you can specify that they be collected in some manner that accounts for such things as: when marked, created, or changed, level in hierarchy (and whether parents are marked or changed), and so on.

The character also displays whether the header is involved in a clone or reference dependency as described above. The widget displays some information about these states and can be tailored to use all sorts of arcane symbols if you wish. The screenshot below shows how I have my codes set up, using a shortcut of color and shape, depending on the pop-up for details.

Hovering over this widget displays a pop-up with detailed information about the state. Control-clicking shows a contextual menu that lets you change the state as it is set up. Clicking on the widget opens an outline that lets you control the state in more detail and change the rules, behavior, and display we've been describing.



ATPO7.fore

Header Level One

Header Level Two with Child

Header Level Two

Header Level Two with Child

This is an unfolded paragraph as you can see.

This para is folded, as it has lots more... [5]

State Control Outline

To the left of this widget is the drag zone. Grab here to mark or drag to a different location or outline document. The behavior of the drag zone is also tailorable. Control-clicking in this zone opens an annotation window that can be any of the cell types. My own style of annotation is to reference a branch of the invisible part of the outline reserved for to-dos and annotations.

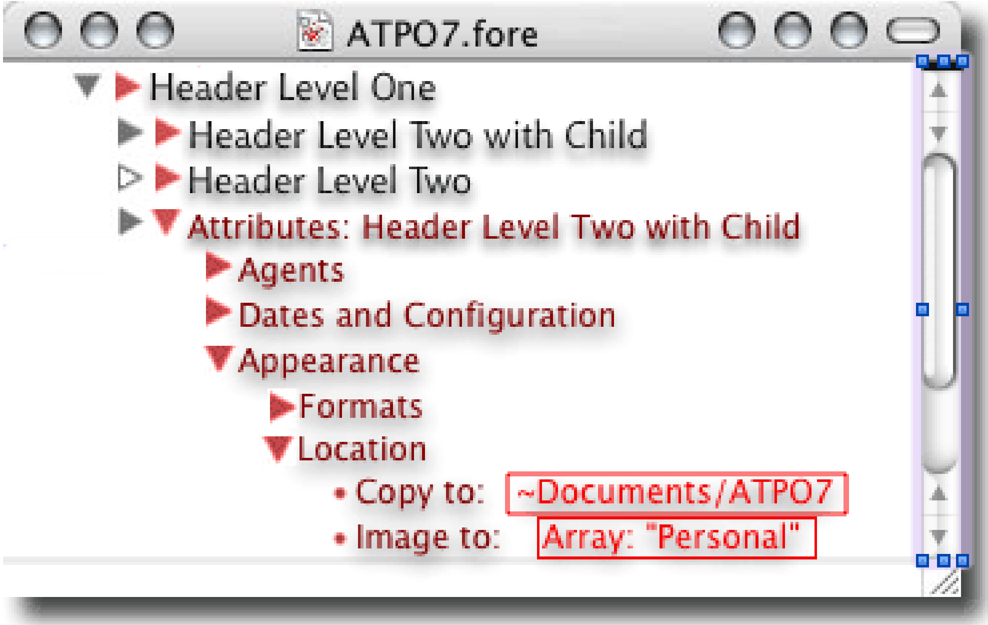
The Outline and Attribute Triangles

Next over is the ordinary flippy triangle that pretty much every Mac outliner uses except NoteTaker. Unless you say otherwise, it behaves in the ordinary way (by collapsing or expanding all children). It is hollow if there are no children, behavior that makes great sense and differs from the Finder. The collapse behavior is controlled by the sliders on the right, which we’ll describe in a moment. Those sliders can make the triangle control several types of outline collapse or different modes of folding. If you activate more than the basic behavior, clicking will give you the default behavior.

The contextual menu will let you select the paragraph type for the header, which in the normal case will be the choice between “header” and “paragraph text.” You can override the CSS specifications here by using ordinary Mac formatting commands or apply any of an unlimited number of named paragraph styles you define.

And to the right we have a similar flippy triangle that is pink. Expanding it automatically collapses the “content” outline under the header and opens an “attribute” outline. This outline displays and controls all the links and attributes of the header. As with all the widgets, it conveys some information by its appearance, shows details in a hover pop-up, activates by clicking, and is tailorable by Control-clicking.

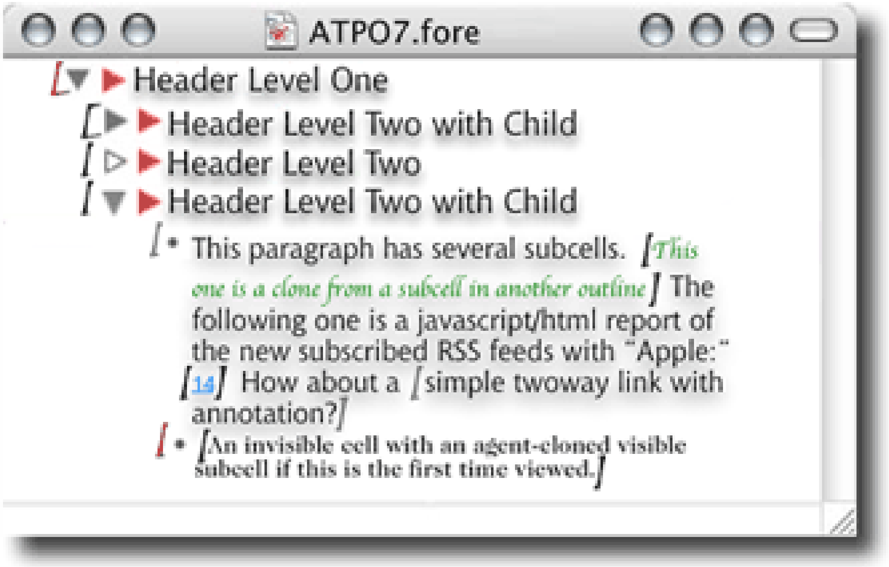
The attributes and links are much like Tinderbox’s implementation and are used in a similar manner. But links can have state, and can be of the same types as the clones (two-way, mirrored, referenced, and so on). In fact, the cloning/referencing mechanism is itself a type of link. Agents are specified here. That's beyond us to describe, except to say that essentially any scripting language can be used that you wish and any scripting editor can be used, like BBEdit, ScriptDebugger, and Affrus.


ATPO7.fore
Header Level One
Header Level Two with Child
Header Level Two
Attributes: Header Level Two with Child
Agents
Dates and Configuration
Appearance
Formats
Location
Copy to: ~Documents/ATPO7
Image to: Array: "Personal"

Attribute Outline

In-line Links

Headers cells are treated as monolithic units in everything we've described so far. But any selection within a cell can be assigned the same properties in place, becoming a sort of subcell in the outline (but not displayed that way). This is denoted by the same bracket-like widgets we described at the left of the header—flippy triangles. In this case, they surround the text or cell object that is referenced in the link or attribute. Links, clones, and references are all possible of the types we described as supplied, or any exotic variety you can dream up. Multiple link markers can be applied to any element, even overlapping. Clicking either bracket gives the behavior specified, often a "go to" link.



ATPO7.fore

Header Level One

Header Level Two with Child

Header Level Two

Header Level Two with Child

This paragraph has several subcells. *This one is a clone from a subcell in another outline* The following one is a javascript/html report of the new subscribed RSS feeds with "Apple:" 14 How about a simple twoway link with annotation?

An invisible cell with an agent-cloned visible subcell if this is the first time viewed.

In-line Link/Attribute Marker

Folding Sliders and Feedback

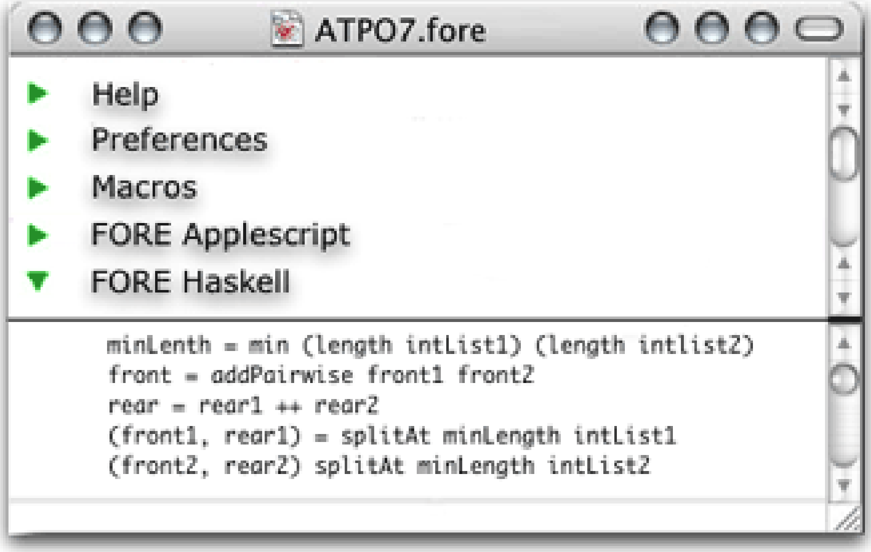
Way over on the right are two vertical markers like we described that Mathematica uses. The inner line demarks the scope of outline collapsing; normally this is all the children under a header. To the right is the scope of an independent folding command. Folding can be defined over any scope with simple rules. You can adjust that scope by dragging the line down and up. The key rule is that if you drag to an Aunt below, that Aunt's sister above is included.

You can toggle (on a cell basis if you wish) whether the flippy triangle controls outline collapsing or folding as you specify. In either case, you have feedback on the number of lines and cells collapsed or folded, similar to that we noted in jEdit. The defaults (shown here) are that grey denotes collapsed matter, with pink showing folded stuff.

Way over on the right of the window is the split pane control that gives you two views of the same outline if you don’t want to open two windows. This is very handy for seeing the outline and its attributes at once.

Horizontal Hoist

The outline described so far is the outline of the content and a parallel outline of attributes and agents. But you can shift the view to outlines of editable preferences and even the code for both the outliner in AppleScript and agent environment in Haskell. Be careful with this extreme tailorability. There is no protection from making damaging changes, and I suspect that most users won’t tinker with the code, instead using enhancements from others. But make copies frequently if you are tweaking the code: you literally edit the application within itself and the changes take place immediately after saving.



- ▶ Help
- ▶ Preferences
- ▶ Macros
- ▶ FORE Applescript
- ▼ FORE Haskell

```
minLenth = min (length intList1) (length intlist2)
front = addPairwise front1 front2
rear = rear1 ++ rear2
(front1, rear1) = splitAt minLength intList1
(front2, rear2) splitAt minLength intList2
```

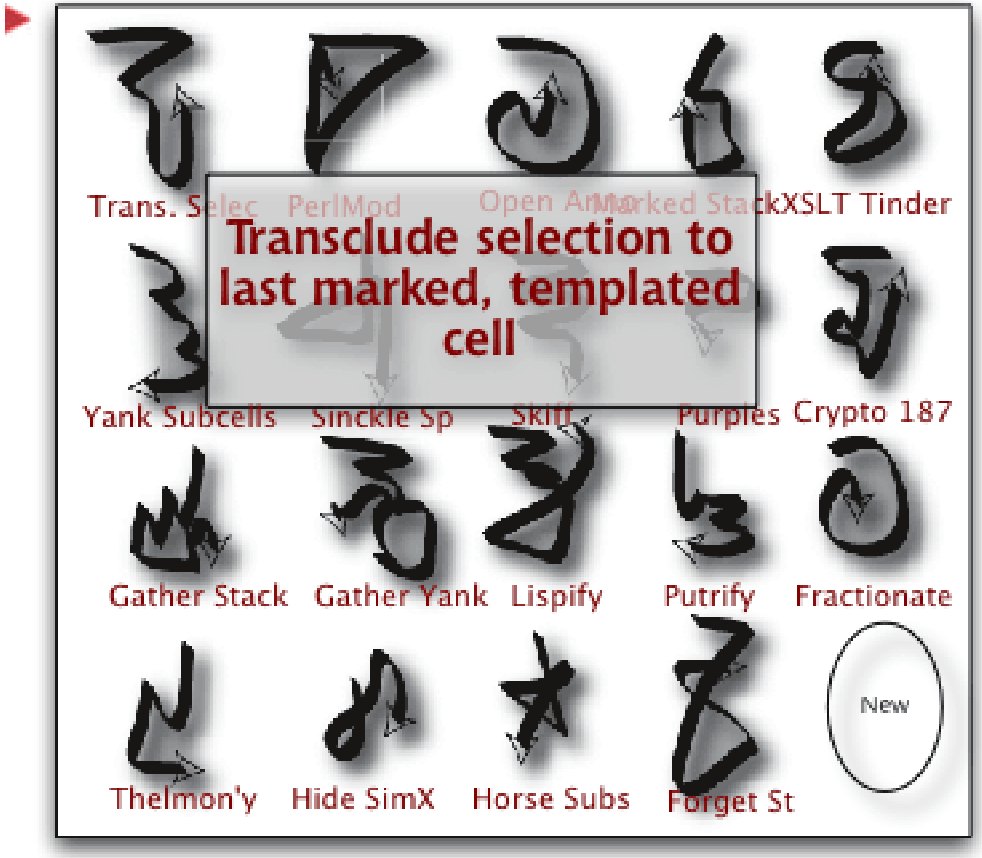
Horizontal Hoist

Button Commands and Status Pop-ups

Notice those three buttons in the upper right that look exactly like the Apple-supplied ones in the upper left? That’s the setup I use instead of the toolbar. It’s a darn sight cleaner even if we do step on a few rules. The button on the far right is the “gestures” button.

The graphic displays of the outline—which we'll cover in a different column—include a view that is manipulatable by certain motions. I like those motions (symmetry operations on concept lattices) and apply them to the outline when in outline view.

I use CocoaSuite, with the start on this button substituting for holding down a modifier key. But most on the team (far more radical than I) have transmuted their PowerBooks with MacNTouch and use cat's cradle-derived gestures. Prefab gestures for both are included in the download.

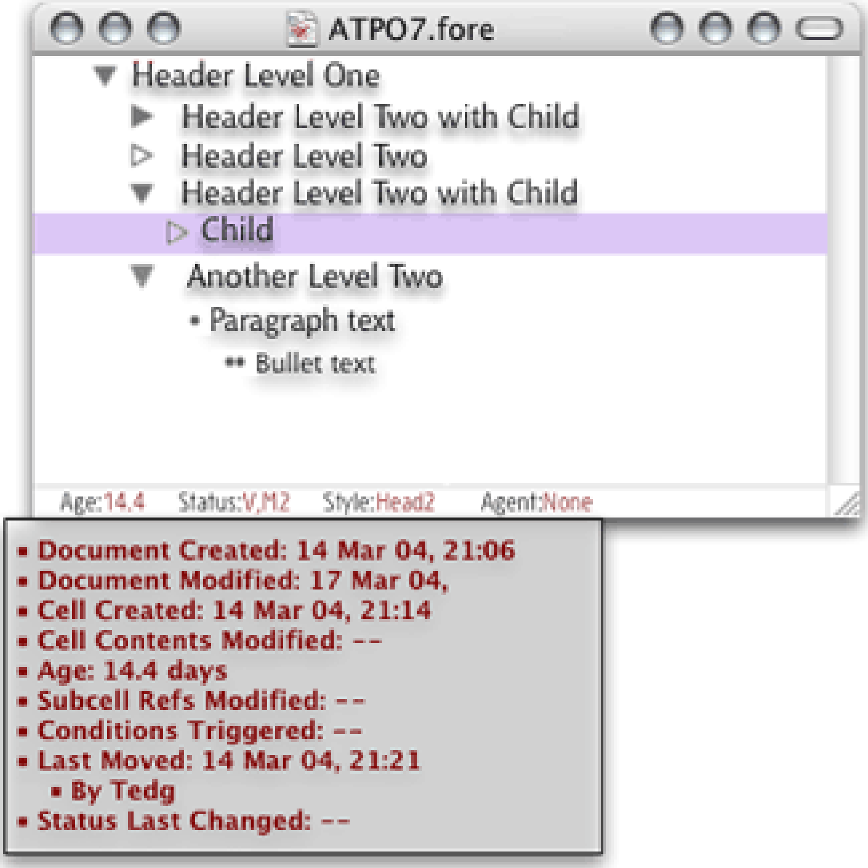


Gestures Editor

Moving left, the nest titlebar button is the "horizontal hoist" shifter. Hitting that shifts among the "regular" outline view, the preferences outline, the pretty good help outline (isn't it scandalous how few outliners use themselves for their help?), the AppleScript code, and the Haskell code. Option-click this button and you get the Finder hoist, which we've called "dehoist"; and "vertical hoist," which zooms in as far as cells with cells or bullet outlines within triangle outlines—and it zooms out into the Finder outline if you wish.

The remaining button on the far left is the drag shelf. You can drag a collection of cells there (or have an agent place them there) and drag them out at your leisure, even to another document. Its very handy. I have this set so that it is a third "yank stack," parallel to that fed by cut/paste and "gather and mark" cells; you can move these stacks among themselves of course or set any of them to be the same.

At the very bottom of the window, sharing space with the scroll bar, is a tailorable status area. This is set up in the screenshot as indicating certain features of the cells. Clicking on one indicator gives some quick options that you would otherwise have to open the attribute outline to see or change. The ones in this screenshot are from left to right: whether the selection is a cell or a subcell, its age, its stylename, its clone/reference status, its type (RTF, HTML, etc.), its nested relatives (subcells, children, multiple sources).



- Header Level One
  - Header Level Two with Child
  - Header Level Two
  - Header Level Two with Child
    - Child
  - Another Level Two
    - Paragraph text
      - Bullet text

Age:14.4 Status:V,M2 Style:Head2 Agent:None

- Document Created: 14 Mar 04, 21:06
- Document Modified: 17 Mar 04,
- Cell Created: 14 Mar 04, 21:14
- Cell Contents Modified: --
- Age: 14.4 days
- Subcell Refs Modified: --
- Conditions Triggered: --
- Last Moved: 14 Mar 04, 21:21
  - By Tedg
- Status Last Changed: --

Status Pop-ups

Other Stuff

We've skipped over some features. FORE/1 can be embedded in Path Finder as the preview editor, which gives a different sort of Finder outline integration. It works well with all the content in a database; I use FileMaker 7. Because FORE/1 uses XML, you can shift your outlines back and forth with Tinderbox without losing anything. Much information from either application's scheme is inaccessible from the other application. You can publish via OPML (which erases much of the cool information), through Tinderbox (or any layout application that accepts XML, like FrameMaker, KWord, or InDesign), or any of the new KDE-derived Apple "iOffice" (code named "Jeholodens") applications.

FORE/1 indexes by n-grams (usually two-, three-, and four-letter sequences) in addition to words. The two together with any tagging and modeling that exists have all sorts of advantages in actually guessing at the meaning of words. So when you do searches, you can get results according to the "semantic distance." A new mailing list and wiki have been set up to advance this technology.

Like Tinderbox and FileMaker, you might consider FORE/1 an open-ended development platform. You may be hesitant because you think you will need to "set it up" in your own way before accessing its power in ways that you can leverage. Recognizing this fear, SAIC is tasked to adjust behaviors so that FORE/1 emulates three of the legacy outliners we surveyed last month. That will provide a ready entry point for the non–power user.

Negatives

The outliner has several weaknesses. Because it is implemented in AppleScript, it is slower than a normal application. I have used it for a few months on my 1 GHz PowerBook with no problems, but I fear that older machines or huge outlines will produce annoying delays. There is no snipping service, as the Cyrobolics Lab used their own AppleScripts for input. Surely someone will add snipping management soon because it will be so easy.

You can display way cool HTML in cells, including tables, layers, and the whole bag. But you cannot *edit* the HTML in FORE/1, other than changing text. You need to use a separate application for that.

The export to other applications is extremely flexible because the native representation is XML. The schema used is included in the download. All program-to-program and program-to-Web translation is done by XSL translations. This is not something a casual user will create. Two-way translation to Word, KWord, FrameMaker, and InDesign is included, plus two blog templates. But you'll have to tweak them if you have specific layouts in mind, and this is non-trivial.

And as noted, for the time being you'll have to export to another application for graphical display and manipulation of relationships and links. Even more basic: printing is pretty hosed up from FORE/1. You'll have to use a layout application for *that* too. Named styles will convey though.

You should also be warned that the original developers feel obsessive about certain things. For instance, they believe in multiple windows; if someone insists on adding tabs to their creation, they are likely to sneak into your house at night, eat your food, and paint your furniture ugly colors. And they can do it too, under the current administration. Even though we have been friends for decades, I'm still afraid; there is nothing more dangerous than a spooky outliner who's been offended.

Department of Corrections, Apologies, and Additions

By now we hope you have discerned that FORE/1 actually stands for 04/01 (April First) and is a hoax. At least the actual existence of the application is—and some of the background we mentioned. I apologize for any damage done to your expectations. Maybe we should make it, or get the Cyrobolics folks to release it.

If there is interest, I'll describe what the fictional Cyrobolics geniuses have concocted for graphical concept mapping when we survey the products you can actually get that do "mind—mapping."

This column was originally intended to survey features of Windows outliners that OS X users don't have. The idea was to prompt enlightened users to spur OS X developers to improve their own particular outliners. But amazingly, after significant effort, we found nothing worth bothering you about. What makes this so annoying is that most Windows outline developers do not have much description on their Web site, nor in the documentation. You actually have to work with each one to discover its capabilities, so it was as much work as last month's column with no result.

There are some interesting Windows products, but all of them (excepting perhaps Skwyrul Pro) are disturbingly ugly and clunky in their user interface. NoteMap is a simple outliner that has an imperfect round-trip export/import relationship with Word. No one on the Mac supports Word round-trip. This matters because stuff like InDesign and Quark understand Word, and many writers like to work in phases, shifting from their work back and forth from outline to layout views, like you could do in FORE/1.

Lacking anything interesting to say on outliner features from other platforms, I decided to describe an ideal outliner of sorts to goose up the dialog you should be having with all these clever Mac developers—the ones that support your creativity.

• • •

We have a new outliner! Zengobi, Inc recently shipped version 1 of Curio. The feature set of this first version is targeted toward "concept discovery," but it is intended to grow to general-purpose brainstorming. What makes this notable is that it is a completely new take on outlining, sort of a cross between OneNote for Windows and Apple's Keynote. This vision has gas, and is worth following.

Copyright © 2004 Ted Goranson, tgoranson@atpm.com. Ted Goranson has been thirty years in the visualization and model abstraction field, and has had careers in defense and intelligence spook labs. He is now beginning a new user interface project.

Web Accessibility

by Raena Armitage, rarmitage@atpm.com

Part 3: Color and Type

Most of your time exploring the Web is spent reading—and attention to your text content is a great place to start making your Web site more accessible. In our last installment, we looked at text and language as they pertain to accessibility. This time, we'll look at issues surrounding color and type—the way you visually present your text.

Who Benefits?

Broadly speaking, your choices of type and color will have a big impact on two groups:

- Those with impaired or low vision find that appropriate text sizes and color combinations make for an easier time with reading. They may also be using some simple techniques to more easily view your page, such as adjusting their browser's preferences to increase text size, or overriding your color choices altogether. Some with a more dramatic vision impairment might be using a screen magnifier or something similar to assist them.

- Those with a colorblindness condition usually have some trouble differentiating between various colors. Hues that seem reasonably different to someone with normal color vision can seem almost identical to someone who is colorblind—contrast helps here, too.

We'll look at ways to make sure that your text stays flexible, and that your choice of colors doesn't cause confusion.

About Colorblindness

The term "colorblindness" might lead you to believe that a colorblind person would see the world like a black and white movie. While there are a few people who are unable to see any color at all, or who have fairly low color perception, the vast majority of colorblind people actually have trouble distinguishing certain pairs of colors.

Let's take a moment to find out a little more about how this works.

Understanding Colorblindness

Colorblindness affects around 8–10% of Caucasian males and less than 0.5% of females. It is more rare for other ethnic groups to experience colorblindness.

- Protanopia is a condition where reds and greens can be difficult to distinguish; furthermore, reds often appear darker than they really are.

- Protanomaly is a similar, but generally less severe condition. The colors are still difficult to distinguish, but some perception is still available.

- Deuteranopia is similar to protanopia, but reds maintain the same brightness value. It's caused by a deficiency in the cells that detect green light.

- Like protanomaly, deuteranomaly is a similar but less severe condition. Deuteranomalous vision is also the most common form of hereditary colorblindness.

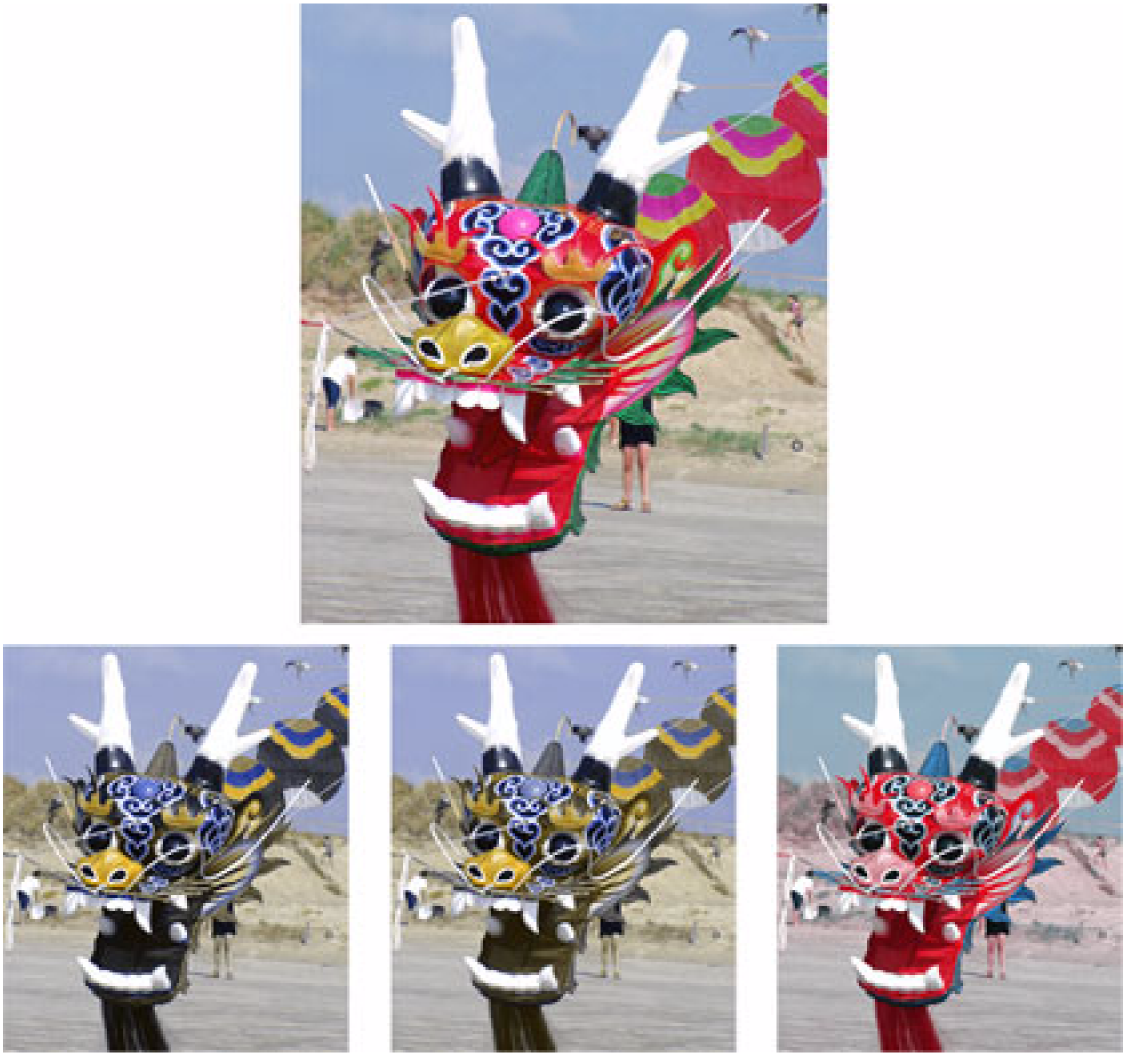
- Tritanopia involves confusion between blues and greens. It is extremely rare to inherit tritanopia, but it can be acquired due to conditions like diabetes or Parkinson's disease, or simply through old age.

- Atypical achromatopsia is a decreased sensitivity to color. Only very clear colors are easily distinguishable. It is normally inherited.

- Typical achromatopsia is a complete inability to see color. It is normally accompanied by photosensitivity—that is, "normal" light levels are too bright. Both forms of achromatopsia are incredibly rare.

For both protanopia and deuteranopia, it's well accepted among researchers that variations on yellow, orange, and brown colors are probably what people see in place of red and green. So as well as confusing red and green with each other, it's likely that those hues in between can be confusable too.

The following simulated photographs use this theory to demonstrate how color deficiencies in their more severe forms can affect the perception of color. You can use the tools at Vischeck or the Colorblind Web Page Filter to perform similar experiments on images and Web pages.



Top: Unaltered image. Bottom, left-to-right: Protanopia, deuteranopia, and tritanopia simulations.

Now Don’t Panic!

Don’t be put off by all these different variants and their sometimes-dramatic results. Any problems that a colorblind user may encounter with your Web site are often due to matters of contrast and distinguishability, which we’ll also address when we’re thinking about people with poor vision. So hold that thought; we’ll get to it in a little while.

Low Vision, Visual Impairment, and Visual Difficulty

It’s easy to forget that visual impairment doesn’t just mean white canes and guide dogs. You can diligently put `alt` attributes on all your images, make sure that there’s a text equivalent for everything, and test your sites in Lynx to see if they make sense. But a huge number of people who have a visual impairment or difficulty are *still using their display*, which is why color and type still matter to a large number of people.

What’s more, there are people whose vision just isn’t what it used to be: as one gets older, vision can often degrade. That’s just a part of the aging process. Heck, I’m not even thirty and my vision’s getting worse.

People with low vision or a visual impairment will most often be using a normal display along with an adaptive technology, like a screen magnifier, or simply using the settings in their operating system and applications to adjust text size and color. Some like to use a text-to-speech facility or a full-blown screen reader in addition to their display.

If you’re using Mac OS X, you can use the Universal Access preference pane to get a general idea of how a screen magnifier works. It magnifies the portion of the screen under your mouse—not just text—and moving your mouse causes more of the screen to roll into view.

Web browsers in particular have two functions that can help people adjust text and color. If you take a look in your browser’s preferences, you should find that you can override the Web designer’s choice of colors for backgrounds, text, and links, and you can choose your favorite fonts and sizes for different types of text.

In many browsers, you can even create a user stylesheet to get extremely granular control over the way things work. You want every page you see to use blue text on a white background? All links to be bright red? No problem. If you’re unfamiliar with stylesheets, that’s fine—you can even have one generated for you.

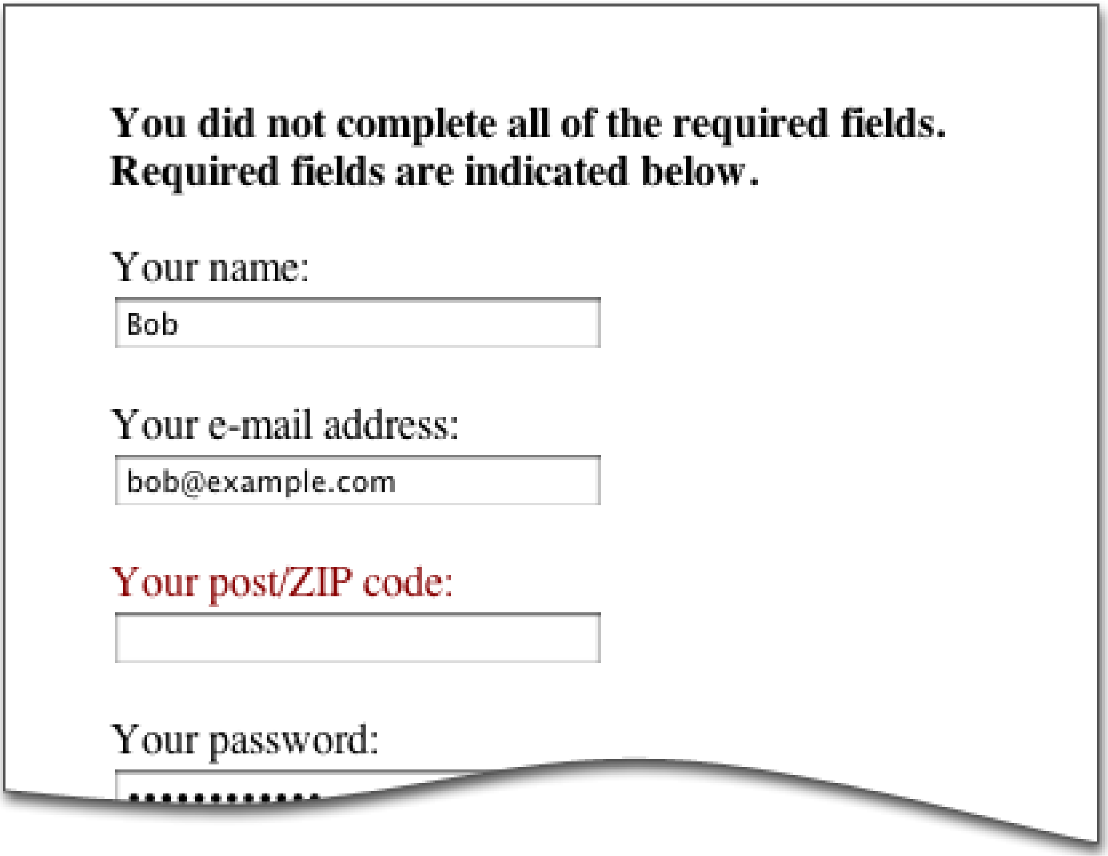
If I had a dollar for every complaint I've heard about Web designers and their choice of text size, I'd be able to buy you all a tasty beverage. If *you're* bothered by tiny text sizes, now's the time to experiment with things like browser settings and user stylesheets. Meanwhile, we'll look at ways to create Web pages that take these variations into account.

Thinking Practically About Color

Text size, colors, contrast, and colorblindness. That's a lot to think about. Fortunately, accommodating all these things isn't particularly hard to do.

Color and Meaning

The absolute minimum you ought to do about color is this: do not rely on color alone to convey anything important or meaningful. Since forms are a particularly troublesome spot for accessibility, we'll use a form as an example.



You did not complete all of the required fields. Required fields are indicated below.

Your name:

Bob

Your e-mail address:

bob@example.com

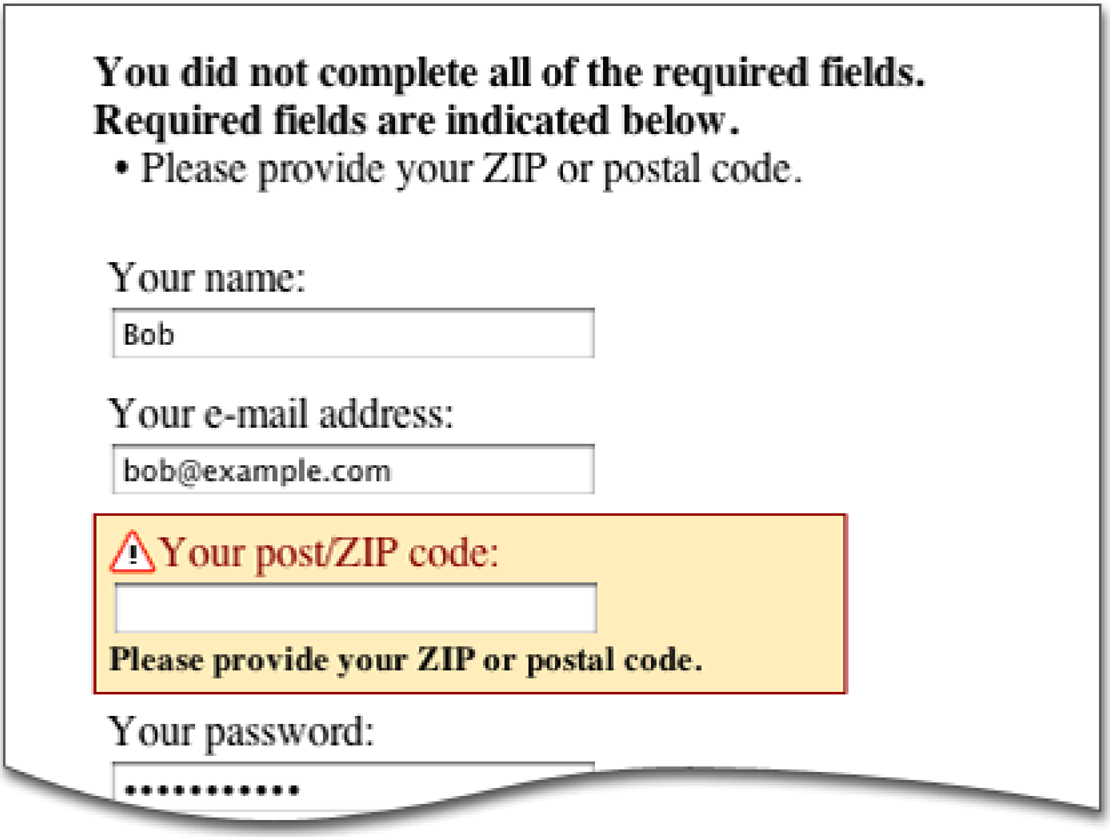
Your post/ZIP code:

Your password:

Highlighting is often used to draw attention to errors in Web forms.

Think about what happens when you fill in a form on the Web. If you've missed some essential details, you will usually be told that you can't proceed until you fill them in. A considerate Web designer will present you with the form again, and highlight the required fields so that you don't have to go hunting for the ones you've missed. In the example above, red text has been used to highlight the offending field.

However, using color by itself causes problems. Someone with a color deficiency might see that red as a dark grey, black, or washed-out brown. Someone using a PDA might not see your color at all. Someone on a screen reader or a text-only browser *definitely* can’t see your color.



You did not complete all of the required fields. Required fields are indicated below.

- Please provide your ZIP or postal code.

Your name:

Bob

Your e-mail address:

bob@example.com

⚠ Your post/ZIP code:

Please provide your ZIP or postal code.

Your password:

••••••••••••

Try using other elements to indicate items of importance.

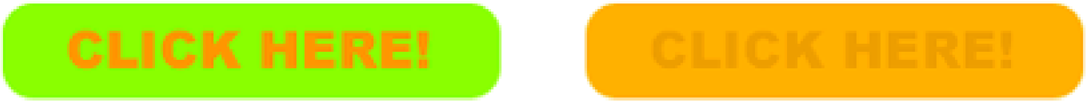
The example above uses a combination of an image, additional highlighting with a border, and an added line of text to indicate the problem. It’s added a level of redundancy for those who can’t see your colors.

Naturally, using color as a highlight is extremely useful to other groups that need accommodation. People with dyslexia or a cognitive disability, poor language skills, and even children can get a lot of benefit from visual cues like color. However, it should not be the only thing that conveys information.

Colorblindness and Your Images

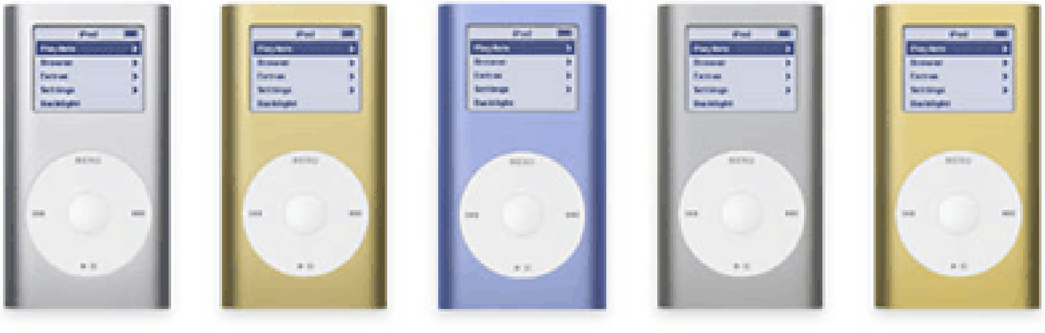
First rule: don't worry about decorative elements, photos, or anything else that doesn't carry out a particular function. Colorblind people are used to perceiving the world in the way that they do, and the fact that they might not see the exact shades in your vacation photos is not going to be a show-stopper.

For functional objects, try to be aware that using confusable hues can cause problems. It's still OK for you to put red, yellow, and green together, but it's also important to check that the contrast is sufficient.



Not only is this button really tacky (left), but it could potentially become unreadable when viewed by a colorblind visitor (right).

Similarly, here's how the new line of iPod minis look when passed through a deuteranopia simulation:

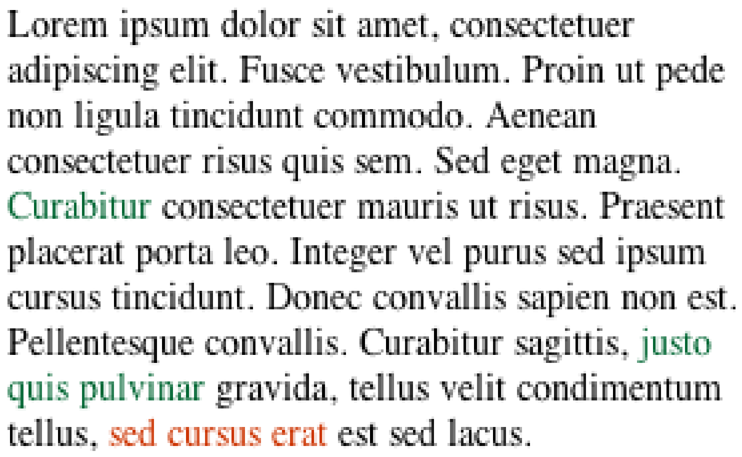


If you had to click on one in order to purchase it, how would you know the difference between the two silver-colored ones, and the two gold ones? Good thing Apple put the color names above the iPods on the Apple Store page. Imagine Mrs. Jones' dismay if the green iPod her husband promised her turns out to be the Barbie pink variant.

On Links

This particular color crime deserves a special mention.

Now that we have more control over link decoration, thanks to cascading stylesheets, we can play all kinds of neat tricks—remove the underline, give links a background color, change their weight, and so on. Again, it’s not a fantastic idea to merely make your links a different color—in particular, within body copy.



Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Fusce vestibulum. Proin ut pede non ligula tincidunt commodo. Aenean consectetuer risus quis sem. Sed eget magna. Curabitur consectetuer mauris ut risus. Praesent placerat porta leo. Integer vel purus sed ipsum cursus tincidunt. Donec convallis sapien non est. Pellentesque convallis. Curabitur sagittis, justo quis pulvinar gravida, tellus velit condimentum tellus, sed cursus erat est sed lacus.

What’s a link, and what’s a highlight? I shouldn’t have to mouse over the link to find out.

You can get away with this if your links are in a navigation bar, a sidebar, or something similar. Web surfers are usually smart enough by now to know that a group of words in a row at the top of the page, or a column down the side, is probably a navigation bar. However, it’s definitely a good idea to use color *and* something else, like an underline or a background, in your body text.

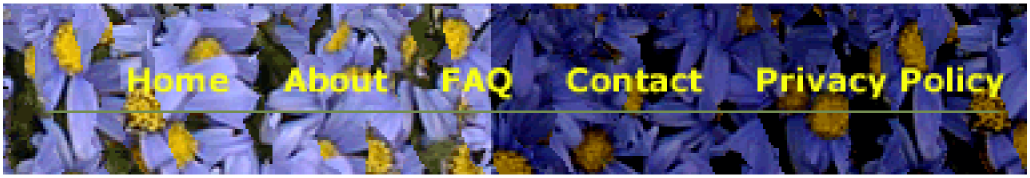
While this doesn’t affect people using text-only devices or screen readers, it *does* affect anyone with a color display. Don’t be tempted to bend the rules too much on that one.

Color and Text

When you’re choosing text colors, anyone who’s spent even five minutes learning about design can tell you that high contrast between the text and its background is the best choice for most people. It’s easier to distinguish the shapes of words and letters, especially when one’s vision isn’t so good.

This doesn’t mean that you have to restrict yourself to black text on a white background, or vice-versa. You can afford to venture a little further afield as long as your text is still crisp and legible.

Oh, and this really shouldn’t have to be pointed out, but *do* avoid busy background images as often as you can manage. Not only are they usually chosen with incredibly poor taste (take a stroll around GeoCities sometime), but the variations in color and brightness can make it even more difficult for someone who’s already having trouble with their vision. If you absolutely must use an image for a background, consider darkening or lightening the image, and reducing the contrast. Less variation in brightness means that the text can stand out over all parts of the image, not just selected parts.



Notice how a reduction in brightness and contrast on the background makes this text easier to read.

Note this well: Remember how we discussed browser preferences—specifically, the ability to choose your own colors? When you define colors for your page, there are five colors that you absolutely must define without fail: background, normal text, link text, visited links, and active links. In old-style HTML, you can specify this in the body tag:

```
<body bgcolor="#ffffff" text="#333333" link="#993300" alink="#000099"
vlink="#660000">
```

And in a cascading stylesheet, which is the preferred technique today:

```
body { color: #333333; background-color: #ffffff; }
a:link { color: #993300; text-decoration: underline; }
a:visited { color: #660000; }
a:active { color: #000099; }
```

If you leave one or more out, a person's browser preferences could come into play for the missing pieces, and that can cause all kinds of trouble. Specify them all, or don't specify any.

Text: Sizes, Spacing, and More

In general, making accessible text does not necessitate using large fonts or restricting yourself to boring old Times New Roman. Rather, it is the *way* you specify your font sizes, typefaces, and spacing that makes a difference. Anyone whose browser settings deviate from the default will appreciate your attention to flexibility.

Text Size

Again, thanks to cascading stylesheets, we have more control over how to specify text sizes beyond `<font size="4">` and `<big>`. If you're still using these old-style tags for defining your font sizes, please be aware that they have long since been abandoned in favor of stylesheets and are no longer recommended.

There's a selection of units we can use to define our font sizes: some, such as picas and centimeters, have no place on the screen and are best used for print stylesheets. Others relate specifically to screen-based measurements, such as pixels, and still others are displayed relative to the current browser default. The ones we're interested in are the relative units: ems, percentages, and the `font-size` keywords.

- ems are named for the idea that they are the width of the character 'm', but are normally somewhat larger. On its own, one em is the size that is specified by the browser setting; when it occurs later in the page, it is based on the font size that inherits from a surrounding element. For example:

  ```
  body { font-size: 0.8em; }
  .footer { font-size: 0.8em; }
  ```

In this scenario, the body is 0.8 times the size of the browser default—with the usual default of 16 points, this will be roughly 12 or 13 points. But because of the way elements inherit font sizes from their surroundings, the class `.footer` is 0.8 times the size of the body text—about 10 points. Be mindful of inheritance.

The redheaded stepchild to the em is the ex, which is named for the x-height of the font, and is around half of the default `font-size`. Exes are seldom used.

- Percentages are fairly simple: a `font-size` of 100% on its own relates, again, to the browser's default size. If we're looking at the usual browser default of 16pt text, then 100% is—surprise—16pt. 110% is 16pt + 1.6pt = 17.6pt. Browsers will round that up or down differently, so don't rely on it for finer control. Percentages rely on inheritance, like ems.

- The `font-size` keywords are `xx-small`, `x-small`, `small`, `medium`, `large`, `x-large`, and `xx-large`. The `medium` keyword corresponds to the browser's default size. The differences between them were supposed to be 1.5 times—so `large` should be 1.5 times the size of `medium`—but most browsers use different variations. Unlike percentages and ems, `font-size` keywords aren't affected by inheritance. Bonus: `xx-small` can never be too small, as browsers won't let keyword-specified text get below nine pixels in height.

  ```
  body { font-size: small; }
  .footer { font-size: small; }
  ```

  Both body and footer would be the same size.

- We've got two more tools in our arsenal: the `bigger` and `smaller` keywords. Unsurprisingly, they are a simple increase or decrease of text size, and are inherited.

  ```
  body { font-size: 1em; }
  .footer { font-size: smaller; }
  ```

Point sizes are much favoured by people from the print world, because they're familiar. However, they can vary greatly between platforms—Macs generally calculate point sizes with a reference point of 72 points per inch (ppi), while Windows machines can use anywhere between 96 and 120 ppi. If you were to define text as 8 points on a Windows machine, it'd be a reasonable size. On a Mac, however, it's illegible. Here's a graphic example from the good old days of Internet Explorer 4.

Broken Browser Alerts Aplenty!

- Netscape 4 treats ems as pixels. This is obviously not good. If you use ems, try to hide that portion of your stylesheet from Netscape 4. (Find out how.)

- I'd love to add pixels (px) to the list of acceptable font sizes, and for most browsers they present very little difficulty. Unfortunately there's a particular browser that does not increase pixel-based sizes appropriately, even when you use the browser's View menu to increase the text size. That browser—you guessed it—is Microsoft's Internet Explorer.

- What's more, Internet Explorer for Windows will sometimes get a little strange when it's told to use less than 1.0em. 0.9em, rather than being a smidge smaller than 1em, will get several steps smaller. If you're in the habit of using ems to define your text, you might like to switch to percentages when thinking about smaller text.

- And finally, Internet Explorer 5 for Windows thinks that the `font-size` keyword `small` relates to the browser default, not `medium` like everyone else. Oops.

All these choices, and all those bugs. What to do?

Most people's browser default is 16-point text, and since I care about those in my readership with normal vision as well, I find that setting to be unneccessarily large for most people. I also want the differences between browsers and platforms to be minimal at best.

You can get good results by defining the body element in your stylesheet as either the `small` keyword or a percentage less than 100% (76% works well), and then using percentages from that to adjust the sizes for other things. People whose browser settings are adjusted to provide larger text will see something larger than the default, and temporarily adjusting the size by using the View menu works for just about everyone. It's a happy compromise.

Pictures of Text

Put simply, it'd be preferable if you didn't use pictures of text too often. They cannot be enlarged, or overridden with the viewer's preferred color, in the way that text can. This is even a problem for Opera, which helpfully blows up *everything* on the page when you adjust sizes; your image might have become bigger, but now it's all pixellated. Yuck.

If you must use an image, don't forget to give it an appropriate `alt` attribute. Stick to using them for headings: using images as body text is, frankly, an evolutionary throwback. We have better tools to control real text now, and it's about time you caught up.

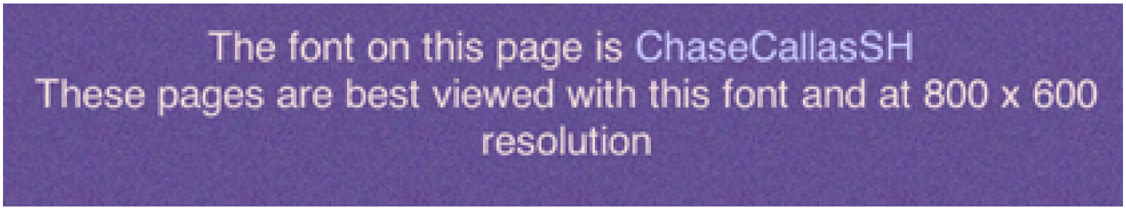
When you use a picture of text as a heading, don't forget to mark it up as a real heading, using the appropriate `h1-h6` heading tag. Just put the image inside the headings tags, and voila: now your text browsing and screen-reader-using folks can tell that it's a real heading, too.

Leading, Width and Spacing

We discussed spacing in the last installment of this series, but a quick recap won't hurt: it often aids in legibility to leave some room around your blocks of text, and in between lines. Clearly defined areas aid those with a visual impairment or a cognitive disability to identify the areas of your page, while added line height makes it easier to keep your focus on a line.

Give your text areas plenty of margins, and increase the line height of your text. This is easily accomplished with CSS:

```
p { line-height: 180%; }
div.bodytext { padding: 20px; }
```



The font on this page is ChaseCallasSH
These pages are best viewed with this font and at 800 x 600 resolution

Oh right, like I'm going to download a whole new font just to see your Web site.

Fonts are best chosen with care, and attention to the fact that there are really very few choices that appear on most people's computers. From an accessibility viewpoint, it's not really an issue—fonts that are hard for everyone else to read are generally bad for the visually impaired as well.

For on-screen use, some typefaces are more legible than others. Fonts like Verdana, Geneva, Lucida Grande, and Trebuchet have been designed with on-screen viewing in mind, and have nice, large x-heights on their letters. Fonts like Times and Gill Sans seem somewhat smaller, and the serifs on them can cause "fuzziness" around the letter forms at smaller sizes.

It's best to limit your font selection to a few choices—changing fonts several times in a document looks dreadful, and can be extremely confusing. A good rule of thumb is to use a serif text for headings, and sans for body—or vice versa.

When you define fonts, *do* make sure that you provide a few fall-backs. For example, Verdana is quite popular, but it doesn't cover everyone. As a last resort, specify a generic font family: if none of your named fonts are present, it will choose the browser's default setting for that generic type.

```
body { font-family: Verdana, Arial, Lucida, Geneva, sans-serif; }
```

What Do I Do Now?

Testing your Web pages for flexible font sizes is easy: simply bump your text size up a few notches in your browser's preferences, and see if your page responds well. Try playing with the default settings for fonts and text, and see how that affects your page.

Testing your pages for color-friendliness is not so easy. There are simulation tools, which you'll find listed below, that can help you see an image as it is likely to appear to a colorblind visitor.

If you've looked at your site and found it lacking, don't panic. As we've said earlier, you don't have to drop everything and spend a bunch of time and money on making changes to your site right now. (Not that it'd be bad if you did!) Gradual changes are okay—consider incorporating these techniques into your next redesign, and try to use them in any new content you're creating.

Those of you using CSS to control part or all of your Web site's presentation will have a much easier time—it's possible to change great swathes of your site in minutes or hours, instead of days and days of work.

It is not unreasonable to expect that your visually-impaired users are willing to meet you half way, and unfortunately many people are completely unaware of the fact that they can do something about font sizes themselves. You may like to consider adding information about how to adjust a browser's type and color settings to your Web site's FAQ or help pages. A great example can be found at The Lighthouse, a site about visual impairment and rehabilitation.

If you're following along with the Web Content Accessibility Guidelines, ensuring that color is not the only thing used to convey meaning is a Priority 1 checkpoint.

Further Reading and Tools

Chapter 9 of Joe Clark's book Building Accessible Web Sites is free for you to read online, and discusses type and color. The attention to colorblindness is particularly useful, with groups of safe colors that can be used.

The UK's Royal National Institute for the Blind (RNIB) can give you information on the various causes of visual impairment. Check out their section on accessible design for loads of handy tips.

More on the RNIB: many people are put off by sites about accessibility, due to the fact that they're mostly as plain as flour. This site is particularly good to look at in that it is both accessible to the visually impaired, while still quite attractive for everyone else. Read all about their design decisions.

You can find out more about the various kinds of colorblindness and the biology behind them at the Wikipedia.

Vischeck allows you to see images or a Web page using colorblindness simulation filters. It's useful for checking images to make sure they're okay, and offers some general information on colorblindness.

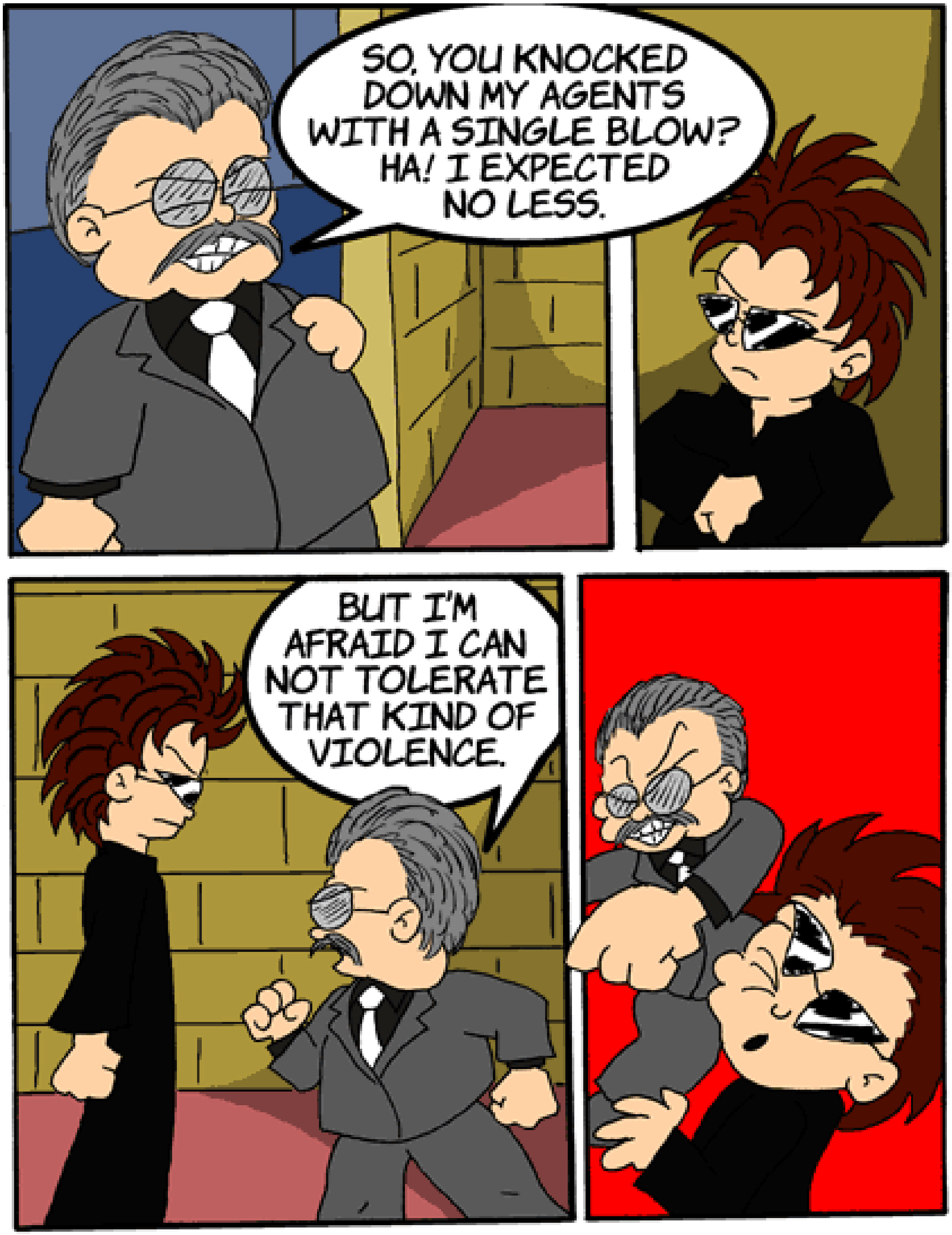
The AWARE Colorlab helps you choose color schemes from the Web-safe palette and view them with a simulation of various colorblindness. There's also another Web site simulator, like the Vischeck one, with more options than the Vischeck one.

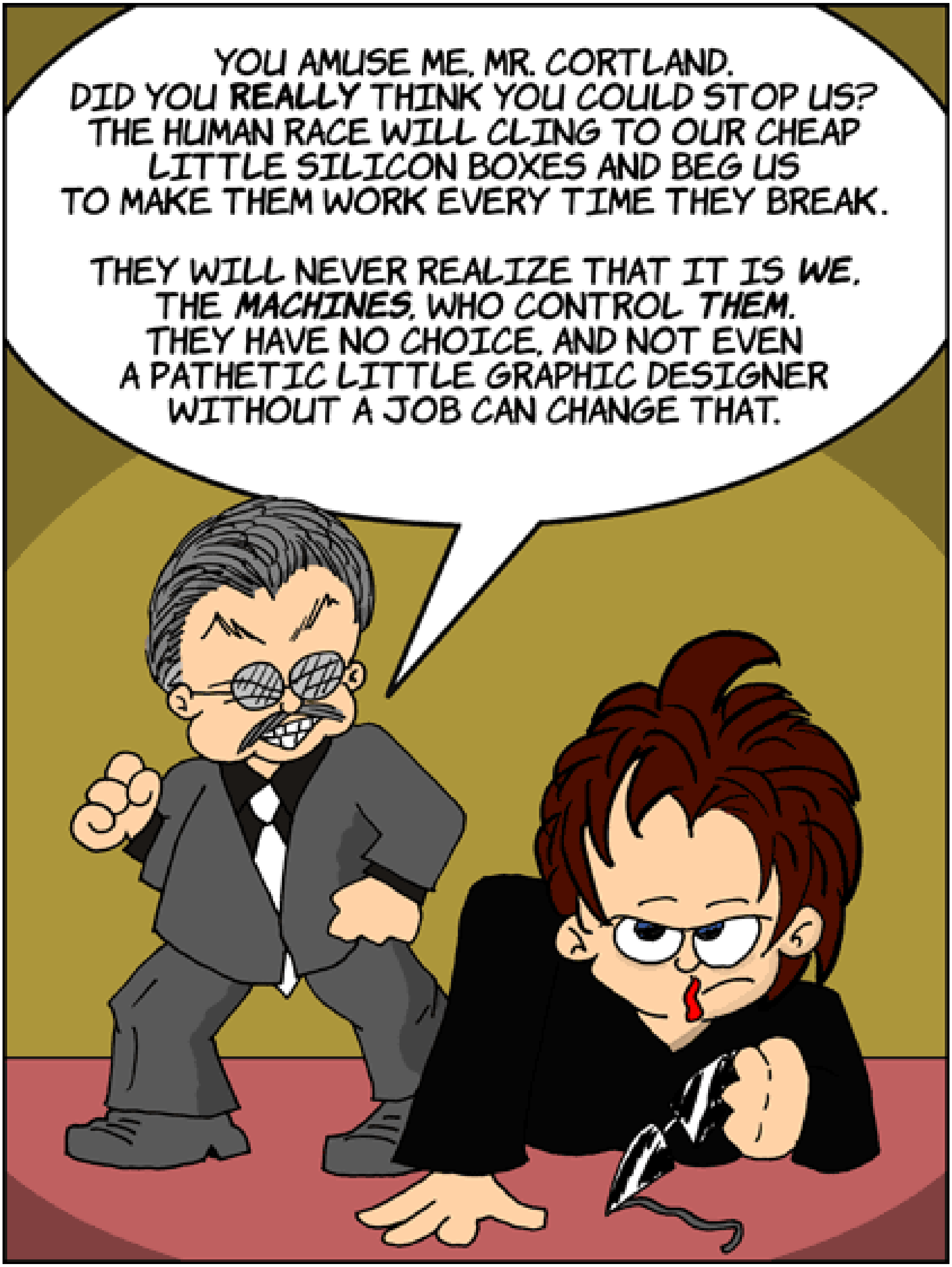
Fun with user stylesheets: if you have no idea what they are or how they work, there are explanations galore at kynn.com. There's even a user stylesheet generator you can use—complete with a banner ad–blocking rule!

The font sizing technique I use is based on a discussion of text sizes by Owen Briggs. It features literally hundreds of screenshots of text between browsers, so that you can find the one that suits you best.

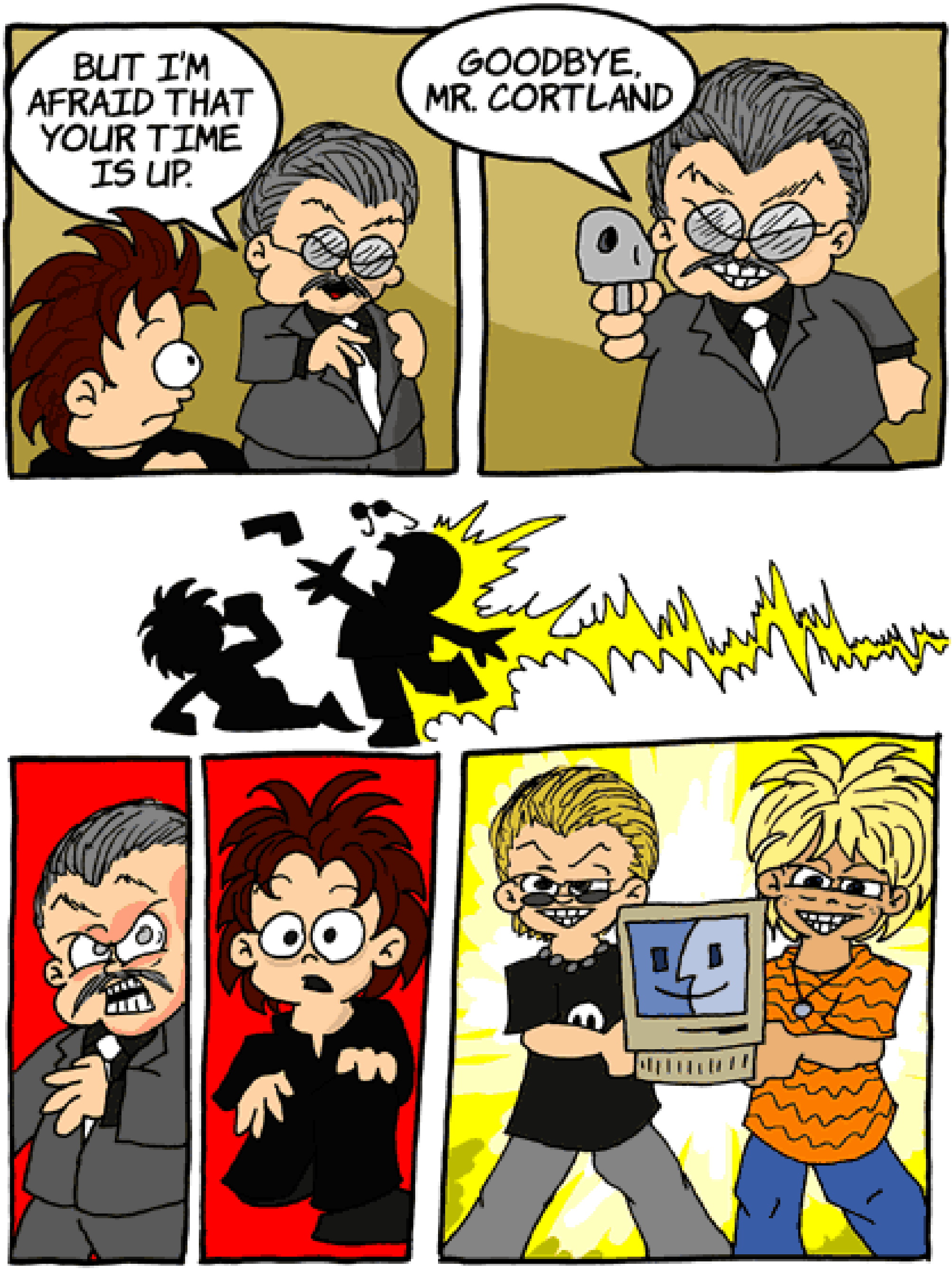
Cartoon: Cortland

by Matt Johnson, mjohnson@atpm.com

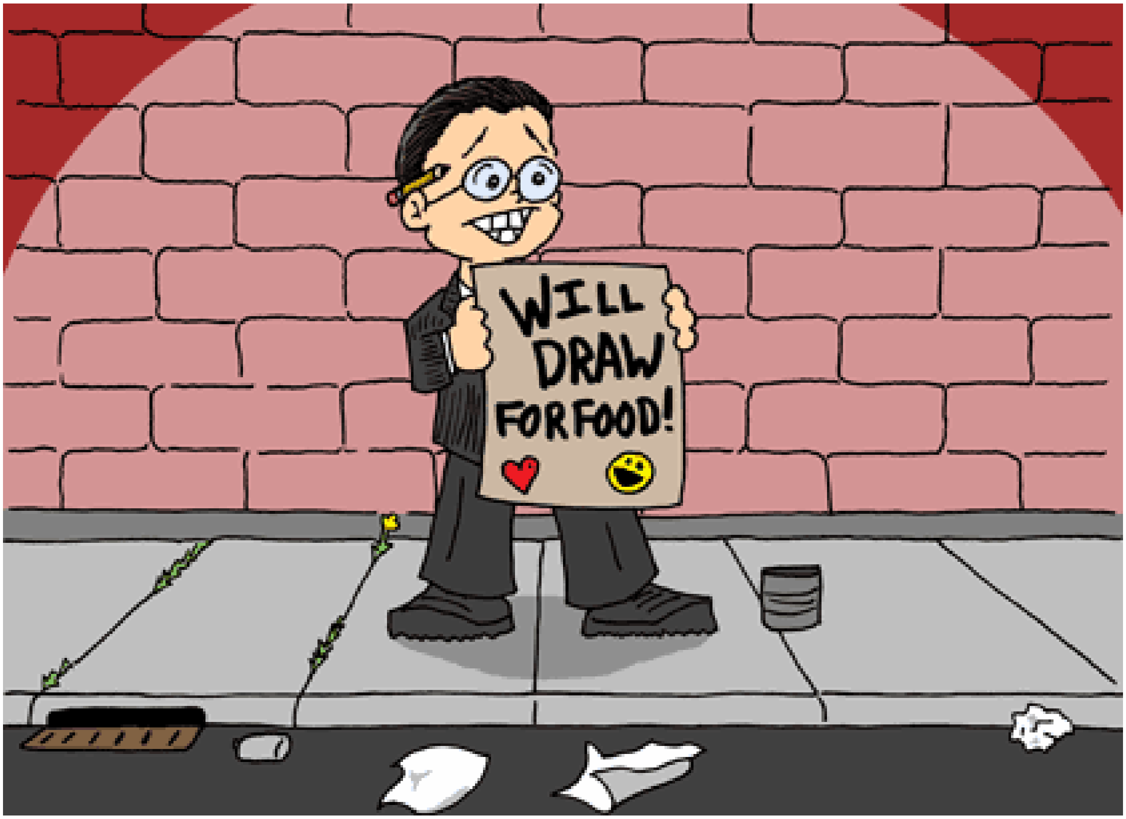

SO, YOU KNOCKED DOWN MY AGENTS WITH A SINGLE BLOW? HA! I EXPECTED NO LESS.
BUT I'M AFRAID I CAN NOT TOLERATE THAT KIND OF VIOLENCE.


YOU AMUSE ME, MR. CORTLAND. DID YOU **REALLY** THINK YOU COULD STOP US? THE HUMAN RACE WILL CLING TO OUR CHEAP LITTLE SILICON BOXES AND BEG US TO MAKE THEM WORK EVERY TIME THEY BREAK.

THEY WILL NEVER REALIZE THAT IT IS ***WE***, THE ***MACHINES***, WHO CONTROL ***THEM***. THEY HAVE NO CHOICE, AND NOT EVEN A PATHETIC LITTLE GRAPHIC DESIGNER WITHOUT A JOB CAN CHANGE THAT.

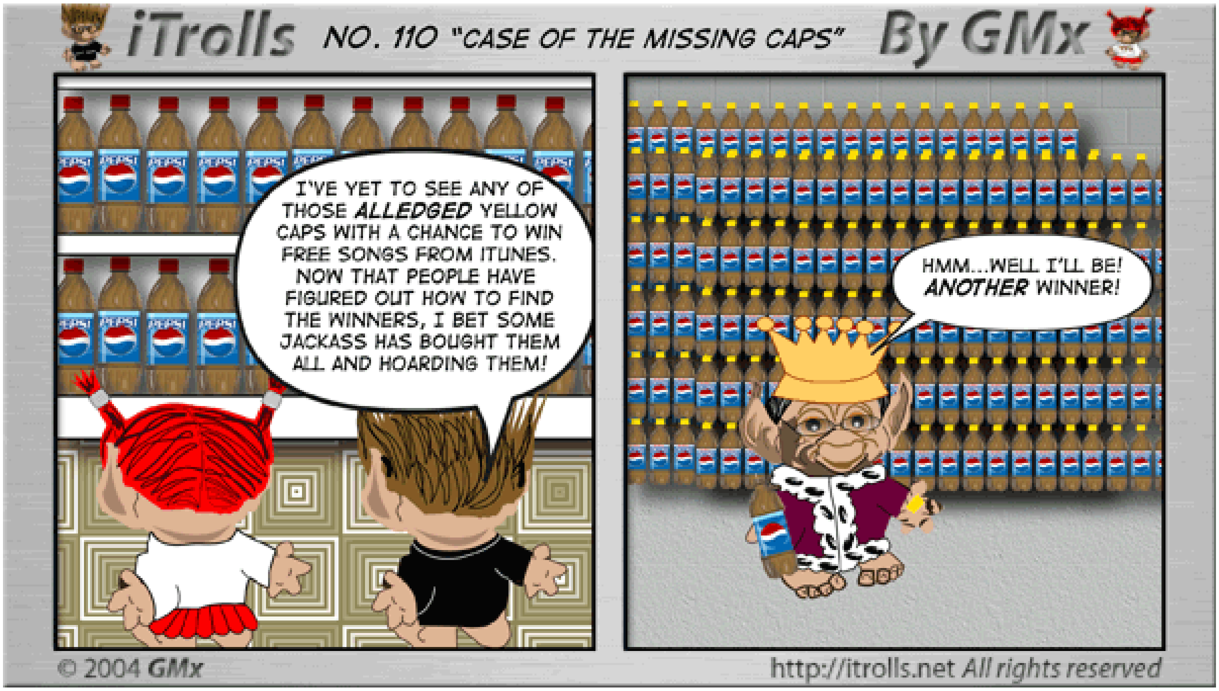

BUT I'M AFRAID THAT YOUR TIME IS UP.
GOODBYE, MR. CORTLAND

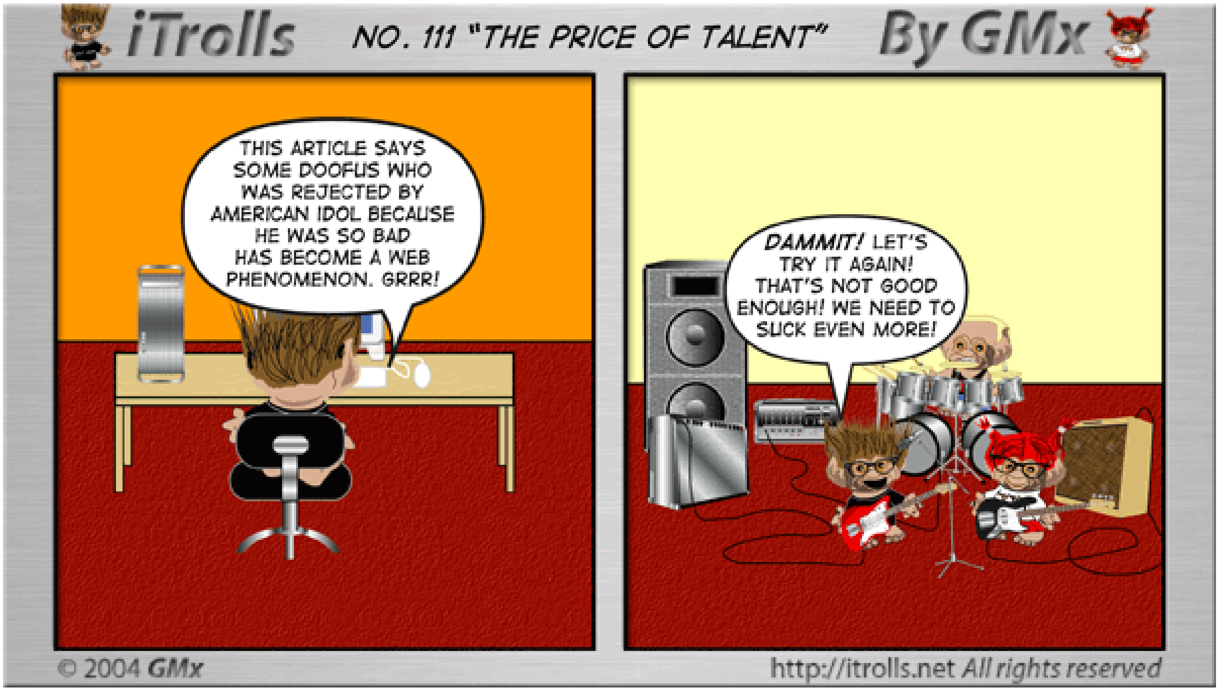
Matt Johnson is currently seeking full-time employment in the graphic design field and can use every bit of freelance work he can get! He has a portfolio online. If you like what you see there and would like him to do some work for you, please drop him a note.

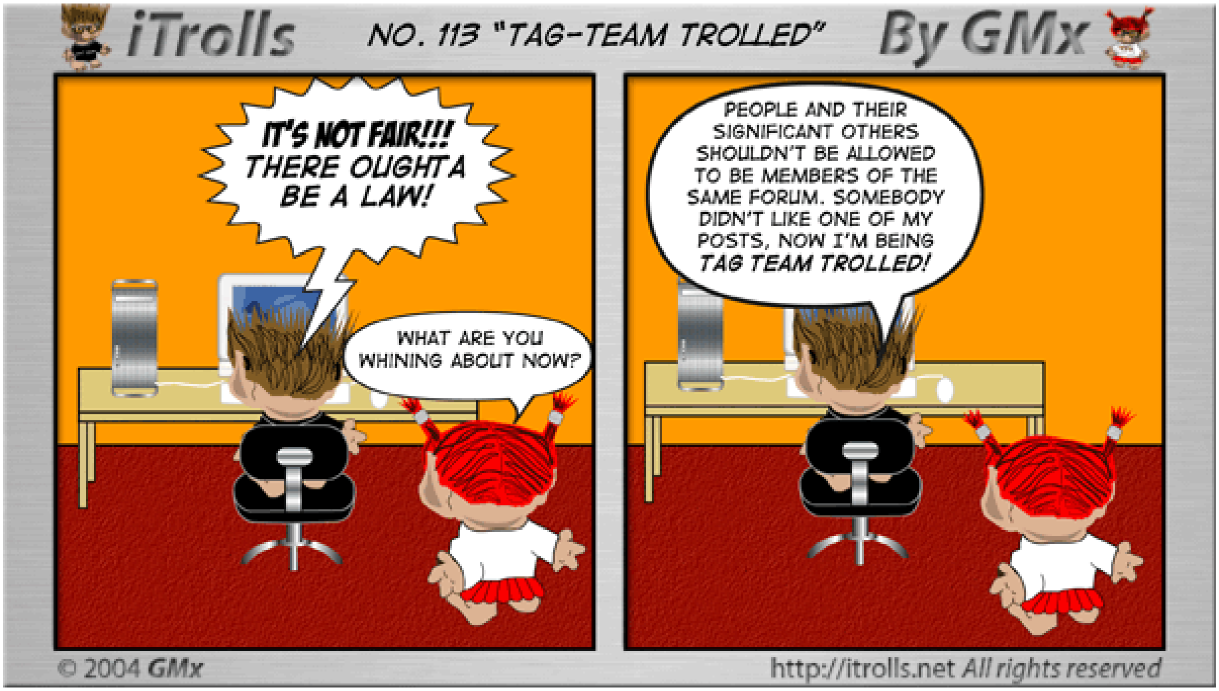


Cartoon: iTrolls

by GMx, http://homepage.mac.com/gregmx


iTrolls NO. 110 "CASE OF THE MISSING CAPS" By GMx
I'VE YET TO SEE ANY OF THOSE *ALLEDGED* YELLOW CAPS WITH A CHANCE TO WIN FREE SONGS FROM ITUNES. NOW THAT PEOPLE HAVE FIGURED OUT HOW TO FIND THE WINNERS, I BET SOME JACKASS HAS BOUGHT THEM ALL AND HOARDING THEM!
HMM...WELL I'LL BE! *ANOTHER* WINNER!
© 2004 GMx
http://itrolls.net All rights reserved


iTrolls
NO. 111 "THE PRICE OF TALENT"
By GMx
THIS ARTICLE SAYS SOME DOOFUS WHO WAS REJECTED BY AMERICAN IDOL BECAUSE HE WAS SO BAD HAS BECOME A WEB PHENOMENON. GRRR!
DAMMIT! LET'S TRY IT AGAIN! THAT'S NOT GOOD ENOUGH! WE NEED TO SUCK EVEN MORE!
© 2004 GMx
http://itrolls.net All rights reserved


iTrolls
NO. 113 "TAG-TEAM TROLLED"
By GMx
IT'S NOT FAIR!!! THERE OUGHTA BE A LAW!
WHAT ARE YOU WHINING ABOUT NOW?
PEOPLE AND THEIR SIGNIFICANT OTHERS SHOULDN'T BE ALLOWED TO BE MEMBERS OF THE SAME FORUM. SOMEBODY DIDN'T LIKE ONE OF MY POSTS, NOW I'M BEING TAG TEAM TROLLED!
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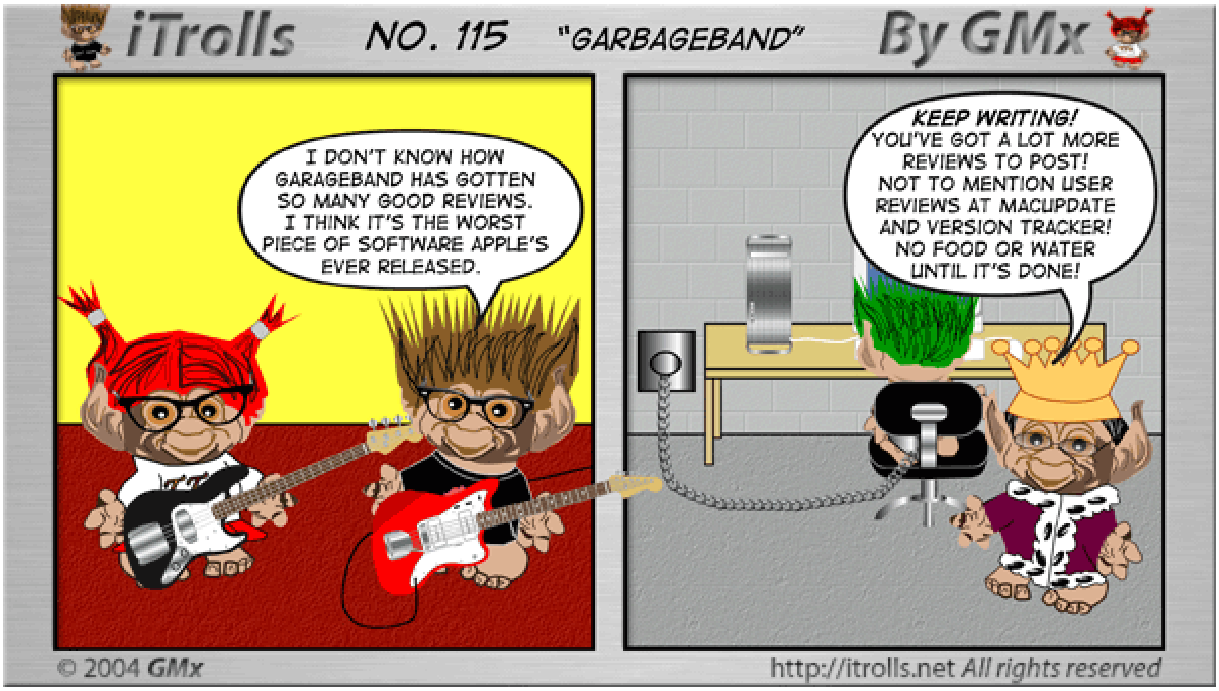
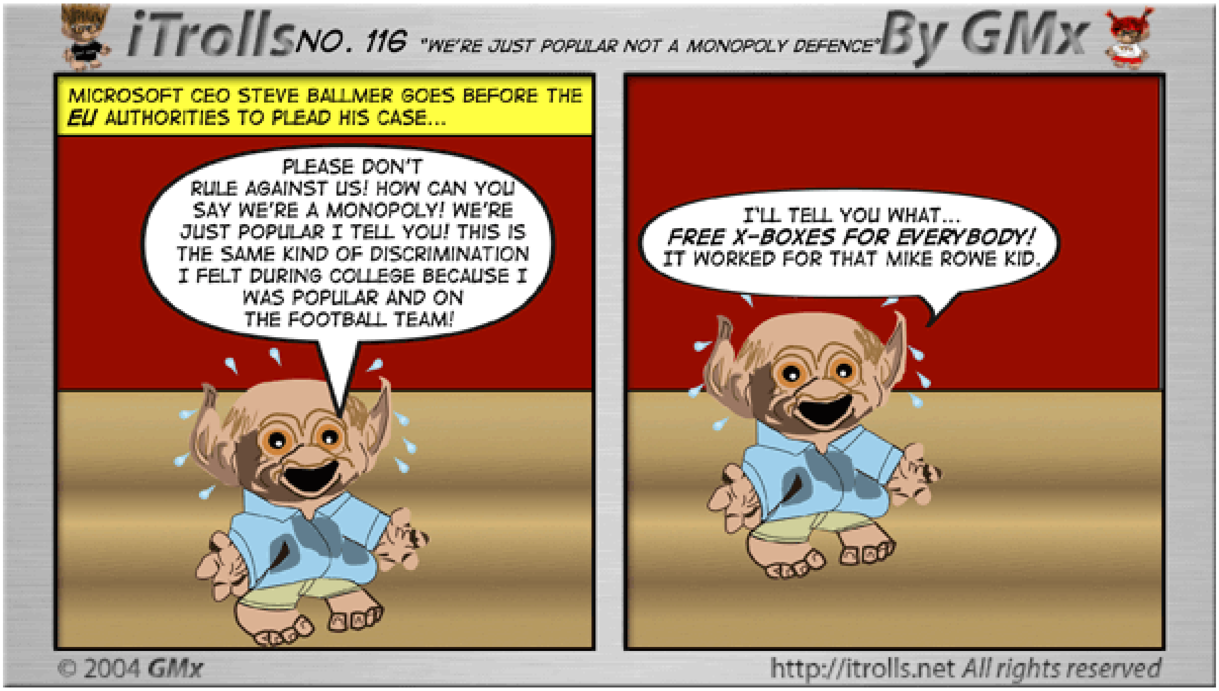

iTrolls
NO. 115
"GARBAGEBAND"
By GMx
I DON'T KNOW HOW GARAGEBAND HAS GOTTEN SO MANY GOOD REVIEWS. I THINK IT'S THE WORST PIECE OF SOFTWARE APPLE'S EVER RELEASED.
KEEP WRITING! YOU'VE GOT A LOT MORE REVIEWS TO POST! NOT TO MENTION USER REVIEWS AT MACUPDATE AND VERSION TRACKER! NO FOOD OR WATER UNTIL IT'S DONE!
© 2004 GMx
http://itrolls.net All rights reserved


iTrolls
NO. 116
"WE'RE JUST POPULAR NOT A MONOPOLY DEFENCE"
By GMx
MICROSOFT CEO STEVE BALLMER GOES BEFORE THE EU AUTHORITIES TO PLEAD HIS CASE...
PLEASE DON'T RULE AGAINST US! HOW CAN YOU SAY WE'RE A MONOPOLY! WE'RE JUST POPULAR I TELL YOU! THIS IS THE SAME KIND OF DISCRIMINATION I FELT DURING COLLEGE BECAUSE I WAS POPULAR AND ON THE FOOTBALL TEAM!
I'LL TELL YOU WHAT... FREE X-BOXES FOR EVERYBODY! IT WORKED FOR THAT MIKE ROWE KID.
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Volcano National Park

Volcano National Park

Managing Editor Christopher Turner offers photos from his 2001 visit to Kilauea Volcano National Park on the big island of Hawai'i. Pictures featured this month include those of the notorious, and noxious, sulphur vents, ever-present around volcanic activity, as well as shots of the large Kilauea Caldera, as the main volcanic crater is named. The steaming bluffs on the northwest rim of the caldera, as well as the cliffs on the southwest rim, are also shown. Finally, hardened lava flow and the land off of the aptly-named Devastation Trail are highlighted.

More pictures from Kilauea will be featured in an upcoming issue of ATPM.

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 10.3.x

Choose "System Preferences…" from the Apple menu, click the Desktop & Screen Saver button, then choose the Desktop tab. In the left-side 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. Select the Screen Saver tab which is also in the Desktop & Screen Saver System Preferences pane. If you put the ATPM pictures in your Pictures folder, click on the Pictures Folder in the list of screen savers. Otherwise, click Choose Folder to tell the screen saver which pictures to use.

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: AppleScript: The Definitive Guide (book)

by Gregory Tetrault, gtetrault@atpm.com

Publisher: O'Reilly and Associates
Author: Matt Neuburg
Price: $40 (list); $28 (Amazon)
Trial: Table of Contents, Sample Chapter, and Index.

ATPM RATINGS
VERY NICE

Overview

This book is designed to be an explanatory manual and an AppleScript reference suitable for all levels of users from novices to experienced scripters. It begins by describing potential uses for AppleScript, progresses to AppleScript's structure and commands, and ends with a chapter on writing AppleScript applications. The book focuses solely on AppleScript for Mac OS X, though OS 9 users may find it useful.

Layout and Organization of the Book

The softcover book measures 7" by 9" and has 453 pages. The book has four parts. The first three parts contain 24 chapters. The fourth part contains two appendices. You can view the table of contents. The 23-page index is comprehensive.

Observations and Opinions

Part I, “AppleScript Overview,” contains five chapters. It logically begins with the chapter “Ways to Use AppleScript.” The second chapter describes “places” to use AppleScript such as Script Editor, Script Debugger, internally scriptable applications, applications or utilities that can run compiled scripts, and applets. Chapter 3, “The AppleScript Experience,” walks through the process of identifying a problem, learning whether AppleScript can be used to tackle the problem, and using an incremental programming approach to solve the problem. Chapter 4 describes basic concepts of AppleScript: Apple events, the Open Scripting Architecture, the scripting environment, applets and droplets, AppleScript dictionaries, and so on.

Part II, “The AppleScript Language,” contains 14 chapters. They cover the syntactical and technical aspects of AppleScript programming, such as variables, constants, handlers, objects, and references; datatypes and coercions; properties; and control structures, operators, and commands. This part used adequate detail and brief, pertinent examples throughout. The descriptions are intelligible to beginners and concise enough for intermediate AppleScript programmers.

Part III, “AppleScript in Action,” contains six chapters. The first chapter in this section describes the dictionaries associated with scriptable applications. It is the best treatment of dictionaries I have read. The “Scripting Editions” chapter discusses the pros and cons of these tools and describes the ones included with OS X. The brief “Scriptable Applications” chapter tells how to target scriptable applications in general. It gives more details about the scriptable applications included in OS X. The “Unscriptable Applications” chapter focuses on GUI scripting within OS X. It does not cover methods for using AppleScript with unscriptable third-party applications. The “Unix” chapter describes how to issue Unix commands from AppleScript. The much meatier “Writing Applications” chapter describes options for triggering AppleScripts: applets, droplets, and folder actions. It then discusses the AppleScript Studio development environment for writing Cocoa applications and works through an entire example.

Part IV contains two appendices: “The ‘aeut’ Resource” and “Tools and Resources.” The former is a listing of the dictionary of AppleScript itself. The latter appendix lists software, books, Web and Usenet sites, and other AppleScript-related resources.

Strengths

- Up-to-date AppleScript book.
- Well organized and approachable.
- Reasonably thorough without excessive detail.

Weaknesses

- No appendices with alphabetical lists of operators, commands, and constants.
- Inadequate discussion of working with unscriptable applications.

Summary

This book meets its goal of explaining AppleScript to beginners through moderately advanced users. It can be used as an instructional text or, to a lesser extent, as a reference book.

Review: iBreeze

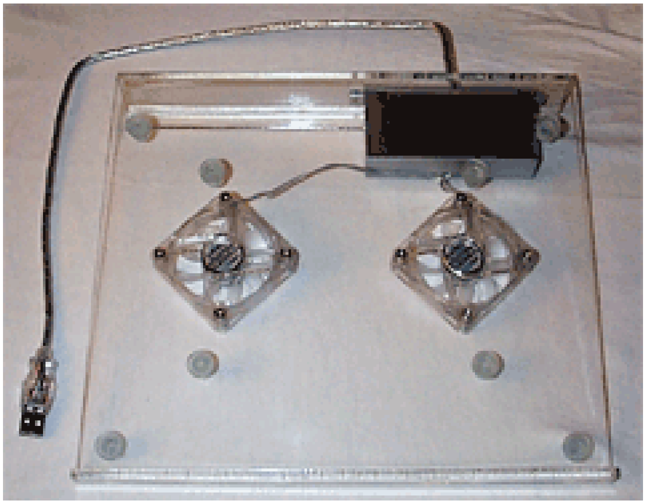
by Chris Lawson, clawson@atpm.com

Developer: MacMice
Price: $30
Requirements: any laptop computer
Trial: None

ATPM RATINGS GOOD

Sometimes passive cooling simply isn't enough. Anyone with a recent G4-based laptop knows how warm they can get, and probably knows how loud the fans get when they're on high. Of course, cooling isn't the only problem with laptops. As mentioned in last month's Contour NoteRiser review, ergonomics is also a major issue. Enter the iBreeze by the MacMice Workspace Products Company, the latest venture of the rather infamous Jack Campbell.

To digress briefly from the review, allow me to explain the "infamous" comment. Jack Campbell began making a name for himself in the Mac sphere by ripping off Green Designs' product line at his MacTable.com site. He followed this up by threatening MacInTouch with legal action for publishing the linked report. After the MacTable venture was blown wide open, Mr. Campbell moved on to DVForge.com and began a rumormongering site called MacWhispers. Around the same time, he started MacMice, which appears to be the only venture still active. MacMice's modus operandi for its first several months of operation seemed to be finding dirt-cheap products elsewhere and either building ripoffs of them or simply reselling them for much higher prices. For example, the iTilt bore a remarkable resemblance to an adjustable display easel sold as a book stand by many merchants. Mr. Campbell and MacMice seem to have cleaned up their collective act, but readers are encouraged to explore the *entire* MacInTouch Reader Report for informational purposes.



Now, back to the review. The iBreeze consists of a folded acrylic sheet, two translucent 60 mm fans, and a short length of USB cable. Eight translucent rubber bumpers sit on the upper surface of the acrylic to keep the laptop from sliding off, though the extremely shallow angle of the iBreeze should largely prevent this in the first place. Compared to the compound used on other laptop stands this reviewer has used, these bumpers are substantially less sticky, and thus less effective at holding the laptop in place. They do, however, keep the laptop and iBreeze from rubbing directly on each other, preserving the attractive surfaces of each.

So how does the iBreeze perform? Its primary goal is cooling, and the two 60 mm fans send a steady and fairly quiet stream of air across the bottom of the laptop, where Apple's recent laptops have their primary heat-dissipating plates. This is a great design in theory. In practice, it isn't quite as impressive. Heat rises, and on the 15" TiBook (as well as most other Apple laptops with the flip-up keyboard design), a large portion of the heat generated is dissipated through the keyboard. This isn't to say the bottom of the laptop doesn't also get hot—it does—but the extra airflow doesn't prevent the TiBook's two internal fans from coming on while thrashing on the CPU with SETI@home or the Distributed.net client. In this reviewer's opinion, this failure is nearly fatal, as it is a failure of the product's primary feature: *quiet* active cooling.

Like the CoolPads, the iBreeze is fairly portable, though it weighs more than either CoolPad model. As with all portable laptop stands, the ergonomics leave something to be desired. In the case of the iBreeze, they leave a *lot* to be desired. The NoteRiser largely rules this roost, but even the Podium CoolPad easily out-ergos the iBreeze, which elevates laptops about as much as a one-inch loose-leaf binder. The saving grace of the iBreeze is its price. You could do a lot worse, style-wise, for $30, and the price is fairly typical of active-cooling laptop stands, like the Bytec Aluminum Notebook Cooler which appears to have been the, ahem, "inspiration" for the iBreeze.

If you thrash your laptop's processor hard and find the internal fan noise bothersome, this attractive stand should keep your fan(s) from coming on above the lowest speed. But if you're looking for a go-everywhere laptop stand, well, there's a reason everyone likes the CoolPads, and nobody questions Jim MacEachern's motives.

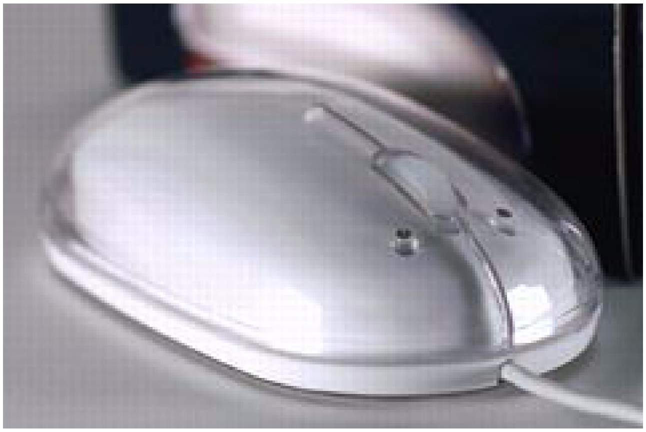
Review: The Mouse

by Chris Lawson, clawson@atpm.com

Developer: MacMice
Price: $40
Requirements: USB port, Mac OS 8.5.1 or Mac OS X 10.1.2
Trial: None

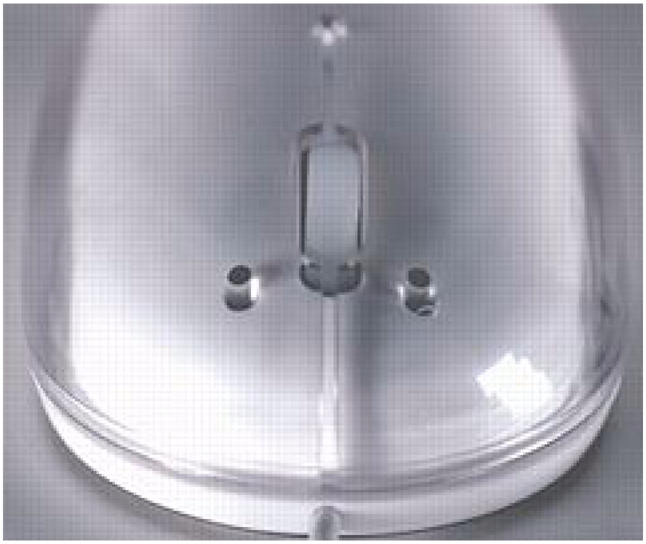
ATPM RATINGS
GOOD

Without question, the most common complaint about Macs by people used to any other platform is the single-button mouse. That second mouse button is Windows users' Corn Pops—they "gotta have" it. Of course, there's a reason multi-button mice are enormously popular among Mac users, too. Apple's Pro Mouse lacks that notorious second button and the scroll wheel that has become otherwise ubiquitous, so MacMice has stepped in with The Mouse to fill the market niche.



The Mouse is what Apple's Pro Mouse would be if Apple ever made a two-button, scroll-wheel Pro Mouse. It is nearly identical in appearance to the white Pro Mouse, which is to say it's quite classy-looking. The Mouse is split right down the middle from the "tail" to about the halfway point, with a button on either side of the slit and the scroll wheel aligned inside it. An optical sensor in the bottom provides a red halo very similar to that on the Pro Mouse.

This optical sensor is excellent, tracking reliably and with good precision on a wide variety of surfaces such as wood, metal, traditional mouse pads, and terrycloth bath towels (don't ask). Scrolling is smooth as well, but the scroll wheel lacks the soft-clicking detent ring so common to other scroll-wheel mice. Whether or not you prefer the smooth style or the soft-click style is a matter of personal preference, though I believe that Apple would opt for smooth scrolling were they ever to make a scroll-wheel mouse.



The Mouse comes configured by default to use right-click as Control-click, a utilitarian behavior that most users probably won't change. The MouseCommand software, which must be downloaded from the MacMice Web site, allows users to change the various settings, even swap the right and left buttons (useful for lefties). A word of caution: if you are running Panther and a version of the StuffIt Engine prior to 8.0.2, you *will* have problems installing the software. Updating to the latest version of StuffIt Expander will fix the problem, and MacMice is aware of this issue.

All that trouble to install the software would have felt like less of a disappointment if the software weren't so…well, poorly designed. The first time the installed preference pane is launched, it requires one final mouse click to enable the driver (which the Read Me file warns will happen), but the text describing the procedure, which takes up the entire preference pane on first launch, doesn't go away once the "Enable Driver" button is clicked. This otherwise harmless visual bug renders the preference pane virtually unusable until System Preferences is quit and re-launched, after which the bug never presented itself again.

The most potentially useful setting in the preference pane—the cursor acceleration controls—is hopelessly ineffectual. The old Kensington MouseWorks software was the gold standard for fine-grained mouse control, and the MouseCommand driver is but a shameful impostor. When cursor acceleration is enabled and the mouse is moved very slowly on a diagonal, the cursor very nearly follows a stair-step track. As slow tracking works fine with the acceleration turned off (or without the software installed at all), it appears that the fault lies with the developer of the software. This reviewer recommends you avoid the software entirely unless you're left-handed or feel compelled to customize everything as much as possible. The Mouse works just fine without it.

The only real problem encountered with The Mouse was that its presence would often—maybe one-third to one-half of the time—prevent the screen on a 15" TiBook from going to sleep. Moving The Mouse briefly and then leaving the PowerBook idle allowed the screen to sleep normally.

If you love Apple's mouse design but wish it had a second button and/or scroll wheel, The Mouse is the answer to your prayers. If all you need is a two-button/scroll-wheel optical mouse, there are less expensive and equally stylish alternatives, offered by companies with a less checkered past. (For details, read this issue's iBreeze review.)

Copyright © 2004 Chris Lawson, clawson@atpm.com. Full disclosure: after the reviews were submitted, the author received compensation from MacMice for converting The Mouse drivers from a Stuffit archive to a Mac OS X disk image. Reviewing in ATPM is open to anyone. If you're interested, write to us at reviews@atpm.com.

Review: Sambucus X 2.3.1

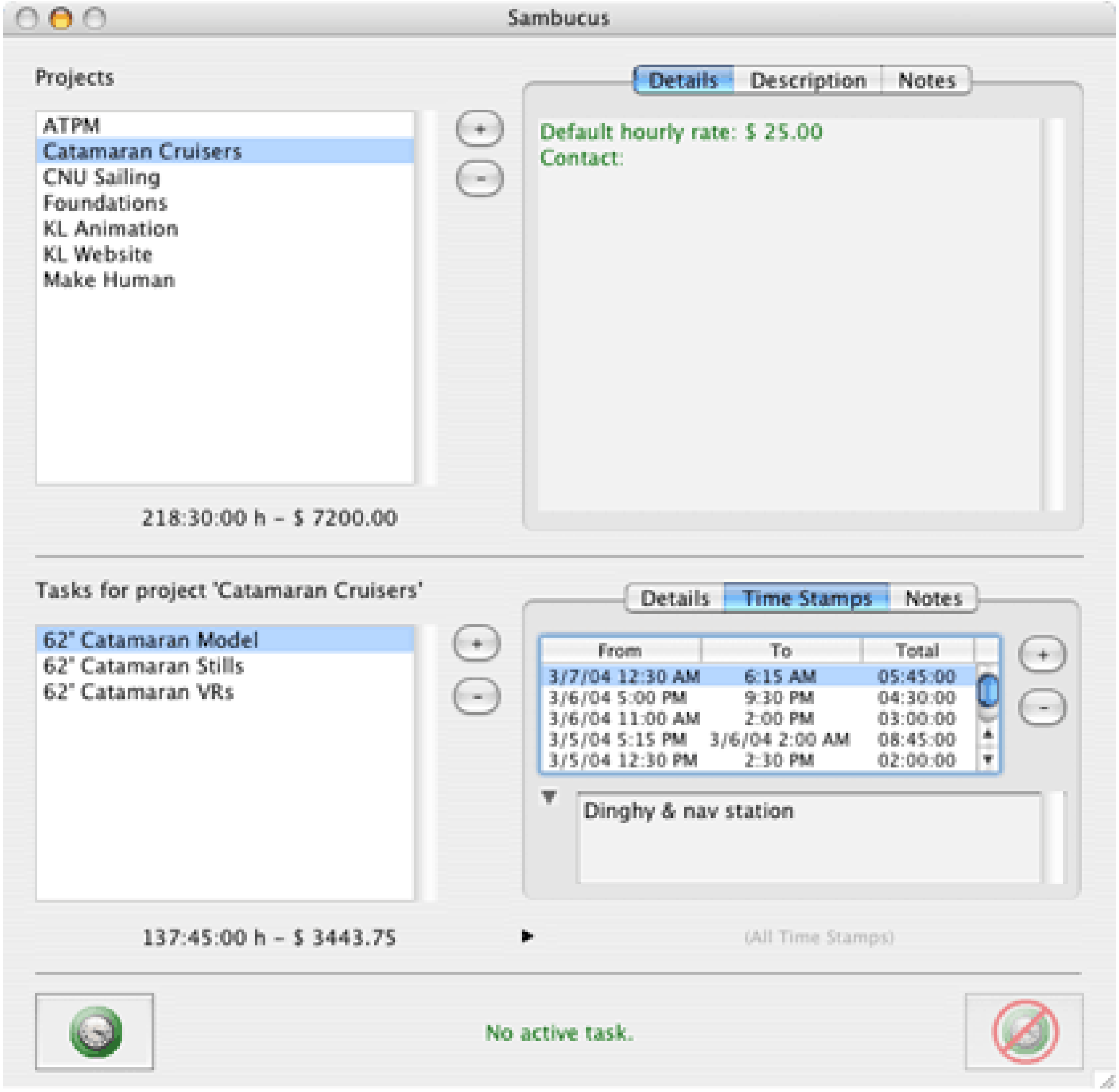
by Andrew Kator, akator@atpm.com

Developer: Logiciels Malus Softwares
Price: $20
Requirements: Mac OS 8 or Mac OS X.
Trial: Fully-featured (30 days)

ATPM RATINGS
OKAY

Running a small business and keeping track of time for billing is always an interesting endeavor. On the most basic level, this is possible with general-use calendar programs such as iCal, but the specific demands of business timekeeping aren’t addressed by such software. Different tasks in a project are typically billed at different rates, and this tracking must be done separately and manually when using general calendar software.

Sambucus solves these problems by offering a specialized hierarchical system for project time management. This system starts with Projects, which are subdivided into Tasks, which can then have multiple individual timekeeping “Time Stamp” records.



ATPM
Catamaran Cruisers
CNU Sailing
Foundations
KL Animation
KL Website
Make Human

Default hourly rate: $ 25.00
Contact:

218:30:00 h - $ 7200.00

62" Catamaran Model
62" Catamaran Stills
62" Catamaran VRs

From	To	Total
3/7/04 12:30 AM	6:15 AM	05:45:00
3/6/04 5:00 PM	9:30 PM	04:30:00
3/6/04 11:00 AM	2:00 PM	03:00:00
3/5/04 5:15 PM	3/6/04 2:00 AM	08:45:00
3/5/04 12:30 PM	2:30 PM	02:00:00

Dinghy & nav station

137:45:00 h - $ 3443.75

(All Time Stamps)

No active task.

The Sambucus main window is well organized and easy to use for timekeeping and project management.

Projects, Tasks, and Time Stamps are well organized and modified from the main Sambucus administration window. New records are easily added or deleted by using buttons within this window, and Details, Description, and Notes can also be easily edited.

Once a project with Tasks is created, Sambucus offers a simple and effective method for adding Time Stamps with “Start Time Stamp” and “Stop Time Stamp” buttons. These work like a traditional time clock, punching your time card in for the start of a task and punching out again when complete. This Time Stamp feature makes exact timekeeping extremely easy.

The first step is to set up projects for each client as well as in-house work, which is easily accomplished. A nice feature is the ability to set different default billing rates for each project or to choose a flat rate, very appropriate for actual small business billing needs.

Another nice feature in project management is the ability to add contact information for each individual project, but unfortunately this feature lacks data sharing with Address Book. This lack of information sharing means any contact information already in Address Book must be reentered into Sambucus and that two separate record systems must be maintained—definitely not the best method for keeping accurate contact information. However, once contact data is entered, Sambucus can conveniently copy contact information from one project to another.

Once a Project is created, different tasks are easy to add. Each Task can use the Project’s default hourly billing rate, a custom billing rate, a flat fee, or have no billing enabled. This is very useful for small businesses that do multiple types of work in a project, and it accommodates different billing methods. For example, a Web design project might include coding, graphic design, and animation—all of which should be billed at different rates.

Individual timekeeping (Time Stamp) records are added to each task. As with Projects and Tasks, each of these time records can also have descriptions and notes. Adding or editing a Time Stamp is relatively straightforward, with start time/date, end time/date, optional duration settings, an option to set a flat fee, and a description field.

Each Project, Task, or Time Stamp has tax options with the ability to add and modify different taxes and rates for billing. The usefulness of this feature can only be fully understood by those who are responsible for local, state, and federal tax accounting and record keeping. Automatically setting these options for a project also ensures that appropriate taxes won’t be omitted from an invoice.

Unfortunately, the Time Stamp details and editing window has a few quirks. Tabbing between input fields for month, day, and year doesn't work as with other Mac software. Instead of the individual number in the date, the entire date is selected, which makes repeated data entry cumbersome. Entering past dates is also somewhat annoying, because the software assumes that any date entered must be for the current or future year. For example, entering "12/15" for a past record must be entered as "12/15/03" otherwise the date is automatically set to 2004. Additionally, dates must be separated with slashes—not dashes—or the software won't understand the input properly.

On the positive side, a nice feature for the date selection is a pop-up calendar, which allows the user to scroll through months and days, a visual method of selecting the date in question. As great as this method is, it isn't well suited for transferring multiple records into the software with more rapid keyed data entry.

The time settings also do not quite work as expected, although tabbing does work to change between hours, minutes, seconds, and AM/PM.

Another unfortunate omission is the ability to "Select All" in any data fields. This means deleting descriptions or contact information must be done by manually using the mouse to select the information before deleting or replacing text.

There was one more disappointment: Sambucus doesn't import iCal calendars. This meant that no matter how organized work and timekeeping records were in iCal, they still had to be transferred into Sambucus by hand.

Sambucus excels at the billing side of project timekeeping. A running total of the logged time and billing within each Task is displayed on the bottom of the Sambucus window. Another excellent feature is the ability to print reports. Once a type of report is chosen, the details displayed can be selected to include any or all records necessary. The reports can be saved in text format to import into other software for formatting and a more professional look for invoices. Printing invoices directly from Sambucus isn't recommended because the reports are all created with the unpleasant monospaced Courier typeface, with no formatting options.

Overall Sambucus has an excellent interface that is straightforward and simple to use with controls over different billing rates and options. Once Projects and tasks are setup, the Time Stamp feature makes exact timekeeping extremely easy. The generated reports are excellent for use with other software, but are not suitable for professional billing when printed directly from the application. Sambucus is a useful program at a great price, but the data entry quirks need resolution, and data sharing with Address Book should be added. The software's downsides are not insurmountable but do detract from the overall ease-of-use and polish.

Review: Harman Kardon Soundsticks II

by Evan Trent, etrent@atpm.com

Developer: Harman Multimedia
Price: $200
Requirements: MacwithUSB,MacOS9.0.4orMacOSX(forUSBaudio);anyMacoriPod(forusewith minijack).
Trial: None

ATPM RATINGS
EXCELLENT

An In-Depth and Critical Review

There has been a lot of discussion lately about USB audio and the promise of “audiophile”-caliber sound reproduction. A veritable plethora of new loudspeaker systems have appeared, most of them sporting seriously funky aesthetics. Depending on your taste, some may appear high tech and “mod” whereas others may simply seem more like a villain from an old episode of Dr. Who. (Anybody remember The Daleks?) I’d love to know what drugs the guys designing these speakers are on. Maybe they could include some with the speakers so we can all better appreciate what in tarnation they were thinking.

As ATPM’s self proclaimed audiophile—both by hobby and profession—I have taken it upon myself to provide a critical evaluation of one of the most sought after computer speaker systems on the market: the Harman Kardon Soundsticks.

Basic Overview

The Harman Kardon Soundsticks II system is comprised of two satellite loudspeakers and a subwoofer. The subwoofer boasts a 6" aluminum driver and a 20 watt on board amplifier. The “sticks” feature four 1" aluminum drivers, and each stick is driven with 10 watts of power. The system claims to reproduce 44–20 kHz although there is no indication of how flat this response is (i.e. +/- 3 dB). The subwoofer weighs in at just under 5 lbs, and each stick is about 1.5 lbs. The entire system seems to be fabricated out of transparent plastic. The “see through” look is decidedly cool, I must confess. If you like staring at the curvaceous backside of a 6" woofer (and let's be honest, who doesn't?) then clearly this is the system for you. The loudspeakers provide both a USB input and a 1/8" stereo minijack input for use with older analog audio computers, or for interfacing with a hi-fi, iPod, etc.

The System

I used the Soundsticks on a PowerBook G4 (15") via the USB port. I ran them through a variety of source material including video games (Hey a reviewer's gotta do what a reviewer's gotta do.) MP3s, CDs, and DVD movies. After some initial tweaking of placement, I was able to produce very pleasing results from the Soundsticks on my PowerBook and was quite satisfied with the improvement over the internal speakers, which clearly leave a lot to be desired. The speakers throw a nice stereo image, provide ample detail, and the subwoofer fills in the lower frequencies nicely.

Admittedly, however, the internal speakers on the PowerBook didn't provide for a particularly challenging face-off. The constraints placed in internal speaker design are too daunting. For one thing, the drivers are exceedingly small. Consequently the sound beams, and there is no coherence to the soundstage. There is also a total lack of deep bass because of the small drivers' inability to reproduce lower frequencies and the lack of a powered subwoofer. The sound is fairly tinny, thin, brittle, and harsh. But it is surprising that Apple was able to obtain results as good as they did given the difficulty of designing internal speakers in a laptop.

Initially I considered doing a comparative review with other third-party loudspeaker systems. But after auditioning several others, I concluded that they more or less all sounded about the same. The Soundsticks had their own sound to be sure, but none of these systems was head and shoulders above the others. I needed a real point of reference against which to compare the Soundsticks.

The Real System

So I decided to bring them to my store, Symphony Sound, and do some comparative listening against real world hi-fi products, rather than other computer speakers. For all of my listening sessions, the Soundsticks were plugged in to an iPod streaming pure CD-quality material. There was no MP3 compression used at any time. The iPod was plugged into the minijack input of the Soundsticks, and when used with the stereo (see below) system I plugged the iPod into the preamplifier using a breakout minijack-to-stereo-RCA cable available at most any store, including Radio Shack.

[I should mention, however, that my breakout cable was not from Radio Shack. It is a cable I made myself, in house, from reclaimed Byzantine gold leaf, clad with Yak butter, and surrounded by an Italian silk weave (courtesy of Giorgio Armani, bless his soul). Each cable was then terminated with solid 24 karat solid gold connectors. The cables are a proprietary design, and if I can ever perfect them (the Yak butter keeps melting when my stereo system heats up) I will sell them to discerning audiophiles such as myself.]

At first I struggled to find a system that would provide similar performance parameters to the Soundsticks. Most of the amplifiers in my store boast enormous output power such as the 1200 watt McIntosh monoblocks ($15,000 per pair, no affiliation to the brainchild of

Steve Jobs). But then it dawned on me that I had a pair of Manley Laboratories Neo-Classic 300B vacuum tube monoblocks in the shop. These are rated at 11 watts per channel. Perfect!

McIntosh Monoblocks

The Manley 300B monoblocks retail for $7,200/pair, and they are hand wired point-to-point in California. They make use of the legendary 300B vacuum tube, which was first invented by Western Electric to power their own movie theater amplifiers, which in turn drove very large horn loudspeakers. After a brief "sabbatical" the Western Electric 300B is now back in production and sells for $360 ea. or $810 for a matched pair. Each Manley monoblock uses two tubes, so my store pair are equipped with a matched quad ($1,656).

Manley Neo-Classic 300B Monoblocks

Next I needed to find a pair of loudspeakers with a similar design philosophy to the Soundsticks. After much head scratching, I settled upon the Genesis 1.1s. Why, you ask? The Soundsticks feature a "line source array" of four tweeters per side. The Genesis 1.1s take this one (maybe more than one) step farther—their "sticks" are more like panels. Each panel sports twenty 1" tweeters. Unlike the Soundsticks, which use a single 1" driver for both high and midrange reproduction, the Genesis 1.1s use the 1" tweeters for higher frequencies and then use a "ribbon" driver for the midrange. But the design is still strikingly similar. A line source essentially results in a division of labor: instead of a single driver reproducing all the sound, the load is shared by several drivers. This results in lower distortion, the capacity to play louder, and a more enveloping "soundstage." They also sound the same whether you are seated or standing, and the sound level is fairly consistent regardless of how far or near you are to the speakers, which is great for parties where some people are 20 ft. from the speakers and others are only 3 ft. away.

Genesis 1.1

Another key similarity between the Genesis 1.1s and the Soundsticks is the separation of the subwoofer from the "sticks"—in the case of the Genesis, the bass frequencies are produced by a separate box. Two boxes, actually: one for the left, and one for the right as opposed to a shared box for the Soundsticks. But the principle at work is the same. The Genesis subwoofers uses twelve 12" woofers per tower. The drivers are made out of aluminum, just like the woofer in the Soundsticks subwoofer.

So the Genesis system consists of four boxes, instead of three for the Soundsticks. Each box is 7.5 ft. tall. The "panels" (sticks) are 42" wide. The entire system weighs in at over 1.25 tons and chimes in at $135,000.

With the speakers and amplifiers out of the way, I just needed to find a suitable preamplifier which I could plug the iPod into for listening through the Manley/Genesis rig. I chose the Audionet Pre G2 because it is imparts very little sonic character of its own and also because it has a gigantic volume knob machined out of solid aluminum. This German beast is built like a Mercedes G500. It's big, it's bold, and baby it's beautiful. It's also priced like a Mercedes—relatively speaking—at $12,900.

Audionet Pre G2

Now some readers may argue that this review is not fair (whatever that means) because of the slight disparity in price between the two systems compared. But, lest we forget, that simply because something costs more does not mean it is necessarily better. (Unless you are buying something from my store. Then the more expensive product is most definitely better. Duh.)

Onward

I called my buddies over at ComEd and asked them to come by and run another 300 amps of electrical service to my box. They gave me this big song and dance about how I'm already using too much power. So I said fine, if you're going to give me "attitude" I'll just roll my own. I went out and bought a diesel-powered generator and was on my way.

Initially it was difficult to form any hard and fast conclusions about the sound of the two systems. They sounded so different. It will never cease to amaze me how different two given systems can sound one from another. I could clearly sense that the heart and soul of two unique designers went into the engineering of the Soundsticks and the Genesis 1.1 systems. The Soundsticks are voiced to be more nimble, and fluttery. They have an almost aloof quality. The Genesis system is anything but. You paid $135,000 for these speakers and you will never forget it.

Each of these systems had its own unique character and it would be hard to declare one the outright winner. Much as Stereophile and The Absolute Sound find it difficult to come away from an audio review with anything but praise, I was hard pressed to fault the Soundsticks. They had a sound of their own that was admirable. Besides which, it is clear that each system was designed with different goals in mind. Can we judge one system on the basis of another's design goals? I think not. Both systems deliver upon the promises they make, and in this day and age who could ask for more?

Rather than offering our readers useful information such as a recommendation, or a concise conclusion as to which product I myself would buy, I feel it is more appropriate for me to ramble on for a few pages about the intricacies of my emotional response to the extensive listening sessions on which I embarked over the course of the comparative analysis. Thus in the long established tradition of long-winded and completely meaningless audio reviews, I will consult my notes from the listening sessions just as the reviewers in the aforementioned, esteemed, publications do. At the end of the following pages you should have absolutely no idea which system to buy, and it should be completely unclear as to how each system sounded. I expect, and demand, numerous irate letters to the editor exclaiming with great frustration how utterly useless this review was. Those of you who threaten to cancel your subscription will earn extra points.

Play by Play

My listening sessions consisted of a number of different recordings with which I am quite familiar. I will not go through each one, but stick to those I wrote the most about in my notes. You should be advised that my methodology for reviewing is quite simple. First I listen to one system for about a month. Then I unplug it, and listen to the other one for a month. Then I consult my notes and write the review. I don't believe in A/B'ing. I believe you have to grow into each system for a sufficiently long time as to actually forget how the other system sounded altogether. Only then will you be absorbed to the point where you really appreciate the heart and soul of the system you're listening to.

Classical

One of my reference recordings is the London Symphony Orchestra performance of Dvorak's Symphony From The New World (#9) under Istvan Kertész, now available on the Penguin Classics label. This recording provides a deep soundstage and good dynamic range with wonderful percussion such as kettle drums and timpani. There are also sweeping crescendos and powerful brass performances. I can tell a lot from this piece of music. I have heard it live numerous times and am quite familiar with this particular recording. For this reason I always play it first.

The Genesis subwoofers are flat to 16 Hz. so this did result in a somewhat more tangible presence of the bass frequencies including percussion and double basses. When the orchestra was playing full tilt boogie, I felt like my rib cage was about to collapse from the sheer pressure of the bass. It was riveting, but admittedly quite painful.

On the Soundsticks, for some reason, there just wasn't the same "oomph"—I don't know if it is something inherent in the design of the subwoofer. Perhaps it is the 1230 lb. discrepancy between the sub of the Soundsticks and the two Genesis bass towers—or the discrepancy in the number of woofers (1 vs. 24)—it's hard to say. I'm not an engineer, merely a music enthusiast. Besides which, specifications don't mean anything as the audio magazines have demonstrated time and again. And aside from this one pitfall, the Soundsticks did a bang up job on the Dvorak. If you can live without that last drop of deep bass, I am quite sure the Soundsticks will satisfy.

Next up was a recording of Mahler's 1st. Some classical aficionados will turn their noses up at this ensemble, but the Florida Philharmonic's recording under James Judd does offer one unique and indisputable advantage over every other to date: it was recorded by Peter

McGrath. McGrath used a really gnarly (and expensive) Schoeps stereo microphone shaped like the human head, along with a couple other mics for ambient fill. This was then fed into the $30K Nagra D recorder. McGrath is a brilliant engineer this recording makes that quite clear. The sense of ambience is profound and the dynamics of this Mahler recording are simply breathtaking. And truth be told, the performance is darn good. Give these Floridians a chance and you may be pleasantly surprised.

The first few minutes of the final movement of Mahler's "Titan" symphony can bring many a stereo system to its knees. The dynamic range of this movement will induce distortion, and in extreme cases "clipping," of many systems. The music is also unusually complex and features the entire orchestra going at it pretty hard, with a lot of brass, and percussion "hits" which will throw you back in your seat.

The Genesis system can produce 120 decibels at 1 meter, which is near the threshold of pain (130 dB)—it goes without saying that prolonged exposure to this sound level will result in hearing loss. That having been said, the Genesis system had no difficulty filling my listening room with a lifelike orchestral sound. The orchestral "hits" were so powerful that when the movement finally ended I was drenched in sweat and actually had to take a cold shower before listening to the same passage through the Soundsticks. Also my downstairs neighbor called several times to complain about what sounded like an earthquake. But of course I couldn't hear the phone ring with all that sound and fury. After I got out of the shower I saw a blinking light on my answering machine and promptly assured her it was just good ol' Gustav up to his old tricks.

The Soundsticks cannot generate 120 dB. They also cannot pack the same "sonic wallop" as the Genesis system. OK, so the Soundsticks didn't make me sweat—but they made me weep. The Genesis speakers have a macho presentation that makes you want to go outrun a state trooper on the highway at 150 m.p.h. in your 'Vette—all while smoking a cigar and playing George Thorogood's "Bad to the Bone."

The Soundsticks have a more delicate way about them. After listening to the "Blumine" movement (which the folks at Harmonia Mundi graciously provided on this recording) I felt like writing a romantic sonnet and springing it upon some beautiful young lass. Amazing the disparate response one can have to the same piece of music when played through two different systems, don't you think?

Jazz and Vocals

Next I threw on some jazz. One of my favorite jazz discs is Sarah Vaughan's Crazy and Mixed Up. On a good system, it sounds like Sarah is right there in the room, singing to you and you alone—and that's exactly how it sounded on the Genesis system. Sarah was there, and I could hear her smokey voice, her breathing, and every last nuance of her vocal intonation. Joe Pass's guitar was so present I could taste it. The rhythm section was tight and in balance, with the drummer and bass player clearly behind Ms. Vaughan, where they belonged.

The Soundsticks presented the music differently. Sure there wasn't as much detail, or bass, or dynamic range, or high frequency extension, or naturalness to the timber of the instruments, or Sarah's voice. But these are audiophile hang-ups. Sometimes you just have to forget about that stuff and listen.

I once read in an audio review, "these speakers bring the music to you, and those speakers bring you to the music." I think that's an apt description for what I heard. I can't think of any other way to explain it. Both systems stirred my soul, but in different ways.

Another great album for testing out vocals is The Tony Bennett Bill Evans Album. I cannot say that I am a huge Tony Bennett fan. I like his work and admire his phrasings. But I am not an obsessive fan. I am, however, pretty obsessive about Bill Evans. Put the two of these guys together and you have something really special. Bill Evans rarely played with vocal accompaniment and to the best of my knowledge, aside from this highly successful venture, he never did so on record. This is one of those albums you wish would have been followed up by a sequel, but then again perhaps it was a magical session that could never have been repeated.

Both systems reproduced Bill Evan's piano lines with impressive fidelity. The lower registers of the piano were more richly presented by the Genesis system thanks to the fuller bass response of those speakers. Vocally, Tony Bennett's breathing and subtle cues were evident on both systems. The occasional moments when he burst out with impressive power did cause some problems on the Soundsticks, which seemed to falter under demands of his proximity to the microphone. And his voice lacked a certain "chestiness" on the Soundsticks that was there in spades on the Genesis system. But sometimes too much of a good thing can be a bad thing. On the Genesis system I could hear Tony Bennett's voice bouncing off the walls of the recording studio. The Soundsticks didn't offer this sort of analytical, “under the microscope” view of the music. This is one of those “if a band jams but the tape machine is off, does it make a sound?” type of propositions. Clearly I am in no position to answer such profound questions.

Classic Rock

Few albums are as effective in separating the men from the boys as Steely Dan’s Aja. There are so many good cuts on this album it’s hard to know where to begin. But certainly the title track, Aja, has some of the most demanding percussion work around. Amazingly it is rumored that Steve Gadd came in and sight read the part. Then again, we’re talking about Steve Gadd. If ever there were a finer studio session drummer, it’d be news to me.

The Genesis system had a nice palpability to it. Instruments were presented in space with “air” around them. I could point to each of the musicians with pinpoint accuracy. The percussion work on all the tracks, and particularly Aja, was crisp, pristine, impeccable, and beyond reproach on the Genesis system. There was such a holographic imagefield on these speakers I felt like I was part of the band. I actually got worried at one point—in the middle of the song I jumped up from the couch for fear that I had too much to drink and was stumbling around the stage of a live concert, about to be thrown out by some big fat sweaty security guard. Ah, but it was all just a vision! The Genesis speakers induced delusional behavior. Now that’s getting your money’s worth!

The Soundsticks were intoxicating in a different way altogether. It’s hard to express in words really. These speakers just have *soul*. There’s no other way to say it, really. But as I look back in my notes I keep seeing the same word over and over: soul. They’ve got soul. And you just can’t put a price on that. I mean you can try, but what is your soul worth? If you can’t sell your own soul, can you sell the soul of a loudspeaker system that, in turn, stirs your soul? I thought not.

Further Listening

While it is tempting to waste more Internet bandwidth with further inconclusiveness, all good things must come to an end. If you would like a full list of recordings used for evaluative purposes during this review, feel free to e-mail me. The list may prove useful for those who wish to conduct this same test on an independent basis (just beware that if your floor is suspended, the Genesis 1.1 speakers may actually break through to the room below, so check with a structural engineer first)

Concluding Remarks

Try as I might, I just can't endorse one of these systems over the other. Each has its own distinct character and being as all things are subjective, I am sure that some folks will prefer one, while others will prefer the other. And attempting to bridge that gap will prove futile. Which did I prefer?

I suppose part of me is tempted by the grandiose Genesis system ($156,756 with specified electronics, but who's counting anyway) with its huge sweeping dynamics, deep powerful bass, high-frequency extension that makes my dog stand at attention, and ear-bleeding sound levels that can puncture all but the most resilient of eardrums. The speakers are electrifying, no two ways about it.

But they do require a rather large room, four or five strong helpers to set up, and a sufficiently well braced floor. And let's face it, they scream "compensation" like a McLaren F1.

That having been said, part of me also admires the simplicity and "plug and play" nature of the Soundsticks. They are lighter on their feet, both sonically and, well, literally. They have a nice clean, articulate, crisp, agile sound and an honest and true midrange and high frequency band. They don't offer the thunderous bass of the Genesis system, but they leave you about $156,557 richer. And I mean, if you want to get petty, I suppose that does count for something.

So where does that leave us? Both systems are very good. Since my job as an audio reviewer is to make sure that, no matter what, I do not leave you with any firm conclusions or useful advice, I'll simply say that you owe it to yourself to hear both of these speaker systems before you draw any conclusions. Don't be dismissive of either. They are both very fine, well engineered systems. For our annual NUTTIES (Never Underestimate The Tendency of Investing in Esoteric Stereo) awards, we will no doubt bestow upon the Genesis system a rating of AAAAA+++++ and the Soundsticks a slightly lesser rating of AAAA++++. We feel the ratings speak for themselves. But remember, ratings themselves are meaningless.

Happy April Fool’s Day.

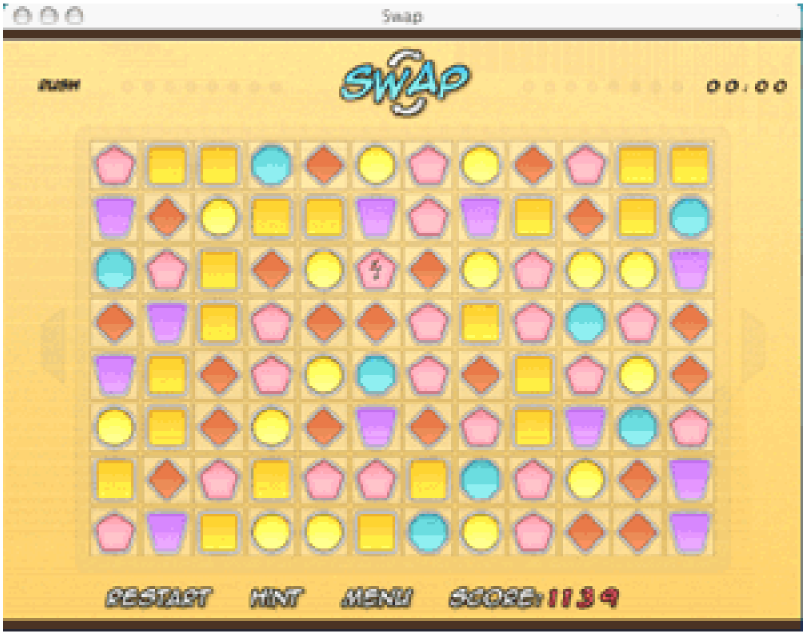
Review: Swap 1.2

by Brooke Smith, bsmith@atpm.com

Developer: Phelios
Price: $20
Requirements: Mac OS X, 128 MB of RAM
Trial: Fully-featured (limited to less than ten minutes per session)

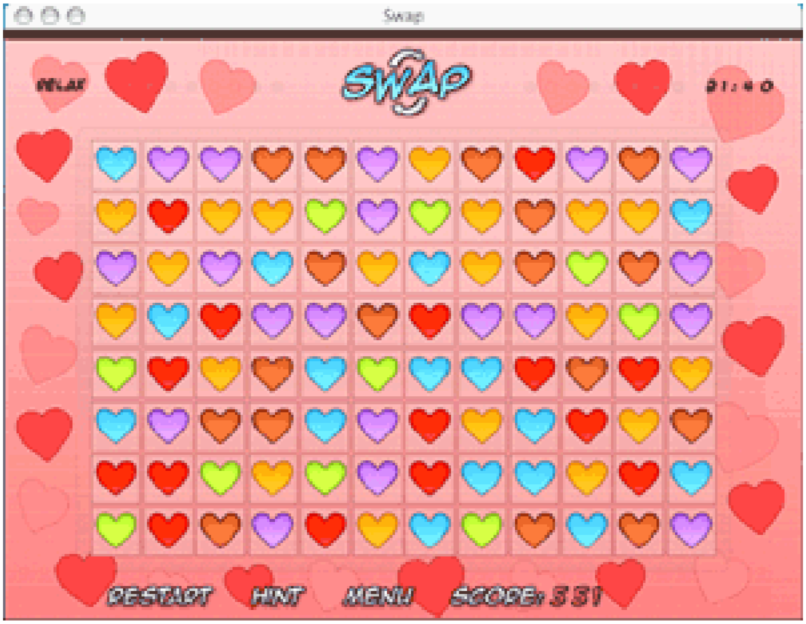
ATPM RATINGS
GOOD

When I first played Swap, I thought it was exactly like Bejeweled only with a pastel-colored interface and pastel-colored shapes. There are three of these pastel themes to choose from: For Her (pink), For Him (blue) or, for those not willing to play the gender game, Classic (yellow).

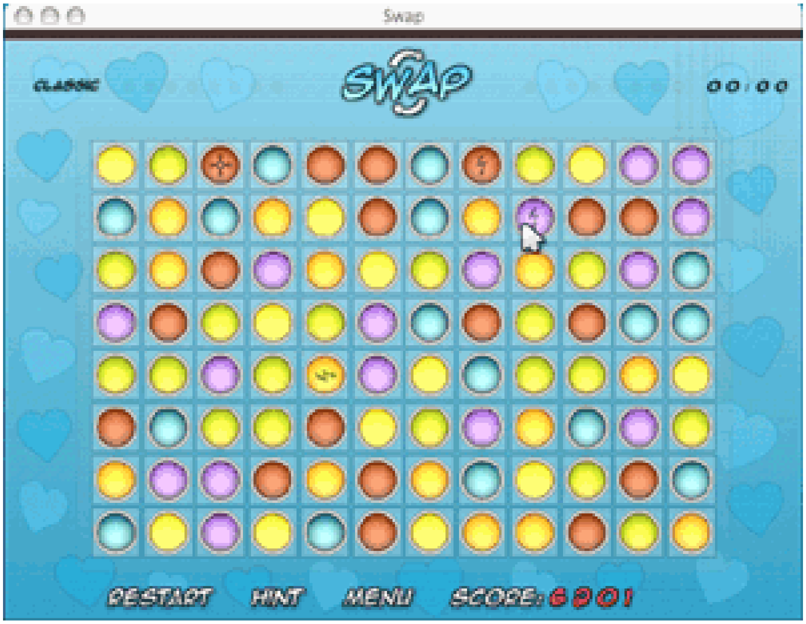


The yellow Classic background using the Shapes option.

Swap is played exactly like Bejeweled. Switch (or “swap”) two adjacent pieces to align three or more of the same color in a vertical or horizontal row. When you do this, these pieces disappear from the board and you earn points. Choose from a variety of Bubble Sets: circles, hearts and shapes (all in pastel colors), or hearts in darker shades.



The For Her background using the darker Hearts.



The For Him background with Circles.

Swap has a few extra features that Bejeweled does not. For instance, a bomb clears a 3x3 area (nine colors), a horizontal lightning bolt clears a line across the entire board and a vertical bolt clears a complete line vertically. A cross shape (two intersecting lightning bolts) clears two lines (horizontal and vertical). All of these bonus blocks earn you more points.

Unlike Bejeweled (where you play a Timed game or just a Simple, untimed game) there are four different types of games to choose from. Try Rush if you want a quick game, where you play for one minute in order to beat the high score. The Classic game gives you five minutes to beat the high score. If you have a little time on your hands, try Million, where you win when you reach one million points; I got 1,064,300 points in 8 minutes and 38 seconds. If timers make you anxious, try Relax. There's no timer; you play just for fun. And, of course, there are three levels of play for each type of game: Easy, Normal, and Hard.

The sound effects in Swap are fun (the swapping of pieces sounds like glasses tinkling), but the bombs and lightning bolts sound just like—well—bombs and lightning bolts. These can start to irritate after a while, so you might want to turn the volume to minimum. I'm so used to playing games with music on anyway, that I don't really miss the clinks and crashes.

My one gripe with this game is the High Scores screen. When this appeared after I’d won a game, the cursor seemed to stick when I tried to type in my name. My score never appeared on the High Scores board.

If you’re not worried about saving your top score for posterity, then you’ll enjoy Swap. It’s a fun game with certainly more play options than Bejeweled, and for the pastel freaks among us it looks great!

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