ATPM

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

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Welcome

by Robert Paul Leitao, rleitao@atpm.com

Welcome to the August issue of ATPM. This month we bring you yet another rendition of your favorite monthly Macintosh Internet magazine. There's so much happening in the world of Macintosh computing that it's a struggle to fit all of the important stuff into one month's issue! Let's get started and…

Let's Get Real

This may be Apple's attitude at press time. The folks at Real Networks have come up with a hack that allows music purchased through Real's Harmony service to be played on Apple's iPod digital music player.

Apple stated that it was "stunned" Real would "adopt the ethics and tactics of a hacker." This may be just another step in Real's efforts to get Apple to license FairPlay, the DRM solution used on the iTunes Music Store, so DRM-protected music purchased on other music services can be played on Apple's popular digital music player. Apple is considering legal options concerning Real's move, but one can expect an "upgrade" to the iPod software that will render Real's efforts useless.

Will We See You in September?

In early July (the day after the fiscal quarter ended) Apple issued a rather odd press release indicating a new iMac had been scheduled for July release but that things didn't go as planned. Apologizing for any inconvenience the delay of the new iMac may cause, the company announced that the new iMac will debut in September.

Not to say we won't believe it until we see it, but it's not a secret IBM has a serious chip production issue. Big Blue has fallen woefully behind in its G5 chip shipments to Apple. In the quarterly conference call with Wall Street analysts, Apple executives did confirm the new iMac would be built around the IBM G5 chip and that the lack of chips was the principal reason for the new iMac's delay.

Meanwhile, Intel has announced a delay in the ship date for high performance Pentium 4 chips. The major chipmakers are struggling with the development and production of next generation PC chips.

And in This Quarter

Apple finished the June period with about $5 billion in cash. The company's heavy weight cash pile has been growing steadily each quarter. The company's world champion digital music player added significantly to the fiscal quarter's success.

For the three-month period that ended in June, Apple reported a tripling of net income to $61 million or $.16 per share on revenue of just over $2 billion. This was Apple's highest-third fiscal quarter revenue in eight years. In other words, it was the highest third fiscal quarter revenue since Steve Jobs returned to Apple.

Long-time Apple watchers may remember that Steve Jobs and his management team reduced Apple's product line in an effort to eliminate money-losing products. The effort returned Apple to profitability in 1997, but also significantly cut the company's revenue base as Steve & Co. set about restructuring the organization.

Despite production constraints and a lack of available storage drives, Apple sold 860,000 iPod digital music players in the quarter compared to Mac CPU shipments of 876,000 units.

Ring Me That Tune

In late July, Apple announced a deal with Motorola to make a scaled down version of iTunes available to users of Moto's cellular phones. Cell phones with iTunes functionality will debut in the first half of calendar year 2005. Although Apple has moved its chip purchases from long-time partner Motorola to IBM, the two companies have found a way to extend their more than twenty-year relationship to the music distribution and cell phone markets.

4G iPod, 3D Sales

In July, Apple released its fourth generation iPod, reducing prices on the product while subtly updating its features. The ubiquitous digital music player continues its commanding position in the market while increasing the exposure of Apple products to consumers around the world.

The iPod mini has made its European debut, and the "Hpod" (the Hewlett Packard branded version of the iPod) is now scheduled for September release. The popularity of the iPod has some industry watchers looking for a "Halo Effect," indicating an increase in Macintosh sales as a result of consumer interest in the iPod. We will be following this issue in the months ahead.

The ATPM Staff

The Candy Apple: Taking a Break

Ellyn Ritterskamp considers whether being offline is a good thing.

Bloggable: Much Ado About Dashboard

Dashboard is the topic of Wes Meltzer's soapbox for this month, complete with plenty of blog links covering all facets of the yet-to-be-released utility. Elsewhere in the Mac blogosphere: the Adium AIM client, and another reason Mac OS X is a better OS to use.

Outliners: Mindmapping Outliners

This month, Ted Goranson focuses on outliners that have a "mindmapping" function.

How To: Making a Silent Movie with iMovie

Sylvester Roque managed to coax FrankenMac through the work needed for one last article before it finally bit the bullet. This month's topic—using iMovie to create the look of an old silent movie.

Cartoon: Cortland

More day-in-the-life glimpses of Terry Cortland, Todd, and Angie as a new continuing story arc appears to be brewing.

Cartoon: iTrolls

The iTrolls encounter Supersteve, Wanted iPods, Apple marketing, and a trip to McDell's.

Desktop Pictures: Reader Submissions

A potpourri of submissions from several readers makes up this month's desktop picture collection.

Review: Just a Geek (book)

Ellyn Ritterskamp reads Wil Wheaton's book about returning to a childhood talent and leaving behind childhood doubts about himself.

Review: Excel Hacks (book)

Gregory Tetrault reads a collection of 100 tips for experienced Excel users.

Review: Eclipse TD 307

Kirk McElhearn checks out what he says are the Rolls Royce of mini speakers.

Review: Belkin Media Reader for iPod w/ Dock Connector

Former staffer Adam Zaner shares his experience of ultimately moving more than 2,000 vacation photos from his digital camera to his iPod.

E-Mail

WEP Security on an AirPort Network

(rubs eyes) I had to check the date on this article. 2004? And someone is still advocating the use of WEP? Get with the times, Apple has wisely upgraded AirPort with support for WPA encryption, and all security-conscious Mac users should be using WPA now, not WEP. WPA addresses the shortcomings of WEP and is far, far more secure.

—Ken Ben

In my case, Mac OS X 10.2.8 was in use, and Apple's software only supports WPA with Mac OS X 10.3 and later. If your software supports WPA, use it; otherwise use WEP. *—MG*

The Future of Outlining

I have been reading these articles but I really needed full word-processor functionality, so most of the products mentioned here were fun to play with but ultimately did not do the job. I think OpenOffice's outlining was mentioned in an earlier article but I believe that was before they had a stable version for Mac.

Now that they have released a final Mac version to run with X11 (they claim it is only for experts because it does not have an Aqua interface), I have given it a try and so far am very pleased.

The Navigator panel is exactly what I hoped for. The floating panel allows viewing of headings (you can choose the number of levels). You can promote and demote levels, and it works exactly as expected (contents and subheadings are promoted and demoted as well). You can also "promote" and "demote" chapters, meaning that they get bumped up chronologically. Also, double-clicking on a heading in the Navigator jumps you to that point in the document.

There is a screenshot of Ooo writer with the navigator panel open. Unfortunately the document shown lacks headings so the outline moving buttons are greyed out.

If you need Finder integration, the master document function appears to actually work in OpenOffice. In this mode each top-level heading is a separate document, and the navigator lets you quickly jump around from file to file.

—Julie Remold

Many of us want full word-processor functionality, and just can't seem to get it unless we like Word. I guess Word has crowded out the competition, though Mellel says they will be adding an outliner. I'm tracking Ooo, but until it becomes a real Mac application, *ATPO* readers don't seem to be much interested. I haven't gotten a single vote for a column on X11-enabled outliners!   *—TG*

Mariner Write

I have been using Mariner Write for quite a while now. It's one of the best word processors out there for the Mac. Hence, they have my continuing support. **:-)**

That said, there are still major compromises to be made if one wants to use it exclusively (i.e. replace Word). Most of us work in a world dominated by PCs and Microsoft Office, which makes document compatibility a must. All of the word processors on the Mac market so far (including Word for Mac) have failed that criteria.

Not only does a word processor have to be able to import a Word document (hopefully without any problem), it also must be able to export as a Word document *and* be able to be read by MS Word on a PC *and* look exactly (or very close to) the same.

Since even Word for Mac has problems with uniformity across different platforms (i.e. Mac vs. PC), I do not expect any other word processor to perform that task perfectly. However, more often than not, the imported/exported documents will not even look remotely like the original, which makes it difficult to use as a replacement.

On the other hand, if someone needs that kind of integration with Word, perhaps one should simply use MS Word.

I am, however, impressed with Mariner Write's ability to use non-Roman characters and vertical text, which has been missing in most Mac word processors for a long time. (AppleWorks still has support for vertical text, but no UI to enable it.)

I still think Mariner Write is one of the best Mac word processors out there. As the software continues to mature, the better it gets. :-)

—*Lucas Lay*

iTalk

Thank you for this outstanding review. I am so impressed with the snapshots and soundclips. This is easily among the best reviews I have ever read. Congratulations.

—*Patrick S.*

ATPM

I've been reading ATPM since 2001 and only now am subscribing. Don't know why I haven't done thins before. Anyway, ATPM is better than any paper Mac magazine I've purchased, and remembers that not everyone upgrades the split second Apple released new hardware.

Lately I've gone back to the beginning, reading the issues from 1995. How is RD Novo? Does he still have anything to do with ATPM? And is Pokegenia still running?

—*Matt*

Since he was last seen in these pages, Danny has become a husband and a father, and started a blog. You'll have to ask him how Pokegenia, his Mac IIci, is doing.   —*MT*

Taking a Break

Now and then, it's a good idea to step back and take a break from our usual patterns. Often we don't realize we have gotten ourselves into negative habits, until we are forced to stop them for a while.

A friend lost his home Internet access for a month recently, and he learned something about himself. He learned he had been spending way too much time online, and not enough time doing household stuff that needed doing. He was not harming anyone else, but it was a good lesson he will keep in mind once he gets his immediate problem solved.

The problem was a blown Ethernet port on a three-year-old iMac. He thinks lightning hit his building the night it went out. It took a while to diagnose the problem, because the unit itself works fine. The ISP replaced the modem and found no problems. Once he finally received a diagnosis, he had a decision to make: replace the Ethernet port for $400; try a $32 USB Ethernet adapter (which we did, before failing to figure out its drivers); make do with a friend's spare G3 until the tax-free holiday comes around and then…buy an iBook; or, go without home access altogether. He is mulling the final two options as I write this.

He is entranced with the iBook, its portability and durability and speed. The iBook has a lot to offer, including recovering the desk space the iMac has been chewing up all this time.

The other option, though, is a return to time spent reading books instead of message board posts. It would mean more long walks around the neighborhood, and fewer hours wasted reading about stocks he will never buy.

I told him I understood the addiction concept. When I'm out of town, I find myself searching for a public library or a 24-hour Kinko's print store so I can get online. I want to vacuum all the spam out of my accounts before I get home, and I like to check in with my message board buddies every few days. It is odd, being disconnected from them.

It is sometimes very cleansing, though, to be not so connected all the time, and not to stay on top of the e-mail. Part of the point of a vacation is to get away from the ordinary, and to breathe. I sort of hope my friend chooses the no-computer option, for a while anyway.

Much Ado About Dashboard

You may have heard recently some of the chatter about Dashboard, Apple's new technology for Mac OS X 10.4, announced at WWDC, to display little snippets of useful information in an Exposé layer.

It's possible you did not. In that case, Vice President Cheney, please try and get cable TV or Internet access in your Undisclosed Location.

Especially if you read weblogs, you will probably find that July was just full of talk about Dashboard, which is in large part the work of active blogger Dave Hyatt and which uses souped-up XHTML and WebKit to power the widgets. No doubt some of excitement was due to the real-time previews and discussions on Hyatt's Weblog, *Surfin' Safari*.

Of course, while Dashboard is really cool technology, a dull roar from certain segments of the Mac blogosphere bemoaned Apple stealing yet another technology from innovative developers: Konfabulator. Arlo Rose, one of Konfabulator's developers, told Geek Patrol about how sore he was over the misappropriation:

> I knew they were real. But there wasn't anything we could have done about it, I mean two independent developers don't have the resources to go up against Apple the way Apple does with other people.

> And, in the bigger picture, I honestly hope that Dashboard will do us more good than harm. It's a subset of Konfabulator, and is modal. But I think it's pretty low of them to call their objects Widgets like we do. It'll cause confusion.

> I think it was pretty uncouth of Apple to steamroll us rather than work with us. It would have made them look good to work with a 3rd party developer to make their application better and more integrated than just wiping them out.

> […]

It would have been nice if they'd made a gesture, However, I'm not sure what we would have done. As we're not terribly far from having a Windows version and I can't imagine that Apple would have let that live, and I think that's a great opportunity for revenue.

I'm not convinced by the superficial similarity of Dashboard and Konfabulator, and neither were a number of other bloggers, who took two lines of defense: either Dashboard and Konfabulator weren't alike because of the differences in their underlying rendering (Konfabulator uses XML and JavaScript, Dashboard uses XHTML and JavaScript), or the similarities weren't important because Apple first came up with the idea of widgets in 1981.

(Those original widgets, for those of you who like a trip down memory lane, were called "Desk Ornaments," and Bud Tribble and Andy Hertzfeld put a bunch together. The original control panel, designed by the always-brilliant Susan Kare, was designed as a desk ornament and used no text labels. Amazing stuff.)

Jumping head-first into the fray was my favorite Mac pundit, John Gruber, who initially remarked that the controversy was no different from the complaining about LiteSwitch X and Watson. He added that the biggest difference, as I said earlier, was in the underlying rendering—and that the superficial similarities are there because Konfabulator mimics the OS X look so successfully. Most of all, he implies the clincher: can your mom write a Konfabulator widget? Your mom might be able to write a Dashboard widget. (Depending on your mom. Mine doesn't know what a "dialog" is, so XHTML and JavaScript are out of the question. Maybe if they write an IDE that can plug in stock code. Maybe not.)

I'm not really sure how far one ought take this logic, but Gruber continued to defend his remarks later, with the best rejoinder in a long time:

> [M]ost of the "faces" in Panic's Audion gallery could easily pass as Konfabulator widgets or Dashboard gadgets—the irregular window shapes, the transparency, the alpha channel blending. Same for Winamp, whose "skins" probably deserve to be recognized as the trailblazing example.

Brent Simmons, of NetNewsWire fame, doesn't appear to be particularly worried about the precedent that Apple is setting (despite all the chatter about *his* product, NetNewsWire, being threatened by Safari RSS). However, he notes briefly that it would have been good PR for Apple to acknowledge Konfabulator, and "worth ten times the price they would have paid."

To continue my long tradition of citing friends here at ATPM, Chris Turner says that in light of its massive resource bloat per widget it wasn't ever worth it to use Konfabulator, whereas Dashboard might just be as long as it doesn't eat RAM for breakfast.

It's well worth considering that Microsoft intended for the browser to extend to the desktop with Windows 98, and that now Apple is asking Safari to do the same thing now, at least according to Todd Dominey. This would make Dashboard like ActiveX controls, which ultimately lock end users into Internet Explorer; can Apple corral those Dashboard-only XHTML extensions out of the Web? Dave Hyatt says yes, and reminds that Dashboard is really more like XUL/XPCOM (from the Mozilla project) than like ActiveX; he also informs us—the unwashed masses—that the plug-in that makes all of this tick will not be available in Safari or WebCore regardless. So at least, no anti-choice, security-risk problems forthcoming.

The most exciting thing to see about Dashboard was a collection of widgets from WWDC that Erik Veland put together; unfortunately, he was forced to take them down by Apple Legal. You might still be able to find them somewhere else, though, if you want to take a look (the JavaScript was pretty slick, if memory serves).

All right, enough on Dashboard. What else happened in the news this month? Not much, as far as the Mac blogosphere is concerned. Of interest may be:

• An interview with Evan Schoenberg, co-head developer of Adium, everyone's (well, my) favorite third-party AIM client, in DrunkenBlog. He tells us of a cute crush one girl expressed using Apple BASIC, background on the Adium development process, and of course an anatomy of the two types of Adium users.

• Why is Mac OS X a better OS to use? If you've ever thought of an answer, you might enjoy James Duncan Davidson's essay on the topic, explaining that having a desktop Unix that works well and reliably and doesn't require a geek pedigree means focusing on only the hacking things you like doing. I can second this, having switched to a Mac

because I got tired of constantly rewriting my `/etc/printcap` to get better results or rebuilding my kernel after buying a new piece of hardware. It's the sort of thing that Unix geeks don't realize is as powerful as it is until they try it.

It looks like that's a wrap for this month. I'm going to be taking August (September's issue) off, as the work schedule at my summer job is making life increasingly difficult to write, but I'll look forward to seeing you all again the first of October!

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Mindmapping Outliners

When I began this outliner column, I resolved to stay well within the domain of "ordinary" outliners. That domain is confusing enough; it is populated by several dozen applications (listed last month), most of which might be a perfect fit for someone's particular needs. And as we've noted, those needs, use patterns, and interface strategies are all over the map, depending on how you live your creative life.

So as a matter of sheer scope, I didn't want to open the even vaster spectrum of "mindmapping" outliners. But I've gotten lots of requests to do an overview of them. This column, dear readers, is proof that we boldly go where *you* wish. As a result of your navigation of this ship, this month we examine outliners that also present what is commonly called a "mindmapping" or charting view.
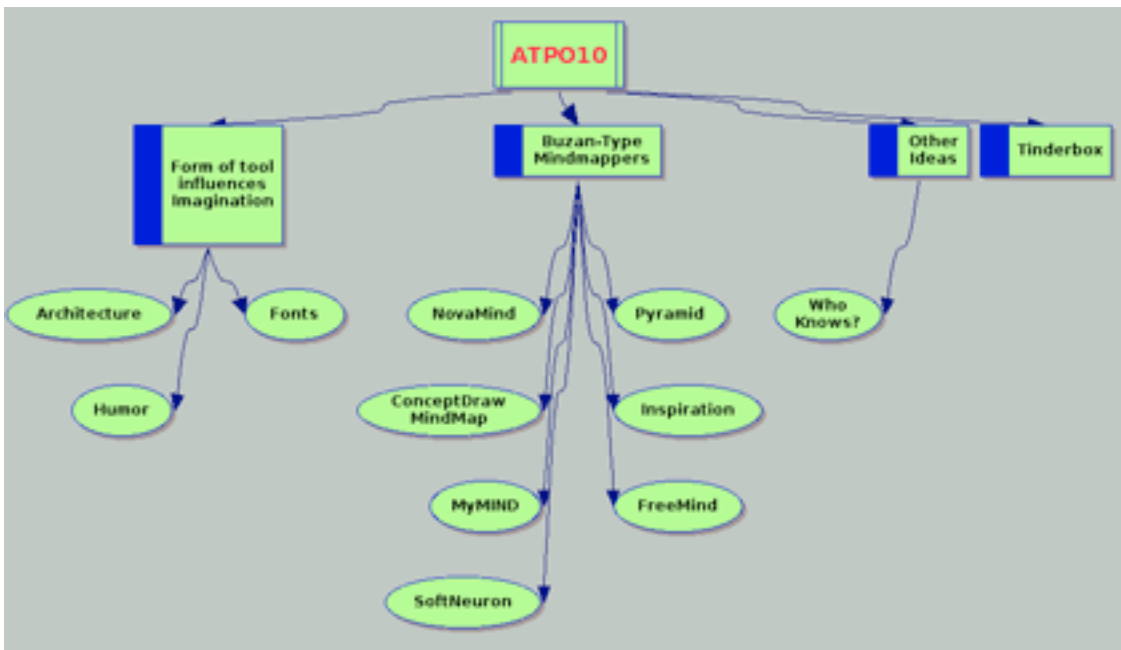
Inspiration

The kind of outliners we've been covering so far are essentially editors—at root, text editors—that add graphic layout. That graphic layout is a matter of indentation, disclosure triangles, and often styles and interface icons. The whole thing refers to a linear flow: no matter what information you are capturing, the outline has a beginning and an end, a flow.

That makes outlines a natural for authoring something that will end up being read linearly, like this column or a book. The linear nature of outliners is also great for setting up and navigating ordered lists, including to-do lists which might be ordered by date or priority. Lists that depend on an indexing order, like the alphabet, also do well with outlining.

That makes sense if I am writing *Lord of the Rings*. But what if I also wanted an outline of all the features of the fictional land: place names, rules history, geographic features, and such? There's no natural linear order for something like this: in fact, it might even make sense to lay it out rather like a two-dimensional map.

That's where these chart views come into play. Where outliners are graphic features added to text layout to manage concepts, mindmappers are the opposite: text features added to graphic layout. For many users, switching between the two is a pretty powerful combination.

Techniques for visual brainstorming have a long and complex history, largely independent of outlining. A few sources claim an origin in Leonardo DaVinci! As it happens, I've been personally involved in some of the more recent history of visual brainstorming, moreso than in the outlining branch that is the focus of *ATPO*. But that history is so twisted, diffuse, and controversial I couldn't possibly give a meaningful summary. It wouldn't illuminate much anyway.

A relevant touchstone is the work of British psychologist Tony Buzan who in the 60s coined the term "Mindmapping" for his approach to the then new technology of whiteboards and erasable markers. Those concepts were:

• Start in the center of the board with a "root" and branch out in spreads of 5–8.

• Use graphics and color as much as possible; when using text, use simple, single words in bold lowercase because it registers in the mind more clearly.

Radical claims were made for the power of this technique at the time. Most of these are indefensible in retrospect.

Since then, the Buzan organization has trademarked the term. Some of the applications surveyed below have official Buzan licenses, but I could not suss out precisely which ones or exactly what it means to have a license. Also since the 60s, "mindmapping" has found its home on the computer desktop, has merged with outlining (since both work with trees), and has evolved some new conventions not originally "invented" by Buzan.

In this column, we'll use the term generically to apply to any graphical view of outlined material whether it is "official" or indeed whether it conforms to Buzan's principles.

About Tools and Thinking

But before we look at applications, I want to take a relevant detour. In previous columns, I've made my own outrageously broad claim: that the tools you use profoundly affect the way you think and work. Several of you have messaged me to disagree, claiming that a tool is simply good or bad. In this view, a tool can get in the way but given the same mind, what would be produced would be pretty much the same no matter the tool.

But at least so far as *groups* of minds, this isn't so. For instance, people who study humor have been able to track how the notion of a joke changed at certain key points in history. One significant cusp was when the Hearst newspaper chain found it competitively convenient to package comics as the "strip," with three or four panels. In short order, many jokes changed from the longer form of spoken stories to a more abstract setup in two or three steps, then the punch.

(For a great example, snap down to ATPM's own Cortland strip.)

This form of humor was completely shaped by the visualization technology but quickly spread to be a dominant form in other media as well, even reinventing the spoken joke and extending to many of those internal jokes we have with ourselves.

Or consider this. My visualization training included an extended dip in the world of architecture. Back in those days buildings were actually designed on paper! And guess what? The size of the paper (together with the scale of the drawing) determined the size of the architectural feature and effect. Big deal, you might say. But repeated exposure to

the same scales of architectural features permanently changed how we interact with buildings and the fabric of cities. What you now experience and appreciate in New York or Budapest or Paris has a lot to do with the presentation technology behind its creation.

Friends have been bored by my tours of American cities where I point out architectural features whose scale works amazingly well, but which were shaped by the limits of the technology. As an example, most folks are familiar with the late World Trade Center.

World Trade Center, for more visit this page.

See that detail where the columns fork into three sections? Why that height and not another? Yup, size of the paper. Same with the size of the plaza and the atrium and many, many features of the former World Trade complex. Even though computers have now freed us from paper, designers still use those dimensions because that's what we have come to expect in what works. So the replacement building will employ many of the same scales. It's the architectural equivalent of making software bug-compatible with what went before.

It is also something like the *Star Wars* effect. Now, every space battle in movies has to have a certain type of noise and fireball effect to seem real. And the ships must move in arcs determined by aerodynamics and gravity. The "real" real would seem false.

Or consider this very strange way that technology has shaped your mind. Romans developed the serif for monumental inscriptions.
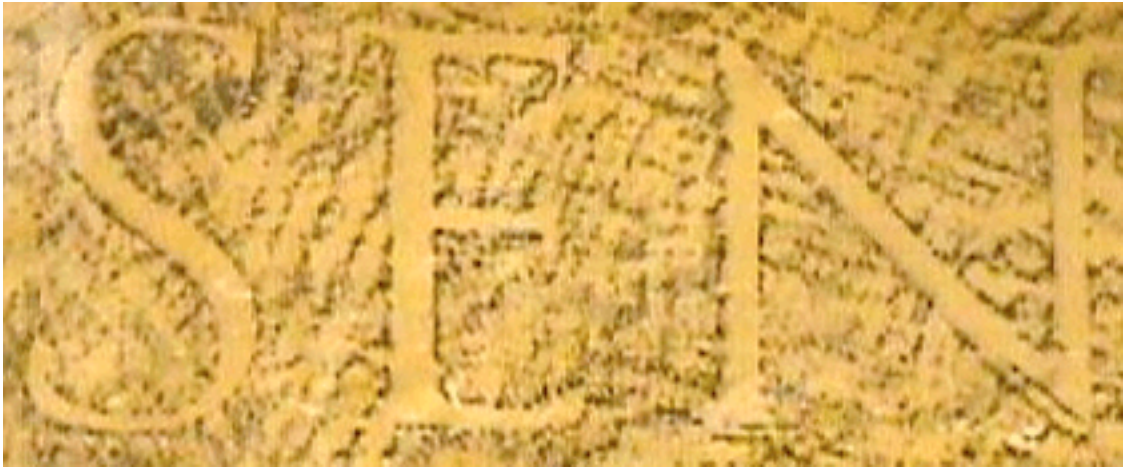
Detail of Trajan's Inscription, more [here](#).>

The serif is the "foot" at the bottom and top of the "N" for example. The serif exists purely because of the technology of stone and chisel. But when the Romans minted coins, they made the letters look the same—more "official," you see—even though the technology didn't demand it. Later, monks emulated the chisel effect with brushes, leading to our modern font designs. Nearly all books and periodicals are set in serif fonts because that's what now works best. It's the *Star Wars* deal at the lowest cognitive level.

Why would I bring this up? Because countless studies indicate that even though mankind has been exposed to the printed page for mere centuries, that remnant of the display technology has somehow become hardwired in the way we receive ideas from words. Not only that, but most of the information is inexplicably contained in the top half of the letters. See for yourself below. Try the same thing with the bottom half of any text.

Tops of Letters

We do imaginative, creative work within many conventions dictated by visualization technologies. Why should the Mac tools in which you actually live be any different? One size does *not* fit all, which is why *ATPO* readers don't live in the Windows world. Instead, Mac outline users work to discover their own particular outliner, which supports and leads the imagination. Helping in this discovery is how I justify the effort of *ATPO*.

Six and a Half Buzan-type Mindmappers

We now return you to your regularly scheduled column. Ordinary, Buzan-like mindmappers are: ConceptDraw Mindmap, $150; FreeMind, free; Inspiration, $70; MyMIND, donationware; NovaMind, $60; Pyramid, $30; and SoftNeuron, $15.

SoftNeuron

The simplest of these is probably SoftNeuron, which we were unable to review. It appears to be a cross-platform Java application from Hungary. There is no demo, and the developers do not return queries. There is one image on their site which you might want to check out for completeness, but this looks like a loser. We only mention it for completeness.

FreeMind

FreeMind is also a cross-platform Java mindmapper, this one from the Czech Republic. But it is a bona fide open-source project with apparently robust development. Because it is a "run-anywhere" Java application, you don't have the nice Aqua interface. Compared to some of the others, this is decidedly unflashy: the Mac-style controls don't work well; you

are stuck with the default layout, and the support for graphics is almost completely absent. (That menu along the left edge is of "labels" you can apply—we've applied a green check to the FreeMind child.)

There are no clones, notes (!), or any of the advanced things we've come to expect in outliners. But URLs are supported as shown in the shot.
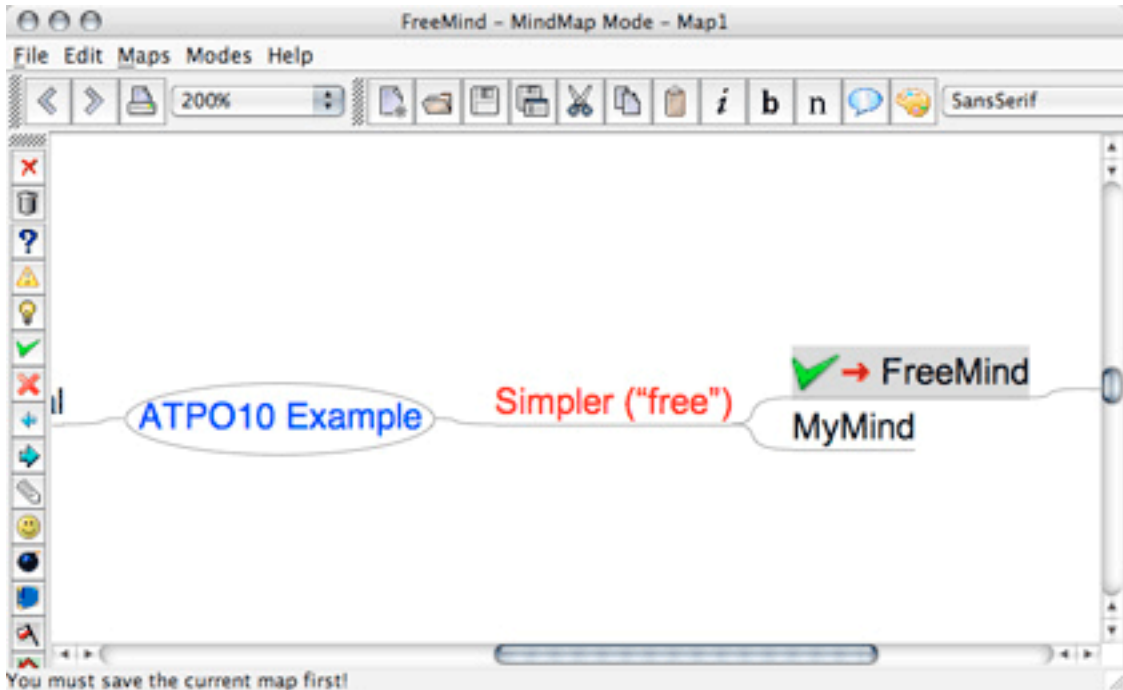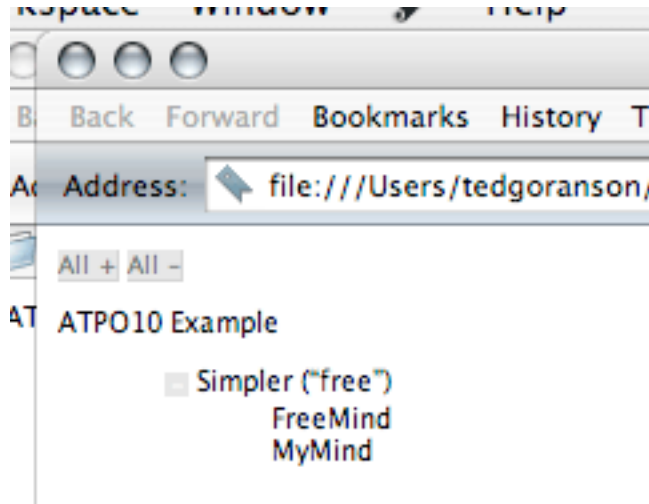

FreeMind

The big deficiency is that there is *no* editable outliner view; you work in mindmapper mode and that's that. On the other hand, some things are implemented so elegantly that this little thing is just begging for space on your hard disk. You add a new child by simply pressing Return. Basically everything you need to ordinarily do (promote/demote and move entries) is done by non-reassignable but very handy keystrokes. Drag and drop reorganization is quite elegant, as is the implementation of collapsing.

Links to files and URLs are supported. Here's the killer trick: choose "File" mode (option 3) and instantly get a navigable mindmap of your hard drive! Imagine my shock when writing this column to find that hot navigation is broken in the current release. Oh no, saving is broken! Well, if you send nice mail to the developer, he'll fix it again and you'll have a mindmapping counterpart to your Finder Outline.
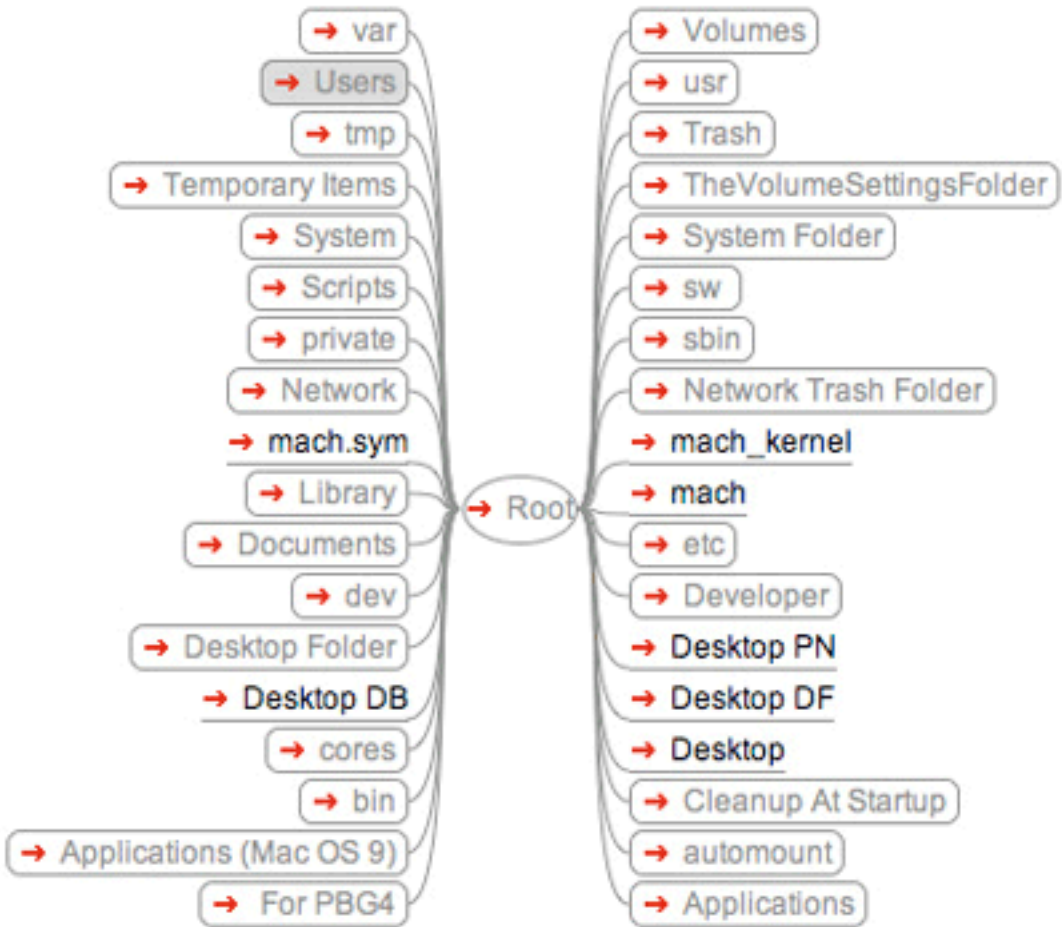

FreeMind's Finder Navigator

I hate to be extolling something that is broken, but here is one more feature that is attractive. Though it has no outline editing mode, it does have an "export to Web outline" mode that's nice, as we mentioned in last month's *ATPO*. The collapse and expand controls can be tailored to some extent.


FreeMind's Weboutline Export

MyMIND

We are walking roughly from least capable to most. Next up is from Germany. I have it after the other two because it works, it has a native outliner, and it is a Mac Cocoa application. It is also the *only* outliner other than OmniOutliner that supports user-defined columns.
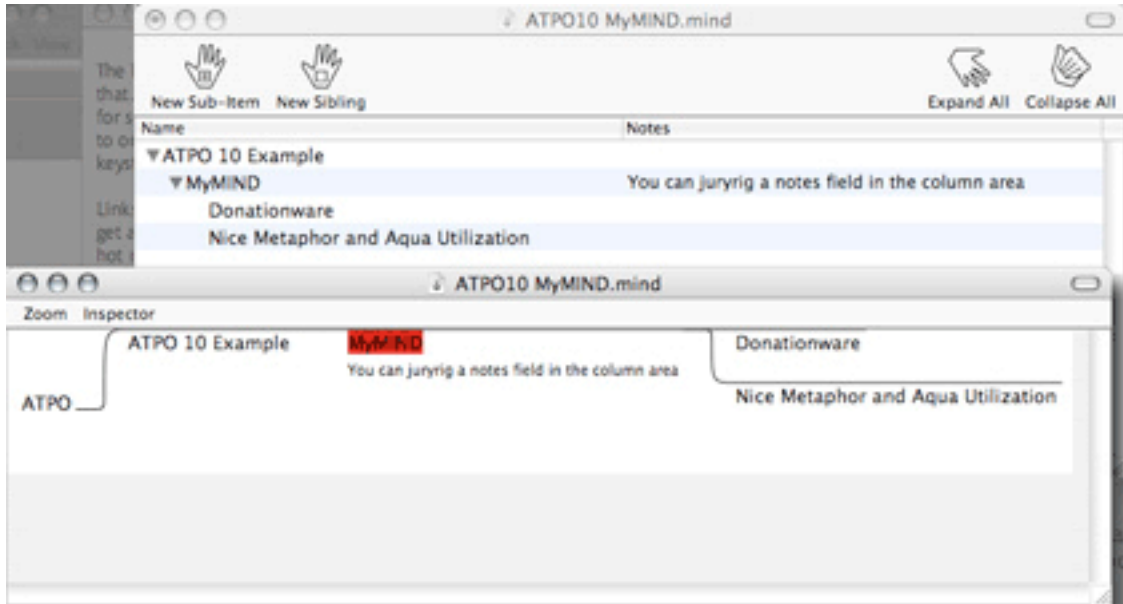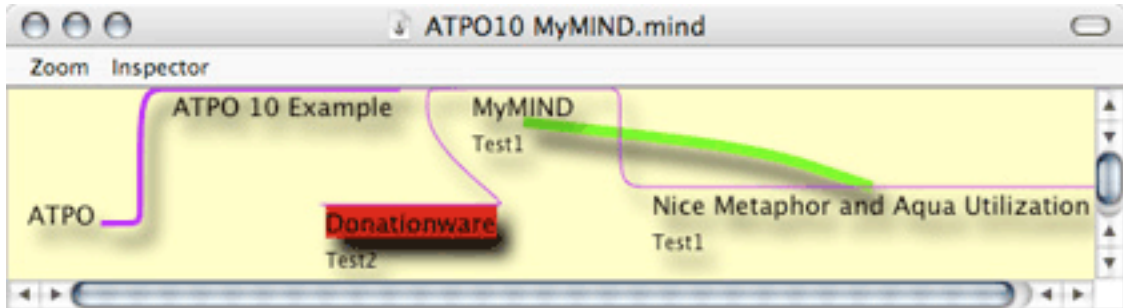

MyMIND

It uses a unique and friendly hand metaphor in its controls and icons, which lends itself well to gestures if you choose to use them. MyMIND has two features that you will not find in other mindmappers. The first is the columns. Columns could be an extremely useful tool in mindmapping, and MyMIND presents one example why.

You can create a column and enter some "values" as shown, Test1 and Test2 for example. Then you can execute the command: "Connect Nodes With Same Attribute…"
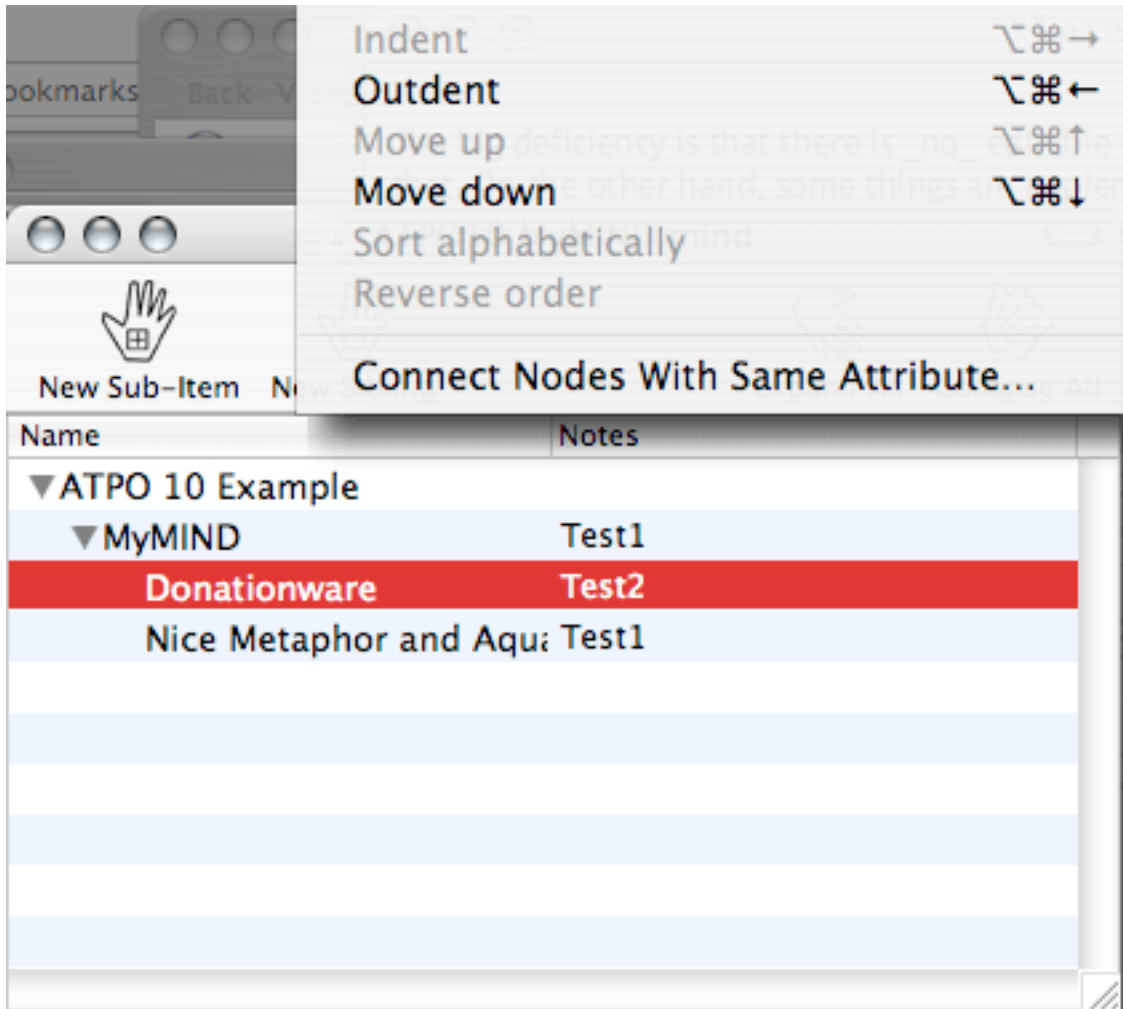
MyMIND Column Values

And you get a map that creates something like a link. Cool possibilities should be jumping about in your mind. This screenshot also shows some display options from the inspector, which leverages Aqua and Quartz. Also, the "Donationware" node has been dragged to a new location.

MyMIND Column-driven "Connection"

MyMIND exploits columns for its other unique trick. If you label a column "URL," you can generate maps that can be used as HTML image maps, where zones are links. MyMIND exports as OPML, which makes it a good citizen in an outlining suite.

The key problem with MyMIND is that the map mode is a report-view only. All editing must be done in the outline, which sort of blows the advantages of mindmapping: to brainstorm in either mode. However, I will make a special appeal here to send encouragement to the developer, Sebastian Krauss. These guys are the backbone of Mac development.
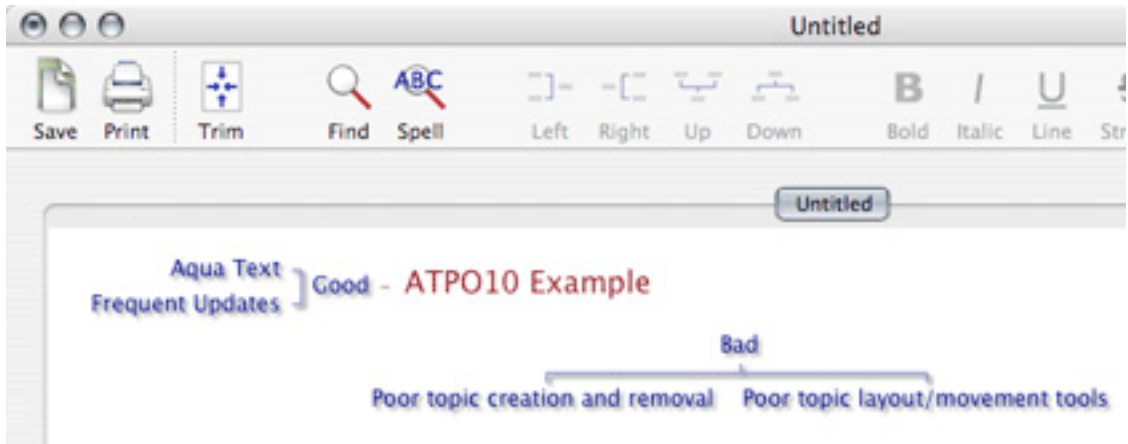
Pyramid

Now we turn to commercial products. Next is the new Pyramid from MindCAD. Pyramid and NovaMind are the only two native commercial mindmappers for OS X. In fact, Pyramid absolutely requires Panther. Pyramid is the less expensive and by far the less capable.

ATPO readers may note that it is not on the list of outliners to track; that's because it has no built-in outliner! Pyramid is a graphical mindmapper only. Alas, it cannot integrate with any other product. It neither reads nor produces OPML or any other format that can be readily exchanged with other outliner products—a strange design decision.

What Pyramid does is somewhere between charting and mindmapping. You can create tree diagrams, more than one per "worksheet." Your documents can consist of several worksheet pages, selectable by tabs. The worksheet behaves like a neutered TextEdit page: you can drag text and images but not files or URLs.

You can link headers you create in tree structures that grow in the four directions away from the root-like dominos. One worksheet can have several roots. Each header can have a note attached that displays in a pane below.

Pyramid

I found the assembly of boxes to be very tricky, and in some cases impossible. What you see in the screenshot is the only option for layout, excepting some "tightening" controls. You cannot, for instance, move a box around.

NovaMind
NovaMind is something of a gem in this collection. Coming from Brisbane, Australia, it has a text outliner that supports the rudimentary outlining tasks such as indenting, collapsing, and grouping. Cloning and linking are not supported. However, NovaMind is a good player with other tools, importing and exporting OPML. (Swapping outlines among tools loses any custom layout in NovaMind.)

It is in the mindmapping that the application focuses; I get the impression that the creators expected the tool to be used as an early brainstorming tool with the results moved to another tool for the next phase of maturity. Exporting to Keynote and PowerPoint is supported, as well as the seven OPML outliners listed last month, but it is nice to have a real built-in outliner for the dual modes of thinking.

When doing this sort of mindmapping, what you'll want are many of the same things you want in text outlining: to easily add and annotate new topics, and to move topics around logically and graphically. You'll also want some advanced outliner features like links, clones, folding, and hoisting. And then you'll want the stuff that comes from mindmapping: extreme and easy control over the layout and appearance of the map.

NovaMind doesn't do all that well on the links, clones, and hoisting. In fairness, no Buzan-type mindmapper does. It only supports a graphical but interbranch link with no logic, and no clones or hoisting. But it does an excellent job in supporting map element creation and display. It supports map folding like FreeMind, but it usefully gives a little "plus" to indicate when folding has happened. Single branches can be collapsed and expanded. As well, the whole map can have lower levels folded.

Here is a screenshot that shows an example.
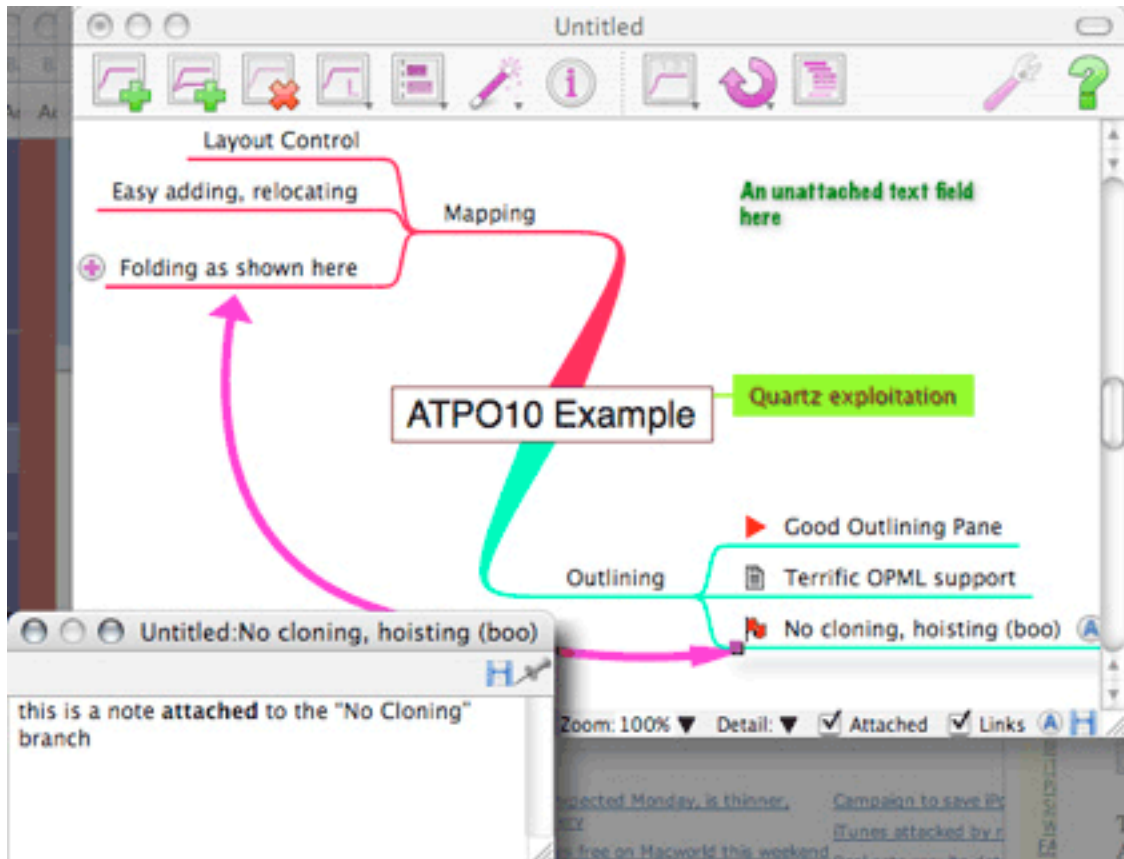
NovaMind

There is one folded branch. Also note the symbols in the lower right. These are what NovaMind calls adornments. They appear before the labels in map view only and carry no significance other than visually. You can edit and import them. The shot also shows a note and a link. Each branch can have a note, but it is not editable in outline mode. URLs and file hyperlinks are supported to external objects.

That pink line is an interbranch link. It is not nameable. Links are easily added and temporarily suppressed, but as with adornments, don't "stick" to the logical structure in any way.

I am very impressed with NovaMind's layout support. I suppose I should be, as that is the whole point of the application. There are various types of "snap" tools that allow the application to handle details of how things are arranged and colored. These are a great aid in brainstorming as one does not want to stop thinking and worry about formatting.

Perhaps we'll review NovaMind in detail in a future *ATPO* as it is the leading Cocoa mindmapper, and there are several cool graphics features and some productivity issues that we are leaving out. Cocoa brings a lot to the table yet to be exploited, and Tiger promises some greater possibilities. There are lots of things missing in our account, which will give the vendor fits, like curved text that follows curved branch lines. A key feature is the ability to import graphics and assign them to branches. We won't illustrate this because others do it with less hassle at this point, but it can be done by finding and importing images one at a time. You'll see the results of this idea below.

Another notable omission in our account is the built-in support for screenwriting. Apparently, successful commercial mindmappers need to have an anchor user community. ConceptDraw targets planners, Inspiration education. Several such Windows products target law firms. NovaMind seems to be putting significant energy into this. It is in fact something I can evaluate, but is not likely of interest to *ATPO* readers. Net result on the screenwriting support: quite promising but not ready for real work yet.

ConceptDraw Mindmap

This Ukrainian product is part of a roughly integrated multi-platform (Mac and Windows) suite of planning and scheduling software: ConceptDraw (which competes with Visio and OmniGraffle), Project (Microsoft Project and Schedule), and Presenter (Keynote and PowerPoint). They also have a special collection for the medical market, presumably *their* target anchor customer. The Mac version is a Carbon application.

Now allow me to step back from the column a moment. As you know, ATPM is serious about its journalistic standards. This column is not a review column, but we come pretty close when we do a survey like this. All products should be given the same level of attention, indeed respect. But we are hampered a bit in being fair with Odessa, the developers of ConceptDraw Mindmap. About a dozen requests over last year the about their product have gone unanswered.

They have a one-month demo. But when that expires, no subsequent demo on any user account can operate. Couple this with my natural aversion to obvious and inelegant Windows ports, and you should take this section with copious salt. Warning complete.

I'll say this, the developers seem to be aggressive in chasing the business enterprise. And they are being very smart about building a suite of applications, something all the big boys are doing. Their mindmap application is the last of their offerings to appear, and it is clearly targeted at supporting their project planning-oriented suite.

Its outliner is optimized as a project task and resource allocation outliner. It is not well suited for general outlining and stacks up poorly with over a dozen Mac outliners. The mindmapper's interface presents several platoons of Microsoft Word–derived toolbars. Once you get past this and some keyboard controls not optimized for Mac users, you are

presented with a capable mindmapping application for $150. For instance, it has indigenous drawing tools like no other application mentioned here. The screenshot shows one of the supplied maps.
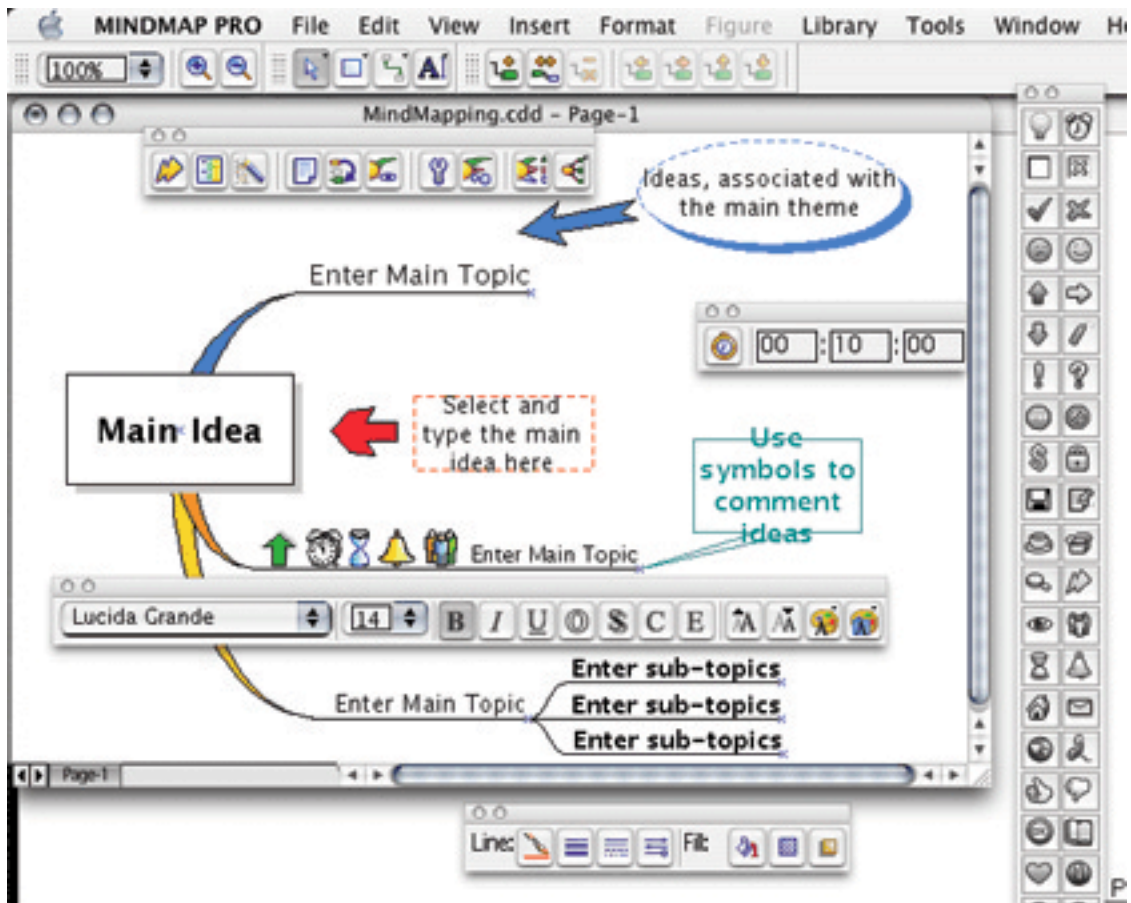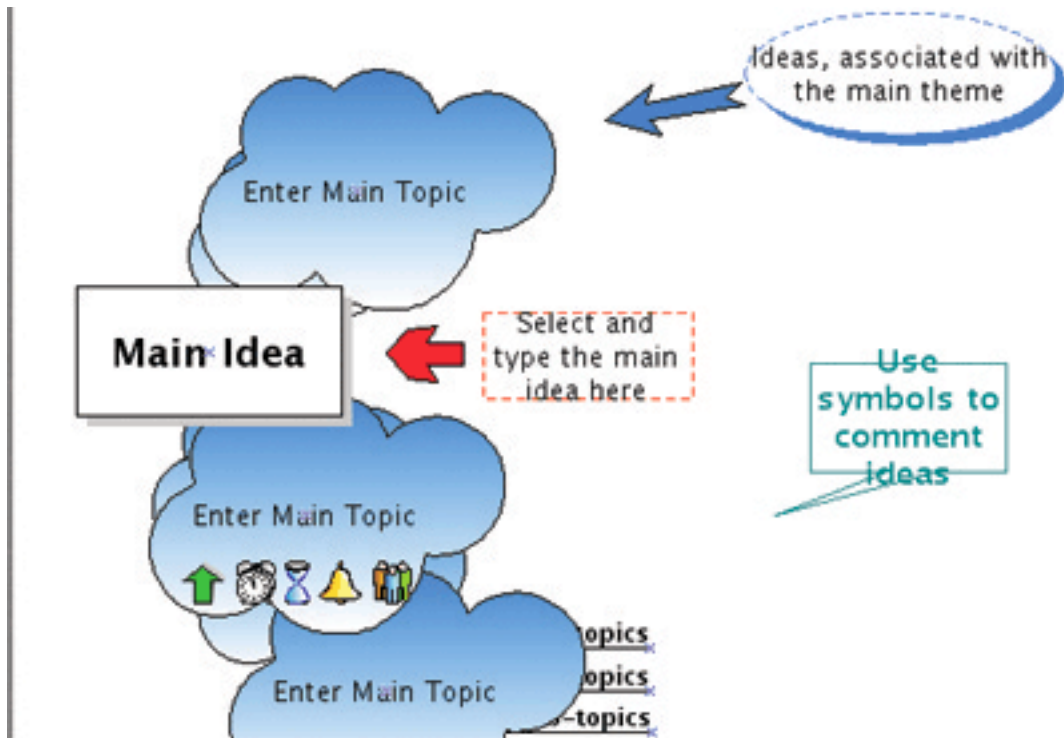

ConceptDraw Mindmap

The basic tools to reorganize and tailor map elements are clunky compared to others, though. The example shows one node with what they call "symbols" and which NovaMind terms adornments. That toolbar to the right is the adornment library. Hyperlinks to external items are supported, but internal links are not.

Overall, I'd say that except for drawing, everything that ConceptDraw does, some application in this column does better, except for the very nice support they have for "templates." A template is a coherent collection of all the styles which you can set for a

map. You can create a map in any hodgepodge fashion you like and apply the template to have it appear as you wish, though the automatic layout options aren't as sophisticated as we've seen with NovaMind.

The screenshot shows the previous map with a new stock "cloud" template applied. You'll note that the layout tools weren't smart enough to move the subtopics out from under the clouds. But still, I can see how this would be very useful: one style for group brainstorming, another for Keynote type presentation, and perhaps a third for shrinking in the printed report.

ConceptDraw Mindmap Changed

And here is the outline view for that map. One topic has a text note and a hyperlink attached, denoted by the icons under the "T" and "H" columns respectively.
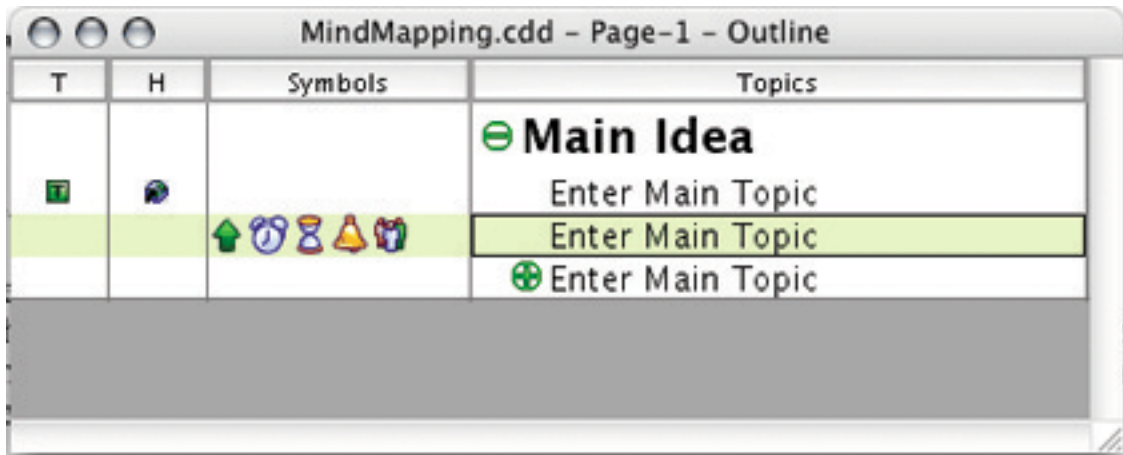
ConceptDraw Mindmap Outliner

Inspiration

Our final Buzan-type mindmapper is Inspiration. ATPM reviewed version 7 of Inspiration last year and rated it Very Nice. Go there or to the longer ATPM review of version 6 for more detail as the current version 7.5 differs little from 6.0. At least two ATPM editors swear by it.

It is a Carbon application. As I recall, it started life on the Mac and then with so many others moved to Windows. It never became a fully Windows-like program. So even though the interface—which hasn't changed much in several years—isn't very Mac-like, it isn't very Windows-like either. And that's a good thing.

Inspiration's target market has migrated to junior high and high school mindmapping, and all their marketing is directed toward that effort. They have a "junior" version, Kidspiration, for kids ten years and under.

In the *ATPO* on <u>Outliner User Interfaces</u> we remarked on Inspiration's features in the normal outlining mode. It is unapologetically set up as a writer's outliner with good reorganization tools and a very nice way of handling inline text. It has clean controls and supports the very useful ability to independently set the styles of header levels—and that means a lot.

However, it compares poorly to other outliners that have cloning, internal links, metaoutlining, hoisting, and other advanced features. It also has limited style controls, in part because it doesn't use modern Mac OS X text formatting.

Friends who use Inspiration for writing tout the export to Word. There is no OPML or other XML export, so Word (or RTF) is what you are stuck with. The export is imperfect: headers do not export as Word outline headers, for instance.

Inspiration is from Portland, Oregon. It is a mature product that will satisfy most mindmapping needs. Where it shines is in the use of images for nodes. This is the element they are leveraging for educational use, and they do a good job. A floating palette contains images from the several libraries you may have loaded. (Inspiration comes with scores of libraries, and it is easy to assemble your own.)

The use of images (which Inspiration calls symbols) is as easy as it gets. You can create your nodes in "rapid fire" mode where a new node is created by a simple Return. Or you can do it the usual way, by setting the node and direction of growth. Then simply select the node and select a symbol in the library. Easy-peasy, as the kid who was demonstrating said.

Here is a screenshot that shows a mindmap populated with animals. I've chosen photographic type images, though line drawings are in this library as well. The first screenshot in this column is also from Inspiration and shows another style of graphic use.
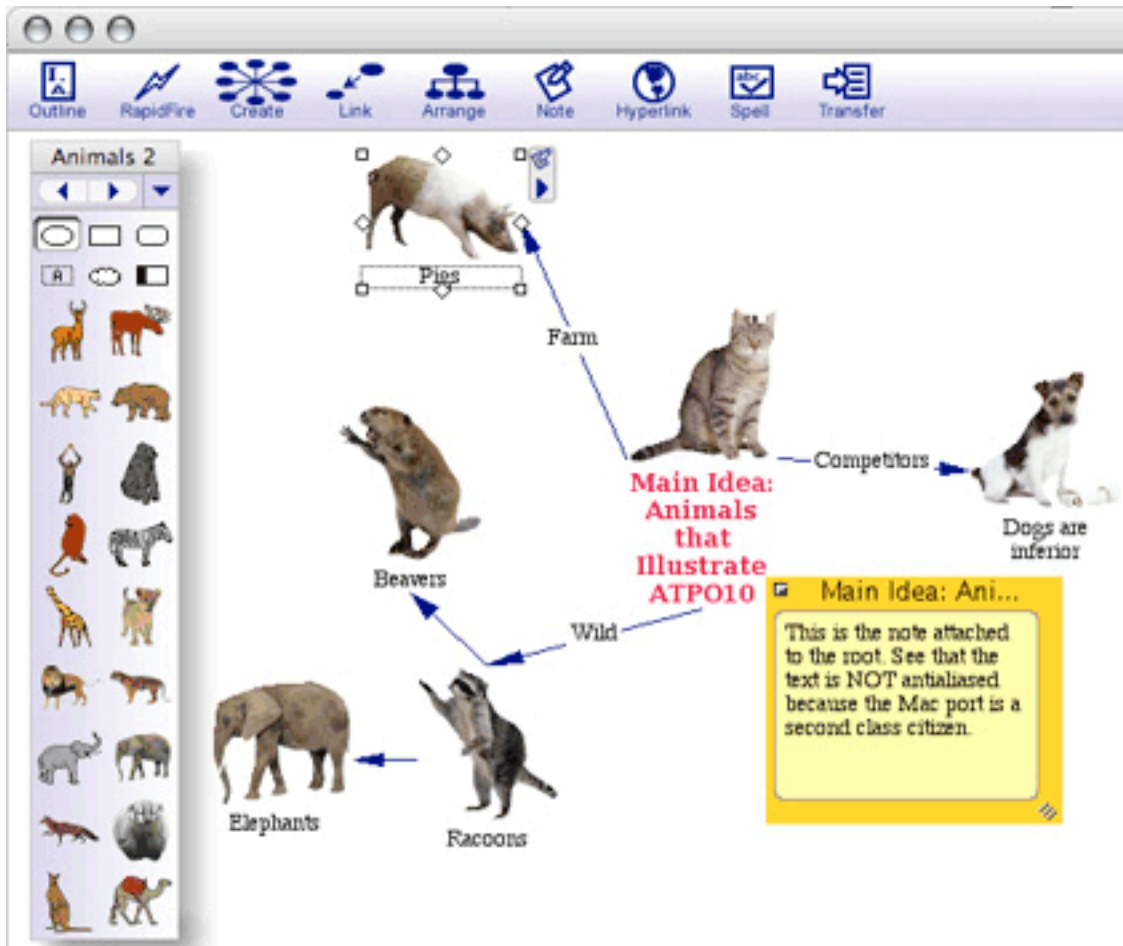
Inspiration

It doesn't have the graphic polish that NovaMind does: shadows, rainbow selection, auto-layout options, variable link width, shadows and all. But it has some refinements that show its maturity. Two of these—both shown in the screen shot—are big deals for me. Links can be labeled, a surprisingly rare feature among mindmappers. Also, look at the symbols it uses for notes and collapsed nodes connected to the selected pig. These are

precisely the same conventions used in the outlining mode, and they work the same way. Oddly, those nice level-based styles you can specify for the outline do not carry over to the map view. Ouch!

Buzan-style Bottom Line

Of this lot, MyMIND is the best bang for the buck, NovaMind is probably the best overall Mac experience (and the one that plays best with other outliners), and Inspiration has the best built-in outliner. But I recommend that you play with them all—you may fall in love with one of the others.

I mentioned the country of origin for each product because I contend that mindmappers are perhaps the Mac's most international product category. That's good.

As with outliners, there are a few Windows-only mindmappers, fewer in number than are listed here. My survey of them gives the same result as with outliners: there's nothing better than what you can find on the Mac…unless you value the purported deep integration with Microsoft Office and Project through XML that MindManager advertises. And as with outliners, the terrain on Linux is bleak—a puzzlement.

Tinderbox

Buzan-type mindmapping is not the only solution to this problem. Tinderbox has another. Next month we'll get into Tinderbox deeply, so we'll only mention the one relevant capability here.

The Buzan approach originates in the whiteboard world and computerizes it rather like word processors computerized the typewriter (and Photoshop computerized the darkroom). The magic of VisiCalc (the first spreadsheet) was that it *started* with what could be done with a computer and then applied that to a specific problem.

Tinderbox starts with what computers can bring to the table, specifically in the form of "spatial" hypertext, then applies it to the same problem: graphical brainstorming and organization for presentation and use.

Mindmapping draws tree structures. There two types of objects, links and nodes, but they waste much of the power of the "link" object by limiting it to denoting only the tree relationships. "Official" mindmapping does not even allow the link arcs to be named. NovaMind sneaks in an extra node-to-node link, and Inspiration provides the ability to name nodes, but neither of those carry over into the logical structure of the thing.

Tinderbox uses the same two types of objects, links and nodes, but it doesn't waste the link by having it display the hierarchy. Nodes are rectangles, and a child node is shown as a rectangle within a rectangle. This has a few advantages:

- Changing parent-child relationships on the map is way simpler in terms of the movements required.

- It graphically solves the problem of folding, changing it to a more graphical notion of "zooming in."

- The link arc is freed to denote a real link, and many types of user-defined links are possible. You can use links in an ad hoc manner or to define "concept maps" or many of the other emerging techniques for information architecture.

- Extremely large collections of nodes are more visually comprehensible because of the nesting and large numbers of nodes at the same level can be spread out on a plane larger than the viewing window.

The screenshot shows an example from the tutorial. It is extremely difficult to illustrate this in one shot. The two boxes at the top are "containers," first-level headers. Clicking on them will zoom into those notes. They already have five characters and three locations respectively, and we are working on a new character ("Franklin's ex-wife") and location ("Franklin's house") which will be dragged in a moment.

The two grey rectangles are "adornments," extra cues. The box marked *location* is a special type of note, actually a "prototype" of locations. Making a prototype link to a regular note as shown bestows location-associated properties. So in this little diagram we

have three hierarchies: the container/tree one, the object oriented like one with the prototype and its instance, and the extra visual one of the adornments. No clones are shown here.
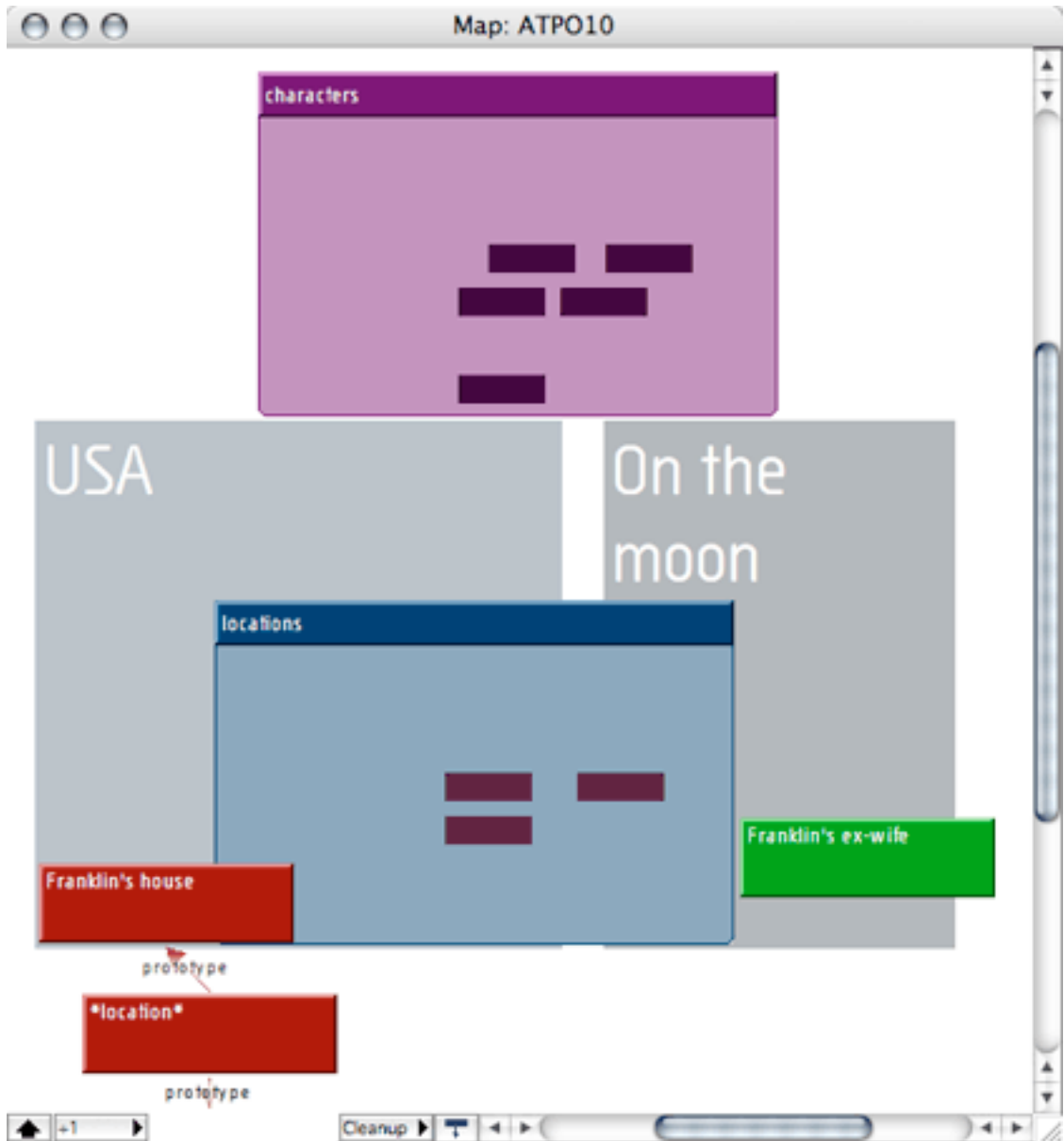
Tinderbox

Incidentally, Tinderbox also allows graphical views of the tree structure, in the form of bare-bones mindmaps, but I suspect they are rarely used. The big disadvantage of Tinderbox's approach is that you cannot paste a graphic on a note's node to give some additional meaning to it—you are mostly stuck with the title in a rectangle. Links are named but if you work with documents as complicated as mine, the links quickly become overwhelming and chaotic. The solutions around these potential problems are:

- A very high degree of graphic control over the color of the box, together with an unlimited number of other (mostly non-graphically apparent) attributes. Amazingly, the eye can discern a high number of hues and associate objects of the same hue more readily than pictures. Pictures require more cognitive work.

- Automatic agents that can collect notes in special views according to those attributes.

- "Adornments" which in Tinderbox-speak are graphics on the map that are not part of the outline. Adornments are often rectangular containers that have an associated graphic or graphic background.

- A much more sophisticated outliner and outline view than any mindmapper, indeed in many respects than any outliner.

- Extra facilities to examine notes in context. You can "open" a note of course to view and edit it, and you can "get info" on a note to see its attributes. But the extra tools of interest here are those that allow you to view paths, "roadmap" (its relationship to other paths in context), and hypertext status.

- And clones. Once you use clones in an ordinary outliner you will never, ever go back. That's because as powerful as hierarchies are, they are often a poor organizational structure. I might want my dog in the Animals hierarchy as well as in Pets and Friends. Clones (which both Tinderbox and the Finder's outliner call "aliases") are the solution. A clone is like a superlink that says "this note has another face over here." Clones are better leveraged by the Tinderbox containment paradigm than that of the mindmapping tree.

More about Tinderbox next month.

Other Approaches

As long as we are at it, let's mention some other approaches to "maps." You can have a whiteboard that contains a graphical outline. This is the Buzan approach, though ConceptDraw and Pyramid extend it a bit by allowing multiple whiteboards per document. But you can also have outlines of whiteboards and outlines of whiteboards that contain outlines. Curio does the first. Keynote does the second.

In other words, Buzan-type mindmaps are "pictures" of outlines. You can also have outlines of "pictures."

We've mentioned Curio in earlier columns. Basically, it is an outliner where every note is an unstructured map and the outliner headers are images of the note pages. It moves the tree from the page to be a tree of pages. But the content on those pages can be richer than in mindmappers, and it can contain Web-generated material and multimedia.
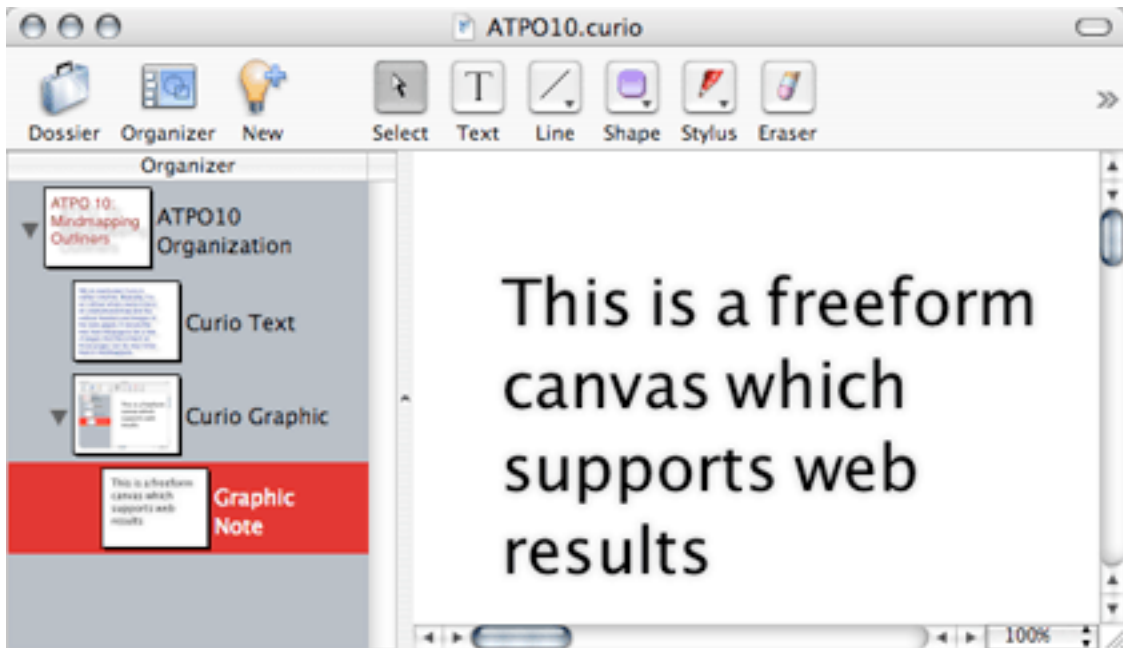

Curio

Keynote is similar in this. If you discount the presentation mode and just focus on the editor, it is like Curio in being an outliner of pages. Keynote pages can contain information far less varied and sophisticated than Curio's with one exception: Keynote pages can contain outlines that are somewhat integrated with the higher level outline, an outline of outlines feature that I value.

We need to include OmniGraffle as well. OmniGraffle does not have an outliner, though integration with sibling product OmniOutliner has been indicated for the future. OmniGraffle is a charting program, a very impressive one, that can draw mindmaps. An OmniGraffle mindmap "stencil" exists.

These drawings can be every bit as pretty as NovaMind's and in fact are much smarter in the construction sense. But they consist of pictures only, rather than a structured collection of concepts. This may be good enough for you if your mindmap is not intended to feed a workflow. OmniGraffle images can easily be used in Keynote and Curio, in addition to its own paged presentation format.
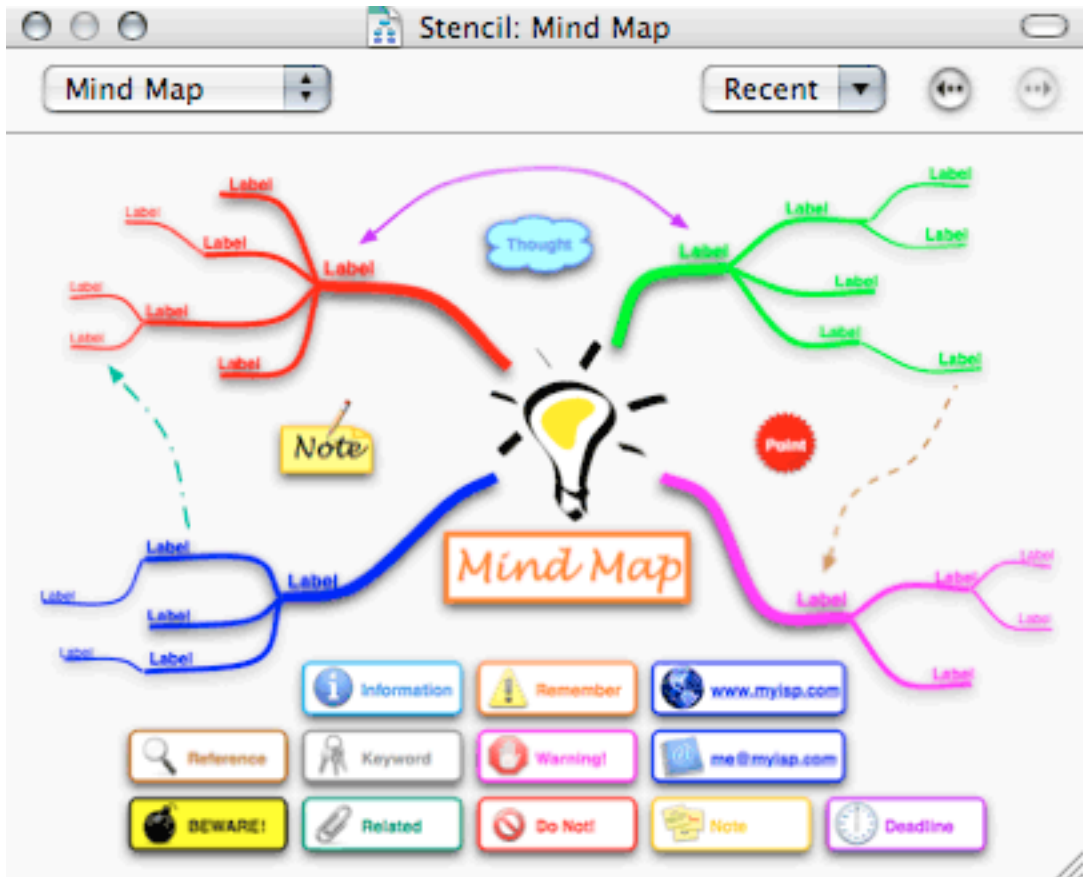
OmniGraffle Mind Map Stencil

Promising Ideas

Gosh, the area of structural visual brainstorming and editing is growing fast with many new ideas flowing in. Let's take a moment to look at a few of these. I'm involved in the first three personally, and I think they will make a difference in a next generation of Mac "outliner" products.

Symmetry Grids

Last month we reviewed SymmetryWorks, a great tool for creating symmetrical tilings. I also mentioned that I am an officer in the international symmetry society. What's that all about? The idea is that the mind sees structure via several mechanisms. One of these is association, for instance of elements of the same color. Another is by semiotic association. (Semiotics is the science of signs and the meaning of symbols as signs.) Buzan's notions rely on the semiotic value of pictures imposed on map nodes to trigger this effect.

Yet another is proximity, which we address in the section below on "semantic distance." But the most profound and deep is by pattern, and the primary cognitive mechanism of perceiving patterns involves symmetry, either through symmetric regularity or irregularity.

So you may find it useful to work with symmetric grids in your mindmaps. Try it. We have scads of experiments (unhappily classified) that attest to their utility in many cases. I'll give an example using OmniGraffle.

Here's the idea: when you arrange ideas in a tree, you are moving some semantics into geometry. It may not be very rich semantics, probably just "this idea is more detail of that one." But it could be more informative, like "this animal belongs to this category." The concept lattice business (explained in the section below) goes all the way, with the idea of making huge percentages of the semantics geometric so that the eye and computer can deal with it readily. But it is not conducive to free-form brainstorming, at least not without new tools.

This idea of symmetry-informed mindmapping is to do something in between white-boarding and full concept lattices. The example has two grids: one at the overall level and another more stringent for each node. I've chosen OmniGraffle for this example in part

because OmniGraffle objects can have links and scripts attached, so that you can click on a node in the big picture and open another OmniGraffle page. Also, you can do some of the heavy lifting in the open-source tool GraphViz.
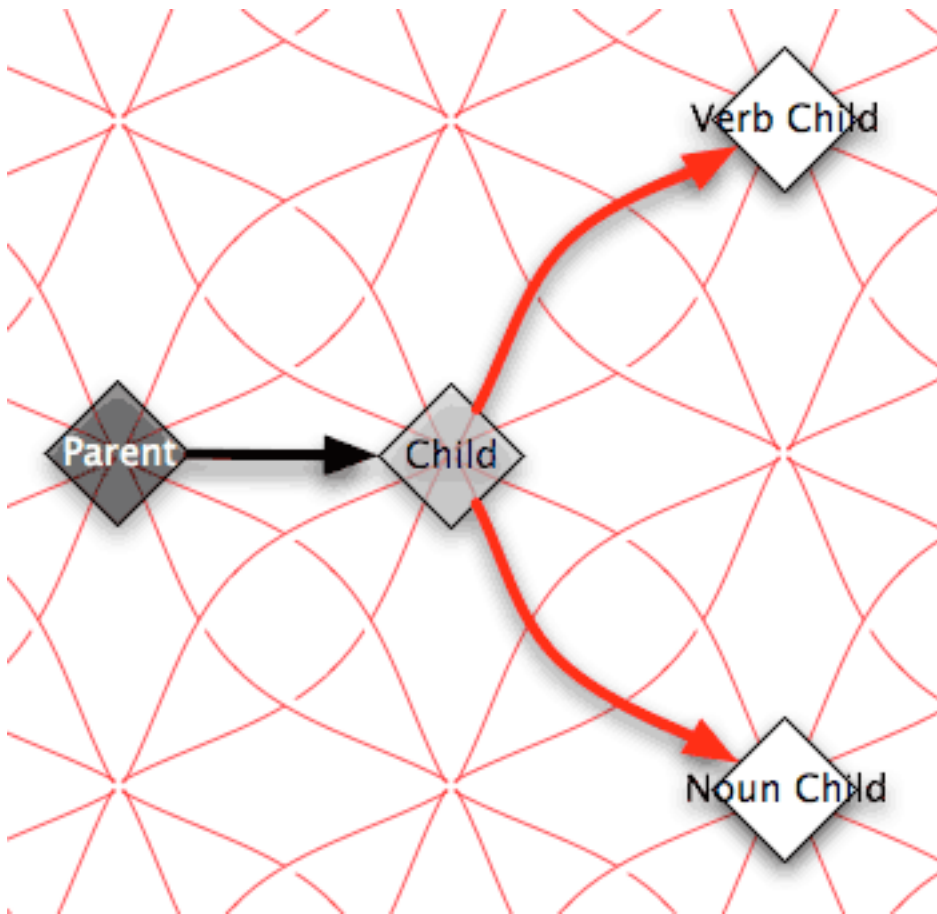
Symmetry-ized OmniGraffle

In the background is a simple symmetry grid that I created in about 90 seconds in SymmetryWorks. You'll note that it is two grids in one. The first is a square grid. The nodes labelled "parent" and "child" are arranged according to that symmetry. You may want to do something similar for your high-level brainstorming because you can superimpose that square grid over the built-in (square) grids of NovaMind or OmniGraffle.

There's a second grid as well, one that aligns by diagonals. This is square as well, but connected by diagonal arcs. If you choose something like this, you'll find it handy that diagonal nodes also snap.

The diagonal links are two, swooping with opposite curves. I chose this grid as an example because I use it frequently when coming to a leaf that I want to switch to a more detailed grid than the Buzan-type north, south, east, or west link. I assign one of the arcs to a "verb" association (say the north, north-east one) and the opposing arc to the clockwise for a "noun" association. A diagonal link means I have shifted into a semantic link type and it is clear from the shape what the nature of the semantics are.

I might have, for example an old-style map semantics with parent=pets, child=puffy, and then shift into another map semantics captured by the shape, noun type link=cat, verb type link=purrs. Cool, huh?

Concept Lattices

One way of extending the notion of charting ideas and relationships is to make the structure logical. Pairing mindmapping with outlining goes some of the way in this direction. Scripts can actually do some interesting things with collections of concepts if they are in a well structured outline. This is why *ATPO* values scriptability and XML so much.

But you can go much, much further, and people have of course done so. Here's an approach which uses outline-like structure and mindmapping-like intuitive graphical displays, but adds a deep formalism for knowledge representation. It is called "formal concept analysis," and actually has a significant community of allied researchers.

A good starting Web page is here. There is some fairly mature open-source Java software, if you are adventuresome.

The group I was with tweaked the formalism to make it more intuitive and to leverage symmetry. (Most lattices are two-dimensional and often not symmetrical. We also add the importance of direction.) The graphic shows an example lattice. Here's how it works: you start at the bottom. Moving up the lattice in one of the four directions confers the property of that "vector."
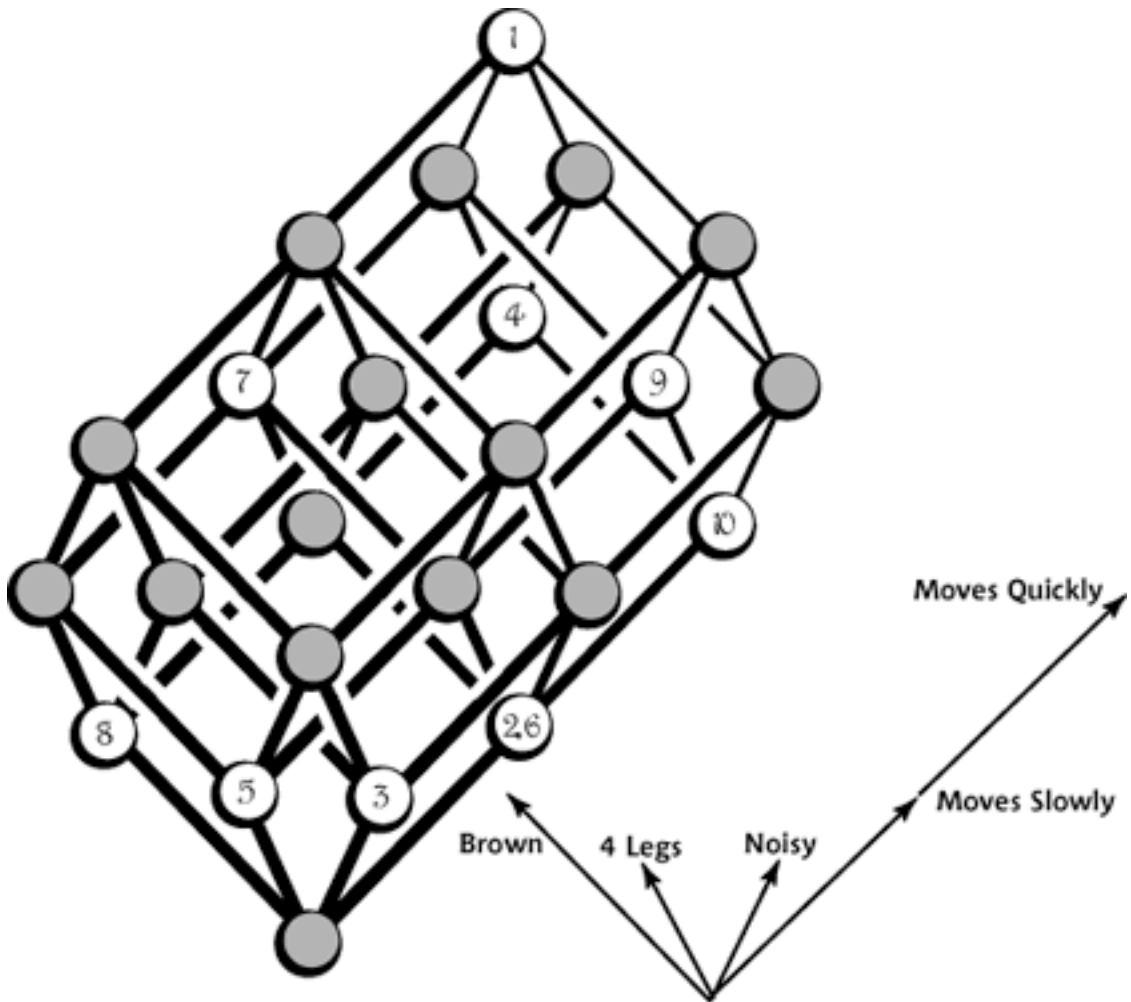
An Example Tweaked Lattice

For instance, you can see that item 8 has the property of brownness but none of the others. Item 9 has two units of "fastness" (very fast) and one shift of "four legs." Item 7 has three properties.

The ten items on this lattice are:

1. Dog
2. Snake
3. Bell
4. Plane
5. Table
6. Tricycle
7. Turtle
8. Mud
9. Rabbit
10. Wind

This is an extremely powerful visualization technique if you work around the weaknesses, which all concern scaling and complexity limits. We managed lattices of huge numbers of dimensions with 3D reduced "zooming views" that took out all but a few dimensions. We employed hyperstereograms (go here for an example) to envision higher dimensions. And we fiddled with symmetries a lot.

Everything in a lattice can be reduced to an outline. What's cool about this is how similar items cluster in easily discerned patterns, and things that differ or are related in complex ways also cluster. It's pretty powerful for some uses.

Semantic Distance
But perhaps the most significant mapping advance is the notion of "semantic distance." This is brand new and probably unrelated to the stuff above.

(Semantics is the study of meaning, so the semantics of an entry in an outline is what it actually means independent of the various methods used to express that meaning.)

The need came from things like the Semantic Web. The idea here is that if everyone signed up to one religion, communication would be perfect and the world would be happy. Unfortunately, I blew vast wads of taxpayer money proving that this is not an achievable or desirable state. People prefer to live in their *own* worlds for good reasons. Communication is almost always imperfect; in fact, that imperfection is often a substantial part of the communication.

So the project arose from the need for formal methods to decide whether a communication was:

- perfect, yay!
- imperfect, but close enough to work as is
- imperfect, but close enough to economically clarify (usually by questions: what did you mean by "way cool?")
- imperfect and probably too far off to be worth clarifying, but the effect of incomplete understanding is tolerable
- imperfect and probably too far off to be worth clarifying, and the effect of incomplete understanding is disastrous

This is very important stuff in many communities involving enterprise integration and knowledge management. Web guys are interested because the same tools can be employed for semantic-based Web searches: "these pages aren't what you asked for, but are close enough to answer your question."

ATPO readers with mindmapping interests might be interested because we may actually be able to use the same tools and methods to associate concepts in maps. The closer they are on the map, the more semantically similar. Now wouldn't that be cool?

This project kicked off late last year with a preliminary study and a workshop of international experts (which Tinderbox attended). Then it took a financial hit as the current administration deemed this and related work to be unimportant ("the effect of incomplete understanding is disastrous"). The project is now reviving as a volunteer effort facilitated by your lowly *ATPO* reporter. If you want to check it out, visit the brand new evolving wiki.

Maybe we can move outlining to a next stage, who knows?

Other Research

There's lots of other research in this general area. You will find it a bit mind-expanding to at least browse a few online projects. The University of Maryland has a page that has many dead links but is a good listing of projects before 1998—quite some time back by the Internet and research clocks. The University of Washington has a good reference page of online readings in this general area.

DOITrees from the University of California at Berkeley addresses navigation of very large tree structures. Constellation addresses a similar problem.

The University of Toronto has a pointer to a cool paper on manifold trees (zzstructures and Mspaces).

Grokker has some interesting tools for Web site tree viewing (but not editing) as does opte. Social circles is a tool for displaying more "connected" hierarchies. Visuos supports visual tree-based queries.

(Thanks to Marc-Antoine Parent of Cheops fame for most of these links.)

The ATPO Outline Tracker

Near-Time Flow

No sooner was the virtual ink dry on last month's column than a new outliner of sorts appeared: Near-Time Flow. It is targeted at distributed, Web-based teams and serves as a knowledge base for content for complex projects together with management information about the project. Like all the products that are just appearing in this space, it is strongest in brainstorming and weaker in actual project management.

Flow is a very ambitious product based on the idea of concurrently edited distributed documents that have structure. You need to subscribe to their Web service for the collaboration to work over the Web or you can locally leverage Rendezvous.

We mention it because the client includes a group-editable rudimentary "quick" outliner (basically HTML lists without collapsing). More interestingly, it features a general folding function, quite apart from the outliner. You select any block of material and simply collapse it to a bar. Unfortunately, there is no feedback whatsoever about what is collapsed.
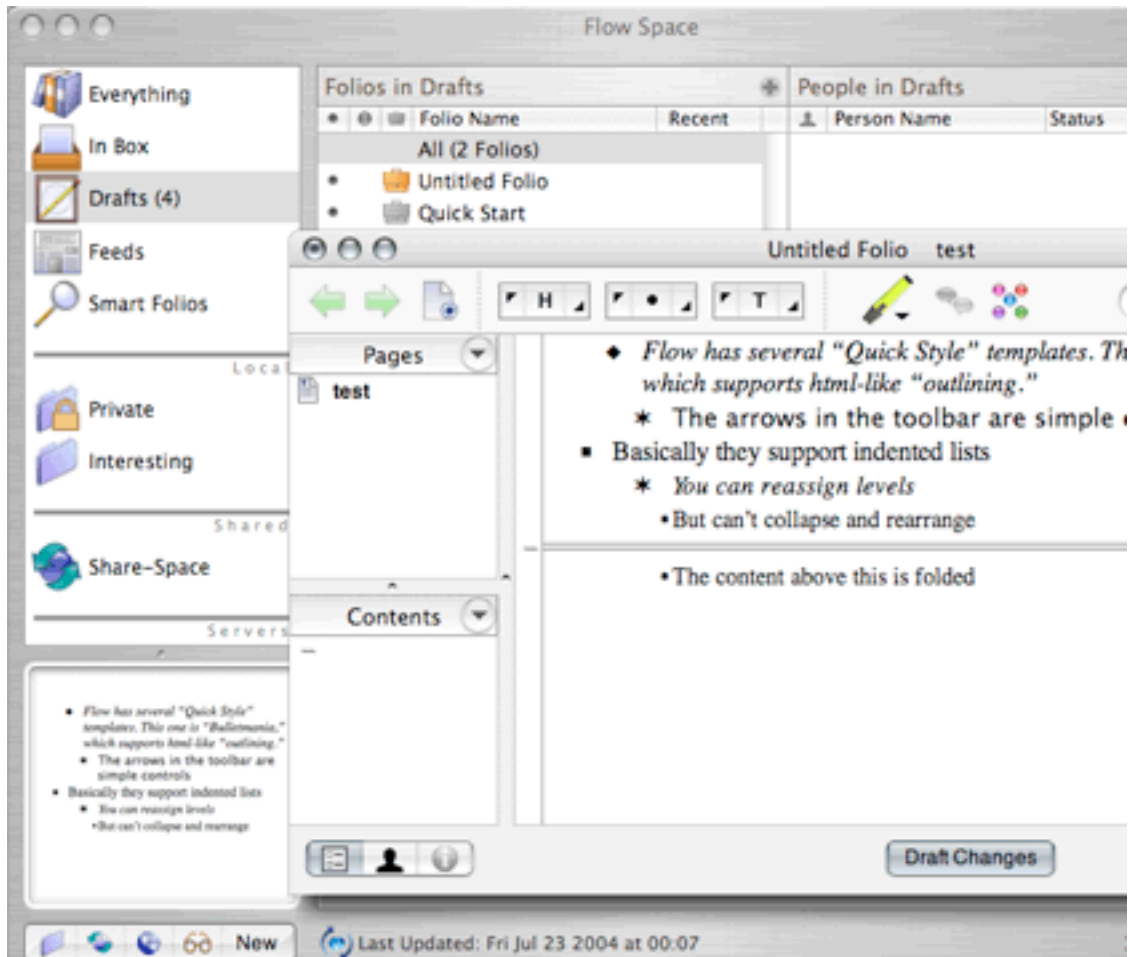

Near-Time Flow

Formation

The first release of Formation has appeared. It is an interesting application in a few ways, advertised as an "integrated" personal information manager and idea organizer. It unifies (perhaps "integration" is too strong a word) several functions under one handy interface,

and includes many more application types than I've ever seen. Unfortunately, that interface bears only a passing resemblance to an outline view. Until it allows more than one level, I'll keep it off the official *ATPO* list.
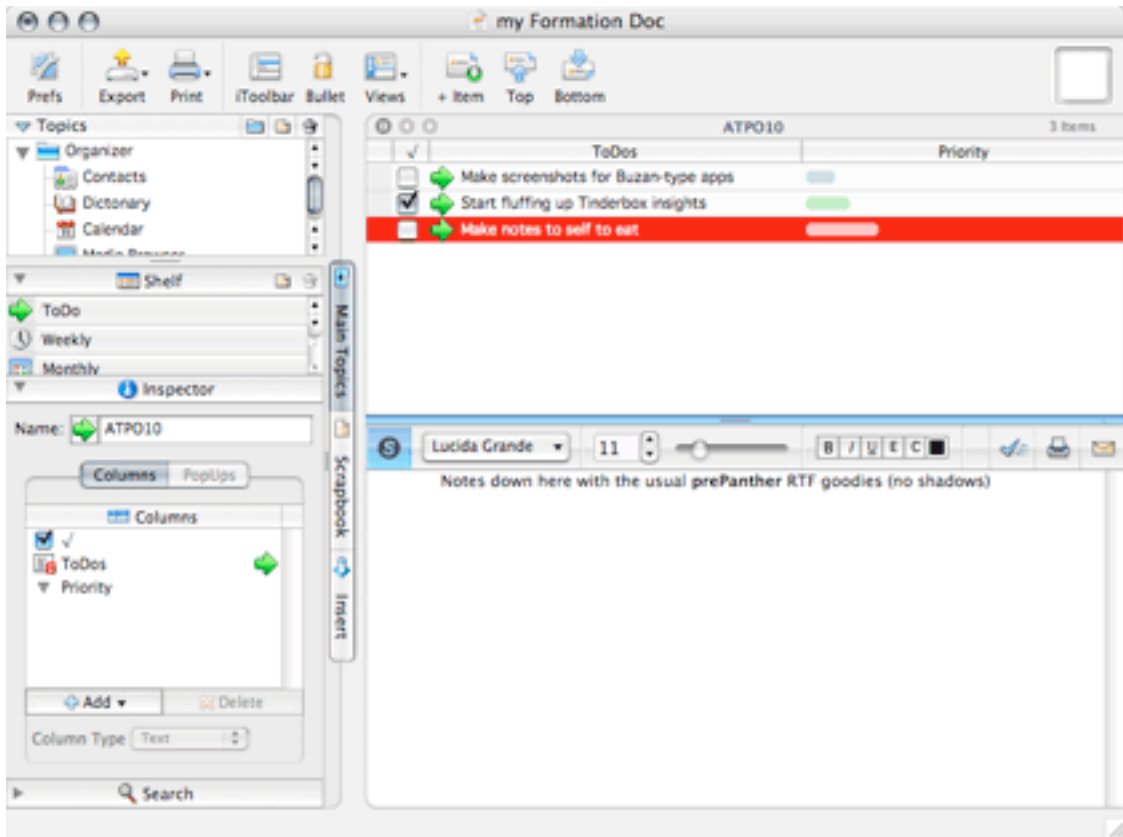
Formation

Tasks

Last month we briefly surveyed Web outlining. We should have included Tasks available in a variety of forms from single to multiuser, donationware to subscription services starting at $4 per month. It is a Web-based outliner targeted at to-do lists. Check it out at the Web site. Dashboard may empower a whole class of applications like this.

Dashboard

Apple had its yearly developers' conference in June, during which it previewed the next version of OS X, Tiger. Among the new features is something called Dashboard, a collection of desk accessory–like little applications that perform specialized functions with Exposé integration. Unfortunately, most of the discussion of Dashboard has focused on whether Apple unfairly "stole" the idea from Konfabulator, which it superficially resembles.

What's being overlooked is that the Dashboard development environment is radically different. Dashboard widgets are dynamic Web pages! Yes, that's right: Dashboard effectively brings browser-based applications to the desktop.

So our little excursion last month into Web outlining (not completely accidental, timing-wise) now takes on added meaning for *ATPO* readers. We soon will have the ability to host things like activeRenderer, webOutliner, Tasks, and similar things within the desktop. I expect a huge wave of innovation in the Internet-aware outliner space as this sinks in. The open-source Frontier may be a force here also. Watch this space.

Department of Corrections, Apologies, and Additions

In our review of SymmetryWorks last month, we said we couldn't find where to download the demo. Stupid us; it is easily found as Artandia reminded us in a comment on that review. Sorry for that, but now you know where to go to play with this great thing for a while.

Next month: "Deep Tinderbox." This will be our most ambitious column, so don't be too surprised if we slip a bit.

Making a Silent Movie with iMovie

FrankenMac Makes a Movie

Regular readers of How To columns in other Mac magazines might get the impression that the author's projects always work the first time, with no serious snags or detours. Let me assure you that, at least for me, this is not true.

My initial idea was to capture video from some old videotapes, edit the video in iMovie, and burn the resulting video to a new disc. Since I had recently purchased a Pioneer Tivo device with a built-in DVD burner, this should have been easy. Well, let's just say that it was not as easy as I expected and save that article for another day.

In the midst of that failed project, my brother called wondering about video editing software for his new video camera. He had misplaced the disk and wasn't too interested in having to purchase a new one without first finding out whether there was something better out there. With my usual confidence in the superiority of our chosen platform, I informed him that if he were a Mac user chances are iMovie would recognize the camera without any additional software. He could simply plug the camera into the FireWire port. Anyway, I made him promise to bring the camera the next time he was in Louisiana.

After I hung up the phone, it occurred to me that being the family computer geek I was likely to be the one asked to edit his future cinematic masterpieces. The last video editing I did was five years ago on a PC. I'd better start sharpening my skills.

I had heard and read many times that iMovie was easy to use. Somewhere along the way, I decided to put this to the test by making a short movie. Thinking back to my previous PC-based video editing experiences, I remembered that it was relatively easy to mess up the timing between the audio and video tracks. I decided to avoid that problem altogether by making a silent movie. We may tackle solutions to that problem in a future article. For now, silent is the way to go. To make the project a little more challenging, I decided to consult the iMovie Help file as little as possible. It's a great resource but I wanted to see what I could do without it.

Getting Prepared

Macs that have shipped over the last few years will work well with iMovie. This is especially true for the short video clip used for this project. There are some things to keep in mind, though, as you are preparing for any video project.

I used iMovie 3 because it's what I had available. Video clips in iMovie 3 must be less than two GB in size. Although this sounds like a lot, remember that digital video takes up about 210 MB of disk space per minute. That alone is worth the upgrade to iMovie 4 if your Mac meets the [system requirements](#).

The Master Plan

No self-respecting filmmaker would start without a plan of action. This plan (storyboard) describes each scene of a movie in detail. Information about dialog, lighting, and special effects is included in this storyboard. It is, in essence, a blueprint for each scene of the film. I didn't go into that level of detail for this project, but I did have a general plan of action.

Prepare the work area by setting some basic iMovie preferences. Throughout the article, I will be using terms that are well described in the iMovie Help file. These terms, including the names of various controls, are explained in the overview section. You may find it helpful to print this portion of the Help file.

Import and Preview the Footage. Use this step to get an overall impression of your video footage. Take notes about which segments you would like to keep or remove, the length of the video, and any special effects that seem like a good idea. Don't worry about any editing at this point.

Edit the video based upon the notes that we took in the previous stage. This is where the real work and fun will occur.

Get to Work

Now that we have an idea what is going to happen, let's get to work.

Prepare your work area by launching iMovie and selecting Preferences from the iMovie menu. I will not go through each option here because some of them have no bearing on our particular project. They are also located in slightly different places in iMovie 4.

There are three preferences that we will be interested in setting. In the area labeled General, decide whether new projects are opened as NTSC or PAL. NTSC is the standard used for video in the US and Japan. PAL is the video standard commonly used in Europe.

Set the Import option to Automatically Start a New Clip at scene breaks. With this preference set iMovie attempts to detect periods in the video where the camera was turned off and then on again. Each of these occurrences is treated as a scene and imported as a different video clip. This setting also forces iMovie to create a new clip before the size of the current clip reaches iMovie's file size limit. Before we leave iMovie's preferences, look at the Import section and decide whether you want movie clips to appear in the clip panes to the right of the iMovie monitor or in the movie timeline at the bottom of the screen. This setting has no effect on the final movie, so experiment and choose the one that you prefer.

The next step is to *import and preview the files*. Importing video from an iMovie supported video camera is well documented in iMovie's Help files. I could not test this aspect of iMovie without access to a video camera. Instead, I used a video file on my hard drive and saved it as a QuickTime movie using QuickTime Pro. If you have a video clip that you intend to convert from one video format to a format iMovie can use, QuickTime Pro is a good option.

Before we actually import any video footage, you may find it helpful to disable any screensavers that are running. Importing video seems to slow down considerably when screensavers are running.

While we are discussing the potential pitfalls of importing video, be aware of changes in file sizes. I started this project with a one-GB MPEG clip that iMovie would stop reading three-fourths of the way through the import process. After some investigation, I noticed that this clip was expanding to more than five GB during import. This is well beyond the two GB file size limit imposed by iMovie 3. My test clip for this project ended up being a 783 MB QuickTime movie that became a 1.65 GB movie once it was opened as an iMovie project. The clip imported in about 30 minutes using the Import command from the File menu. Although iMovie gives you an estimate of the time needed to complete an import

operation, the estimate may not be accurate. In my case, iMovie reported that the import would take 38 minutes. If you have used iMovie's default import settings the right side of your iMovie screen will look something like this.
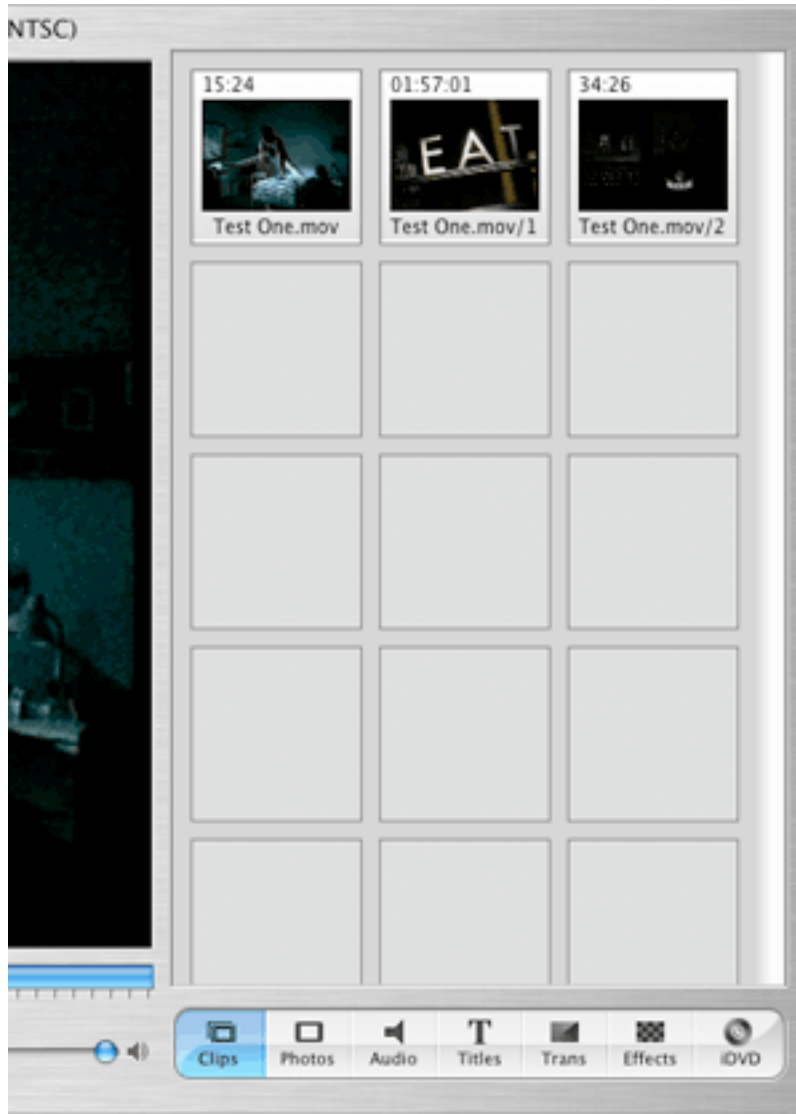
Completed Video Import

Now that you have imported your video, take the opportunity to preview it. At this point, we are not doing any editing. Just look at the footage that you have to work with. You might find it helpful to make notes about such things as what parts of the clip you want

to crop (delete), where you want transitions between scenes, and where you want title screens with dialog. Remember, my example is a silent movie. Also note whether the changes affect one or two scenes or the entire movie.

At this point, that general working plan outlined earlier needs some refinement. We have a better idea of what needs to be done and can build a better plan. With a little thought, you will probably see a logical sequence of events that need to be completed. My plan of action involved organizing the movie scenes (clips), removing the audio, converting the movie to black and white, and finally adding some scratches, dust, and jitter to simulate an old film.

Getting Down to Work

Knowing how to select things is as important in iMovie as in any other program. Many of iMovie's effects are applied by selecting the clip to be modified, choosing an option, adjusting the settings, and applying the changes. With that in mind, here are a few selection tips:

Select an individual clip by clicking on it. In many ways, this is like selecting options in a dialog box. It is how you let the program know where you want it to work.

Select multiple clips by clicking on the first clip and Shift-clicking to select additional clips. If the clips are contiguous, you can simply click on the first clip and Shift-click on the last clip to be selected.

If you are selecting the entire movie, simply click on one clip and then press Command-A. Once you have one clip selected, it's also possible to either Shift-click on the last clip or choose Select All from the Edit Menu.

It is possible to apply some effects to only a few frames of video in a clip. To get this fine a selection you will need to select a clip and then use the scrubber bar. This blue area under the iMovie monitor window shows where you are currently working in your movie. Select a clip and then click on the triangle at the bottom of the scrubber bar. Drag the triangle where you want the selection to start. Now go back to the left corner of the scrubber bar, grab another triangle from the bottom of the bar, and drag it to where you want the selection to end. The area in the scrubber bar corresponding to the frames that have been selected will turn yellow.

Finally, the Real Work

Clips

Start by organizing your video clips. Clips (scenes) are imported into iMovie in the order in which they were shot. This is fine for most movies. Maybe you want to change the order of the clips? Go right ahead. It's your movie. You get to decide where things belong. If your scenes are in the clips panes, simply drag them to the timeline at the bottom of the screen in the order that you want them to appear in your movie. You can rearrange the clips later if you like.

Let's start by clicking the clock at the left side of the screen just above the timeline. This shifts us from clip view mode to a mode more resembling a timeline. The single row of clips at the bottom of the screen becomes three rows. The first row contains your movie clips. The other two rows are blank. Switching to this mode allows us some freedom in manipulating the audio as well as the playback speed of the clip.

Removing the Audio

Now that we have things in order, let's remove this audio. This is a silent movie, remember. If you look to the far right of the timeline, you will see a very small speaker icon. Each of the three boxes has check marks. You could silence the movie by clearing these check marks. The audio would still be there for future use.

This method is fine if you want to retain the audio. Getting rid of the audio entirely is a simple two-step process. First, select the clips with audio that you want to extract. Now type Command—J or go to the Advanced menu and choose Extract Audio. The audio track appears as a dark purple strip in the timeline just beneath your movie clips. The dark

purple color means that the track has already been selected, while a lighter purple strip indicates that the track has not been selected. Since the track is already selected, press Delete. Now that we have taken care of the audio, it's time to begin the video work
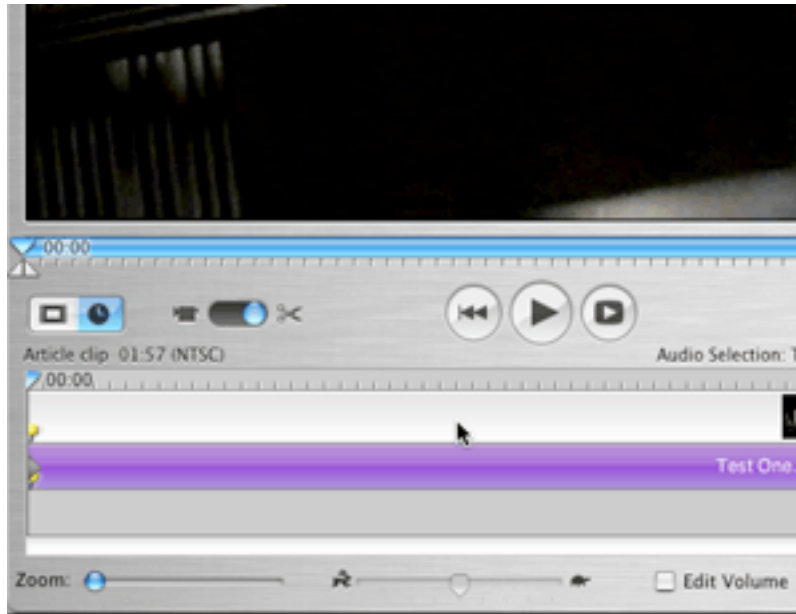
Ready for Audio Extraction

Have You Ever Seen a Color Silent Movie?

We have the sound of a silent movie now let's make this *look* like a silent movie. In order to get that look we will remove the color and age the film by adding scratches and jitter. For most of the effects we are going to apply, I can give you the steps but not precise numerical values. That's because many of the effects rely on slider controls rather than numerical values. Use iMovie's preview window to see what the effect will look like. You can judge iMovie's progress by the red line it places under the clips being rendered. When the render is complete, these lines disappear.

Cropping

Applying effects to your movie can take anywhere from a few seconds to several minutes so let's get rid of footage we don't need. Why waste time applying effects to footage that's only going to get deleted later? Do you remember the triangles I mentioned in the scrubber bar? They are also crop markers. Use them to select the portions of the video you

want to *keep*. Once you have done that, press Command-K or Select Crop from the Edit menu. This behavior is different from, say, word processors where you would select the things to throw away. That was my first trip to the Help files.

Credits

Now it's time for the dialog screens and adding some credits. By doing these now, when we age the film later, these screens will age as well. For this we need to click on the Titles pane just above the timeline. Click one of the options and watch the Preview window. If you don't like that title, select a different one. You can type text into the box where your name appears as well as adjust the font, size, and color of the text.

At the top of many of these effects are sliders for Speed and Pause. The speed setting controls how long it takes the text to appear on screen, while the pause setting determines how long text will stay on screen. If the selected title uses scrolling text, the four arrows determine which direction the text is going. Clicking the left arrow, for example, scrolls text left. On some effects, only one or two of the arrows are available for use. Once you have an effect you like, drop it into the timeline at an appropriate place.

You can add more title screens as needed. This is not only a great way to represent the dialog in a silent movie, but it gives you a way to add credits to your movie. How else is everyone going to know who the next Hitchcock is if you don't tell them?

Black and White

Now we are ready to shift our movie from color to black and white. Removing the color before aging the clip means iMovie does not have to waste time applying effects to color data that will be removed. Since I am applying this effect to the entire movie I will click on a clip and then press Command –A to select the entire movie. Click on Effects in the pane

buttons just above the right side of the timeline. An alphabetical list of effects appears. Click on the Black & White effect. The Effect In value should be zero since we want the beginning of the clip to be black and white.
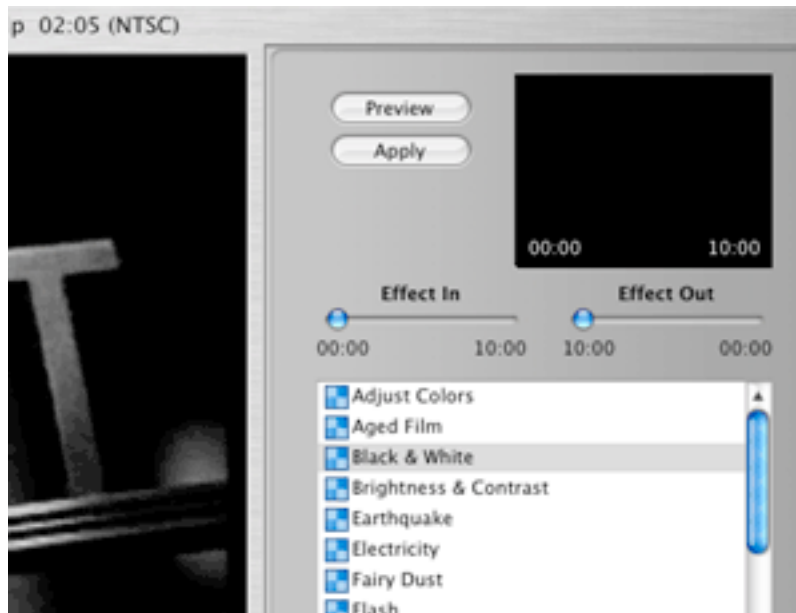

The Black-and-White Movie

Setting the Effect Out slider to either 0:00 or 10:00 produces the same result. About ten seconds from the end of the clip it gradually starts changing to color again. After some experimentation, I solved the problem by moving the playhead (vertical bar in the timeline) near the end of the clip. As you scroll the playhead, watch carefully and stop about nine seconds from the end of the clip. The shift to color wont be noticeable yet, so watch the time. Stop the playhead and choose Split Clip at Playhead from the Edit menu or Press Command-T. Since the new clip is less than ten seconds long, the effect will be applied to the entire clip. Choose Preview and look at the clip. When you have a look you like, click Apply.

I suppose that workaround for making the movie black-and-white should count as needing help. I got the idea based upon the discussion of this effect by Bob Levitus and Dennis Cohen in the *iTunes, iPhoto, iMovie and iDVD Bible*. Although the edition that I have covers version 2, the technique still works in iMovie 3.

Aging

Now that we have a black-and-white film, it's time to make it look older. The clips are already selected, so click on the Aged Film effect. In addition to the Effect In and Effect Out sliders, this effect has sliders for Exposure, Jitter, and Scratches. As a starting point, set the Exposure control about two thirds of the way across the slider. Moving the slider left under exposes (darkens) the image. Moving the slider right exposes (lightens) the image. Set Jitter and Scratches near their minimum values and adjust them gradually. Put the preview pane to extensive use if necessary. When you have a look you like choose Apply. This effect may take a few minutes to render.
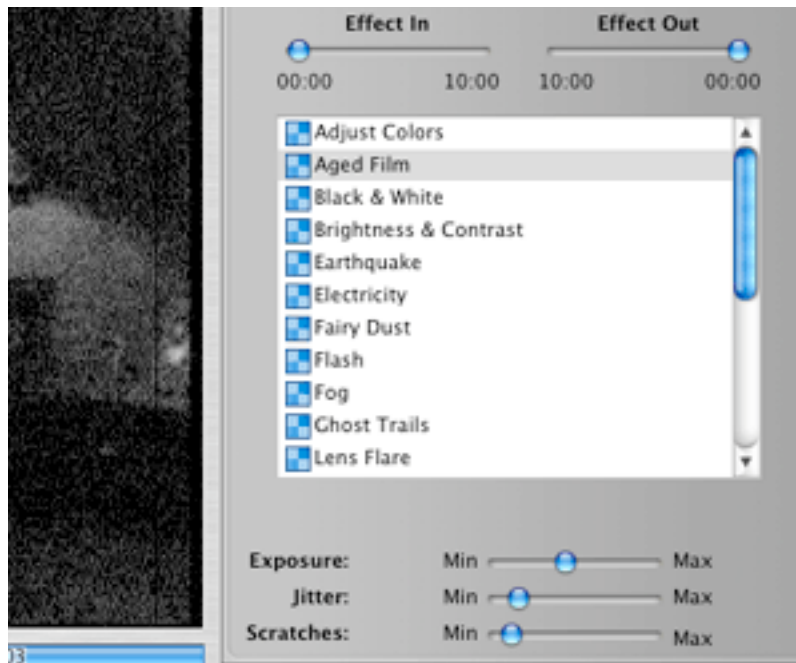
Aging the Film

Depending upon what settings you use to age the film, your footage may look fine now or it may be just a little too sharp for an old silent movie. The first movie I made for this project needed some additional work. The second one did not. If your movie is too sharp, there are probably better methods for fixing this, but I chose Soft Focus. This effect has the same Effect In and Effect Out sliders we encountered earlier. I left Effect In at 0:00 and Effect Out at 10:00. There are also sliders for Softness, Amount, and Glow. The values for

these sliders all say None for the minimum value and either Lots or High for the Maximum values. Start with the sliders set close to None, and gradually adjust them. Once again, the Preview window is helpful for deciding when you have the look you want.

There is one more useful effect for this project. At the bottom of the timeline are icons of a tortoise and a hare. If you select a clip, or series of clips, and then move the slider, the playback speed for the clip changes. That's a good start toward simulating some of the speed changes noticed in silent movies due to the use of hand-cranked cameras.

Closing Comments

I realize that iMovie is capable of a lot more than I explored here. Many of you probably have ideas for how this project could be improved. If I have given you some ideas or encouraged you to start using iMovie, then the three hours and three trips to the Help files was worth it. There's a lot of unexplored territory in iMovie, but let's save that for another day. I plan to revisit iMovie periodically. I've been doing some pretty boring stuff with my Mac. It's time to really explore the digital lifestyle. Until next time, FrankenMac's lab is open.

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WANTED

iPod

For Corporate Theivery, Breaking and Entering
Should Be Considered *Extremely* Dangerous!
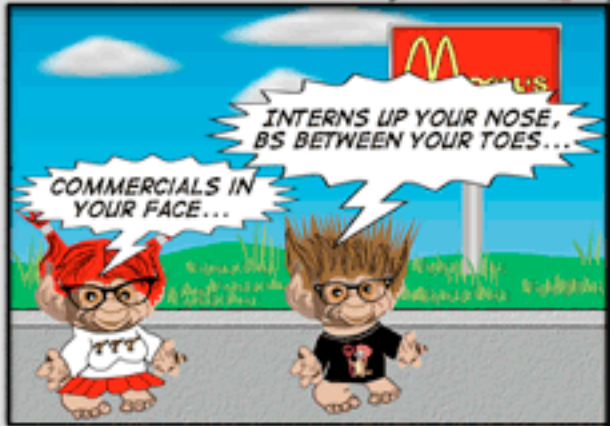
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Pictures From ATPM Readers

Pictures From ATPM Readers

This month, we feature a collection of desktop pictures from ATPM readers.

Henry Bear submitted a photo of Niagara Falls.

Robert De Coen submitted an apple image that he created.

Tony Conte submitted photos from his trip to Italy.

'Segun Olude submitted photos from his trip to a design conference in Nagoya, Japan.

John Petty submitted photos from Grenada, one of an orchid and one of a bougainvillea.

James Pillar submitted photos from a snowy day at his father's house in Calcutta, OH.

Jeff Rease submitted a photo of the Biltmore Estate in Ashville, NC.

Jose S. Rodriguez D. submitted a photo of a flower in Venezuela, called the Bird of Paradise.

Katherine Sears-Lent submitted photos of the Apple campus in Cupertino, CA.

Sigurdur Valur submitted an image of a killer whale that he created with watercolors and Bryce.

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: Excel Hacks: 100 Industrial-Strength Tips & Tools

by Gregory Tetrault, gtetrault@atpm.com

Publisher: O'Reilly
Author: David and Raina Hawley
Price: $25
Trial: Ten sample hacks can be viewed from the Web site.

Overview

This book presents quick and creative techniques for improving Excel spreadsheets and applying some of Excel's less known, but often useful, features. The techniques in this book require intermediate to advanced knowledge of Excel.

Description

Excel Hacks is a 6" by 9" softcover book with approximately 300 pages. It is comprised of eight chapters, a glossary, an index, and a short preface. The table of contents lists the descriptive titles of all 100 hacks. The index is comprehensive. The O'Reilly Web site maintains a list of errata for the book. Two minor errors are listed.

Contents

"Chapter 1, Reducing Workbook and Worksheet Frustration" contains 15 hacks that cover topics such as workbook display, security, dead links, and data corruption. "Chapter 2, Hacking Excel's Built-In Features" contains 23 hacks that cover data validation, conditional formatting, multiple lists, sorting, cell comments, and date and time features. "Chapter 3, Naming Hacks" contains six hacks related to naming cells and ranges. "Chapter 4, Hacking Pivot Tables" contains five hacks related to pivot tables (cross-tabulations on steroids). "Chapter 5, Charting Hacks" contains ten hacks. "Chapter 6, Hacking Formulas and Functions" contains 21 hacks. "Chapter 7, Macro Hacks" contains 14 hacks. "Chapter 8, Connecting Excel to the World" contains six hacks. Unfortunately, five of the hacks are not applicable to Macintosh versions of Excel.

Utility

Reviewing a book of tips requires a different approach than reviewing a book that functions more like a manual. I decided to assess the usability and value of the tips by selecting one tip from each chapter (except Chapter 8) and seeing if I could accomplish the same task using information provided in Excel's manual and help files. A book of hacks that contains no more information than help files would have no value.

Hack 8 describes two ways to limit the scrolling range of a worksheet. Both methods work well, and the authors cover all possible situations where limiting the scrolling range can cause problems. Solutions to avoid or work around those problems are provided. The book provides far more information than the Excel and Visual Basic Editor help files.

Hack 20 describes how to generate alternating row colors using conditional formatting. The basic technique works well; however, the advanced technique (no highlighting of blank rows) does not work with Microsoft Excel X for Mac (Service Release 1), due to a

Visual Basic bug. It works with Excel 2000 for Windows. This hack can be replicated (with difficulty) using information in Excel's help files, but you must figure out how to apply the modulus formula.

Hack 41 describes how to create and name a custom function. The basic hack is easy, and Excel's help file shows how to do it. The advanced hack uses the intersect method to create lookup functions. This impressive technique is not easy to duplicate using only Excel's help file.

Hack 47 tells how to automate PivotTable creation. The basic technique uses the PivotTable Wizard (which is usable with minimal instructions). The advanced hack uses a macro to create a PivotTable from any database or list column. This feat cannot be replicated with information from the Visual Basic Editor's help file.

Hack 55 shows how to make a "thermometer" chart. This hack cannot be replicated using only information from the help files.

Hack 70 tells how to find the "nth" occurrence of a value in row or column. Again, this nifty and useful hack cannot be replicated using only information from the help files.

Hack 93 describes how to run procedures on protected worksheets. The book described how to use Visual Basic code to allow macros to function even when worksheets are password protected to prevent other users from altering them. This hack can be replicated by a skilled VBA user by assembling information available from the Visual Basic Editor's help file.

Conclusion

Excel Hacks contains many useful and interesting tips geared toward experienced Excel users. I found it easy to use, and I appreciated the clear explanations that accompanied the hack descriptions. Most of the hacks provide information not readily available from help files. However, I find that books comprised solely of list of tips are not as useful as manuals with explanations and examples, which is why my rating is Very Good instead of Excellent.

Developer: Fujitsu Ten
Price: $449
Trial: None.

ATPM RATINGS

EXCELLENT

The Rolls Royce of Mini Speakers

If you've tried some mini speakers, to listen to music from your computer or your iPod, you may have been disappointed. While some systems offer surprisingly good sound for their size, most of them offer muddy sound with poor depth and resolution. While this type of speaker is acceptable for playing games on a computer, it's a shame to listen to music on them. You get so used to poor quality sound that you no longer realize what you're missing.

Enter the Eclipse TD 307, a set of mini speakers with maxi sound. These speakers, little brothers of the company's 512 studio-quality speakers, will astound you with the clarity and purity of the sound they offer. Listening to these speakers makes you realize just how much you miss when listening to systems designed for their small size. These speakers sound as good as they look.

I confess to having been totally blown away by the sound that comes out of these speakers. Never before have I heard compact speakers that reproduce all the music on a recording. It's not only that they have pure and true sound, but they bring out all the instruments and sounds that you often don't hear on your stereo, and probably never hear on your earphones or headphones. These speakers use Time Domain Theory to create a soundscape that astounds with every note. Time Domain Theory "aims to reproduce the original audio waveform, which contains the amplitude/phase frequency characteristics, through the speaker, without change." Part of the magic occurs because of the shape of the speakers, but the rest is the result of voodoo electronics inside the speakers.

There are some caveats, however. First, like x-ray glasses, these speakers show you what is truly behind the music. If a CD is recorded poorly, or if you listen to an old CD that was not remastered, you're likely to hear something that you don't like. These speakers are unforgiving to such recordings; any CD with hiss in the background will be hard to listen to, and any muddy recordings sound, well, even muddier.

Good live recordings sound great; Peter Frampton's Frampton Comes Alive, with its judicious use of crowd noise to enhance the live atmosphere, makes you feel like you're in the middle of the arena during the show. Stan Getz's final recording (People Time, recorded with pianist Kenny Barron), recorded live in Copenhagen, sounds like it's being performed in your living room, and ascends to a new level of emotion. Or listen to Bill Evans' live recordings from the Village Vanguard in June with your eyes closed, and you might think you're sitting at one of the tables with a cigarette in your hand and a drink in front of you. Somehow the music envelops you and seems to come from all around, even with just two speakers.

Studio recordings get even more of an improvement, as long as they were recorded well. Put on any of Pink Floyd's classic albums (Dark Side of the Moon or Wish You Were Here, for example), and take a trip into musical space. Or if you're a classical music lover, listen to a good recording of a string quartet. Close your eyes and your mind can situate the location of each performer in the space in front of you. One of the most astounding recordings I listened to with these speakers is Brad Mehldau's studio version of Exit Music (For a Film), from his album Songs—Art of the Trio Volume Three. Jorge Rossy's subtle drum and cymbal playing is brought out in front of the speakers, making it sound like the kit is in the middle of the living room.

The system is much improved by the addition of a sub-woofer; the basic setup is two speakers and an amplifier. If you don't listen to bass-heavy music, you can get by without one, but just about everything sounds better with a sub-woofer.

These speakers aren't cheap, but if you want to hear what music should sound like, you owe it to yourself to check them out.

Review: Just a Geek (book)

by Ellyn Ritterskamp, erritterskamp@atpm.com

Publisher: O'Reilly
Author: Wil Wheaton
Price: $25
Trial: Sample Chapter

Wil Wheaton decided to grow up. He didn't do it until he was nearly 30, but that's OK. (I didn't start until I was 25, and I didn't really get moving until I was 33.) In his new book *Just a Geek*, Wheaton walks us through the turning points, when he went from successful child actor, to good-but-mostly-unpaid actor, to husband and dad, to weblogger, to writer.

Wheaton started a blog a few years ago that has become a well-respected celebrity site. He has made it something other than a celebrity site, though, because when he started it, he was trying to figure out if he was still a celebrity. He taught himself the tools of building a good page, and began to write about himself and the things he believes in. Here is his site, and it really is kind of cool, watching him grow up in front of us. Note: Wheaton is comfortable with some profanity on the blog and in the book, so some readers will want to stay away.

He was encouraged to turn his blog entries into a book, which became *Just a Geek*. He didn't have room for some pieces, which were released in a paperback book called [Dancing Barefoot](). As it was presented, *Dancing Barefoot* showed promise but lacked narrative coherence, since it was leftovers. This book does not have that issue, as it is almost entirely narrative, and is really more autobiographical than anything else. That may be its singular flaw.

Don't get me wrong. This is an engaging, well-related story of a few years in the life of the writer. The thing is, after a while you realize it is nearly all about Wil. *Dancing Barefoot* had a few pieces about other people in Wheaton's life, and this book, even though it's longer, somehow has less of that. There are indeed some great stories about reunions with *Star Trek: The Next Generation* cast members, and he mentions some other people in his life. But part of the charm of the first book was that it showed a lot of the interaction of Wheaton with those around him.

This book is heavily loaded with Wil talking to himself. I understand that's what his blog readers probably wanted, and I learned a lot about how he resolved his conflicts with himself. I like the way he presented various aspects of himself as their own characters, who bicker and quarrel with each other. After a while, though, it just got to be a little more Wil than I was ready for. Maybe I was just tripped up by my expectations: I was looking for more short stories, and what I got was an autobiography of Wil Wheaton, age 15–30. The book is in fact listed as autobiography/science fiction, so it's my own fault.

This book will appeal most to folks who have been insecure about their interaction with others, as it provides a look at ways to get off that train. Wheaton is not insecure about his talent, and that's appropriate. He spent too much of his life trying to please other people, and when he quit doing that, he got happy. Wheaton does not discuss his Web coding learning process in enough detail to interest readers who are only in it for the technical element. *Just a Geek* will appeal to *ST:TNG* fans, and I would think the ones who hated Wheaton's character might learn something from him. Those of us who liked his character are going to like the book, because we saw all along that Wesley Crusher represented the awe in all of us.

Now that Wheaton has chosen to be a writer, and has gotten the obligatory writing-about-myself phase out of the way, I hope he has the courage to try a story in which he is not already involved. I want to see if he can dream up a fictional character and make us want to follow that story. There's nothing intrinsically wrong with writing about yourself

and your family; Pat Conroy made a great career out of it. I just think Wheaton has some stuff to say, about animals, and free speech, maybe the environment, and I don't know what else, and he may not even know what some of it is yet. Now he knows he has the courage to keep transforming himself.

Review: Belkin Media Reader for iPod

by Adam Zaner, azaner@sbcglobal.net

Developer: Belkin
Price: $90
Requirements: iPod with dock connector, digital photo card (CompactFlash Type 1 or 2, SmartMedia, Secure Digital, Memory Stick, or MultiMediaCard).
Trial: None.

ATPM RATINGS
VERY NICE

In short, it works. Just like it's supposed to.

My wife and I were heading to Europe for a couple of weeks in June—11 days in Paris, three in London. Having made the leap to digital photography over a year ago, I was looking forward to freedom from endless rolls of film while on vacation. But as the trip approached, I realized the capacity of the 512 MB CompactFlash card that normally stands me in good stead for any day's worth of events (or even a long weekend's worth) would fall woefully short of meeting my needs. I'd be away from a repository computer for two weeks straight. I take lots of photos on trips as a rule, and Paris, a place we'd never visited,

was certain to generate no exception. There was no way the 250 or so 4-megapixel images I can normally fit onto my 512 MB card would possibly be enough, and I didn't want to take our iBook overseas. I had a storage problem on my hands.

I should note for reference that I use the Canon S400 (purchased in 2003, since replaced by the S410 and S500 models). It's a fantastic intermediate-level camera, and I highly recommend it. By my own criteria, it strikes the best balance between high-end features (primary factors: resolution, image settings, and optical zoom) and ease of use (primary factors: pocket-size portability, simplicity of control interface, and compatibility with my Macintosh system).

As for Paris, my first thought was to simply buy more, higher capacity cards—but I quickly determined that larger cards would not be a cost-effective investment (at least, not until the prices come down). A 1 GB card might hold roughly 500 4-megapixel shots. A 2 GB card might hold as many as 1,000, if I were lucky. But would 1,000 shots be enough for two weeks? Plus, 2 GB cards still cost hundreds of dollars each—and how often would I really have a need for a single card with that much room? Almost never.

I next considered the Image Tank and Digital Wallet devices, which are essentially portable hard drives used by professional journalists, etc., on assignment, to solve precisely this problem. But again, they're hundreds of dollars, for a piece of equipment I'd use maybe once every few years.

I never seriously considered the "Internet café" option of e-mailing photos home to myself each day. Even assuming everything went perfectly, the time involved would be absurd.

The elegant solution? iPod. As most of you already know, Apple reconfigured the iPod software in March to allow the pocket-size device to be used for digital photo storage. So, the real purpose of this article is to let you know that the software, coupled with the Belkin Media Reader, does indeed work as advertised, and works like a charm. I tried it out in the field, gambling my Paris photos on it, and I wasn't disappointed in the slightest. Sure, the 20 GB iPod cost a bit more than a 2 GB card, but hey, it has 10 times the storage capacity. No worries at all about how many photos we could take while we were away—and that, in and of itself, has value. More important, while the iPod still cost a few hundred dollars, it's certainly not a device that will sit in a drawer unused for the rest of the year. We use it almost every day. (The only thing that will conceivably sit unused in a drawer for long periods of time will be the $90 Belkin Media Reader.)

Use of the Belkin Media Reader with the iPod is simple and straightforward. The adapter runs on four AAA batteries, which I never had to replace on the trip, and still haven't had to replace. The batteries are supposed to last for something like 80 download sessions. (Be sure to use Duracell or Energizer, however, rather than the suspect AAAs that come packaged with the adapter—they just don't look dependable.) The adapter unit itself is a flat white plastic box, slightly larger than the iPod. Slide open the card slot door on the Media Reader, insert the photo card you've removed from your camera, attach the cord from the other end of the Media Reader to the dock connector on your iPod (running software version 2.1 or later), and the iPod automatically puts itself into Photo Import mode. (To get there manually, open the iPod's menu item Extras, select Photo Import, then select Import Photos.) Meanwhile, watch the green LED on the Belkin adapter flicker to life. The iPod's screen tells you at this point how many photos are contained on the card, and how much free room you have left on the iPod itself. Armed with this information, you can choose to Import or Cancel. Choose Import and you're done—all you have to do now is wait for the transfer to finish. You can watch a status bar progress across the iPod's screen if you like. Afterwards, you can select either Done or Erase Card, which are self-explanatory.

As a practical matter, I usually set this procedure up on my nightstand as I was getting ready for bed each night, and by the time I'd brushed my teeth and climbed into bed, it was done. (Another thing I did each night was slip a fresh battery into the camera and plug in the one I'd used that day for an overnight recharge. In other words, I took two camera batteries with me and swapped them back and forth each day. The second battery was always in my pocket during the day as a reserve, just in case.)

Each download session from the adapter is stored on the iPod as a sequentially numbered "Roll" of photos. I performed one download each night, so I ended up with "Roll 1" for the first day's set of pictures, "Roll 2" for the second day's set, etc. The number of images contained on each roll is indicated on the iPod display. At the end of the trip I had 14 rolls on the iPod, for a total of 2,354 photos. That's right, an average of almost 170 photos per day. Now, that was a result of my snapping two and three (and sometimes more) photos of almost everything, so that I could edit down and find the "keeper" later. And it also included some simply bad shots. But I figure it doesn't cost me anything (beyond an extra half second) to push the button again, so why not avail myself of the freedom digital photography affords? Note: There's no way to manipulate the contents of rolls (or to combine rolls, etc.) once they're on the iPod. The rolls simply wait there patiently, in the order in which they were created, to be downloaded onto your Mac at some point in the future.

When the trip was over and we got back home, I put the iPod into its dock and loaded all the images straight into iPhoto. Not a single hitch. iPhoto, of course, provides an excellent interface within which to edit and organize your images. The edited subset of photos we're showing to our family and friends came in at a much slimmer 555, which seems pretty reasonable (to me).

The point, however, is that I never even approached the capacity of the iPod. It gave me the freedom to take as many photos as I wanted and a compact place to store them every night in the hotel room. And now that the trip's over, well, I have an iPod, which is incredibly cool in its own right. I'm in the process of loading our CD collection onto it now. (I should mention that using the iPod as a photo storage device didn't have any effect on its ability to play music while we were on our trip. It still worked just the same. The only consideration, of course, would be that if you had the iPod full of music, you'd have to offload some of the music to make room for photos.)

Downloading 2,354 photos onto the iPod did use the iPod's battery to a notable, though not excessive, degree. I had to charge the battery once, in the middle of the second week of the trip. For that, I'd taken along the iPod's normal A/C charger, plugged that into the multi-country A/C adapter/converter unit I'd purchased years ago (from Sharper Image), and in turn plugged that into the French receptacle on the wall. No problems. (But be very sure you have an appropriate A/C voltage converter in the sequence, not just a physical adapter. The device I bought has both in one handy palm-size unit. If you make the plugs fit, but don't ramp down the voltage, you'll fry a small device like an iPod. And yes, I also used the adapter/converter setup to charge my camera battery every night while I slept.)

As new as the Belkin Media Reader is, there's an even newer version I haven't used—the [Digital Camera Link for iPod w/ Dock Connector](). It appears to be slightly smaller, slightly less expensive, and also housed in white plastic. The main difference between it and the product I purchased is that instead of taking the photo card out of the camera and inserting it into the Belkin unit, you connect the camera itself to the Belkin unit with your camera's USB cord. Two minimal downsides to this other Belkin product would appear to be: one, that the process would drain power from your camera battery, and two, that you'd have another cord to take along on your trip (the USB). But there may be upsides of which I'm not aware (e.g., maybe it minimizes the power drain on the iPod, etc.). Beyond those considerations, I can only assume the process is as straightforward with the Digital Camera Link as with the Media Reader I used. If I get a chance to use the Digital Camera Link, I'll let you know how it performs.

Finally, in case you're interested, to show our vacation photos, I hook our iBook up directly to a television with the Monster iTV Link cable (which also works like a charm, by the way) and use iPhoto's slideshow facility. This process works extremely well in our own home, but it's also easy to take the iBook and cable to a friend's house (assuming the television there has readily accessible RCA jacks, etc.—if not, the photos can just be shown on the iBook). I mention this because although we now know the just-released fourth-generation iPods can't link directly to a television, can't display photos themselves, and have no color screen, it's not too hard to imagine some version of the iPod having these capabilities in

the not-too-distant future. It's easy to envision the iPod becoming an increasingly more important device in the digital photo arena, as both a storage device and a player. I can hardly wait.

FAQ: Frequently Asked Questions

What Is ATPM?

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

Are You Looking for New Staff Members?

We currently need several **Contributing Editors**. Please underline contact us if you're interested.

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The **Online Webzine** edition is for people who want to view ATPM in their Web browser, while connected to the Internet. It provides sharp text, lots of navigation options, and live links to ATPM back issues and other Web pages. You can use Sherlock to search all of the online issues at once.

The **Offline Webzine** is a HTML version of ATPM that is formatted for viewing offline and made available in a StuffIt archive to reduce file size. The graphics, content, and navigation elements are the same as with the Online Webzine, but you can view it without being connected to the Internet. It requires a Web browser.

The **Print PDF** edition is saved in Adobe Acrobat format. It has a two-column layout with smaller text and higher-resolution graphics that are optimized for printing. It may be viewed online in a browser, or downloaded and viewed in Adobe's free Acrobat Reader on Macintosh or Windows. PDFs may be magnified to any size and searched with ease.

The **Screen PDF** edition is also saved in Adobe Acrobat format. It's a one-column layout with larger text that's optimized for reading on-screen. It may be viewed online in a browser, or downloaded and viewed in Adobe's free Acrobat Reader on Macintosh or Windows. PDFs may be magnified to any size and searched with ease.

What Are Some Tips for Viewing PDFs?

- You can download Adobe Acrobat Reader for free. If you have a Power Macintosh, Acrobat Reader 5 has better quality and performance. ATPM is also compatible with Acrobat Reader 3, for those with 680x0 Macs.
- You can zoom the PDF to full window width and scroll through articles simply by single-clicking anywhere in the article text (except underlined links).
- You can quickly navigate between articles using the bookmarks pane at the left of the main viewing window.
- For best results on small screens, be sure to hide the bookmarks pane; that way you'll be able to see the entire page width at 100%.
- Try turning Font Smoothing on and off in Acrobat Reader's preferences to see which setting you prefer.
- All blue-underlined links are clickable.
- You can hold down option while hovering over a link to see where it will lead.
- For best results, turn off Acrobat's "Fit to Page" option before printing.

Why Are Some Links Double-Underlined?

In the PDF editions of ATPM, links that are double-underlined lead to other pages in the same PDF. Links that are single-underlined will open in your Web browser.

What If I Get Errors Decoding ATPM?

ATPM and MacFixIt readers have reported problems decoding MacBinary files using early versions of StuffIt Expander 5.x. If you encounter problems decoding ATPM, we recommend upgrading to StuffIt Expander 5.1.4 or later.

How Can I Submit Cover Art?

We enjoy the opportunity to display new, original cover art every month. We're also very proud of the people who have come forward to offer us cover art for each issue. If you're a Macintosh artist and interested in preparing a cover for ATPM, please e-mail us. The way

the process works is pretty simple. As soon as we have a topic or theme for the upcoming issue we let you know about it. Then, it's up to you. We do not pay for cover art but we are an international publication with a broad readership and we give appropriate credit alongside your work. There's space for an e-mail address and a Web page URL, too. Write to editor@atpm.com for more information.

How Can I Send a Letter to the Editor?

Got a comment about an article that you read in ATPM? Is there something you'd like us to write about in a future issue? We'd love to hear from you. Send your e-mail to editor@atpm.com. We often publish the e-mail that comes our way.

Do You Answer Technical Support Questions?

Of course. E-mail our Help Department at help@atpm.com.

How Can I Contribute to ATPM?

There are several sections of ATPM to which readers frequently contribute:

Segments: Slices from the Macintosh Life

This is one of our most successful spaces and one of our favorite places. We think of it as kind of the ATPM "guest room." This is where we will publish that sentimental Macintosh story that you promised yourself you would one day write. It's that special place in ATPM that's specifically designated for your stories. We'd really like to hear from you. Several Segments contributors have gone on to become ATPM columnists. Send your stuff to editor@atpm.com.

Hardware and Software Reviews

ATPM publishes hardware and software reviews. However, we do things in a rather unique way. Techno-jargon can be useful to engineers but is not always a help to most Mac users. We like reviews that inform our readers about how a particular piece of hardware or software will help their Macintosh lives. We want them to know what works, how it may help them in their work, and how enthusiastic they are about recommending it to others. If you have a new piece of hardware or software that you'd like to review, contact our reviews editor at reviews@atpm.com for more information.

Shareware Reviews

Most of us have been there; we find that special piece of shareware that significantly improves the quality our Macintosh life and we wonder why the entire world hasn't heard about it. Now here's the chance to tell them! Simply let us know by writing up a short review for our shareware section. Send your reviews to reviews@atpm.com.

Which Products Have You Reviewed?

Check our reviews index for the complete list.

What is Your Rating Scale?

ATPM uses the following ratings (in order from best to worst): Excellent, Very Nice, Good, Okay, Rotten.

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If you or your company has a product that you'd like to see reviewed, send a copy our way. We're always looking for interesting pieces of software to try out. Contact reviews@atpm.com for shipping information. You can send press releases to news@atpm.com.

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Where Can I Find Back Issues of ATPM?

Back issues of ATPM, dating since April 1995, are available in DOCMaker stand-alone format. In addition, all issues since ATPM 2.05 (May 1996) are available in HTML format. You can search all of our back issues.

What If My Question Isn't Answered Above?

We hope by now that you've found what you're looking for (We can't imagine there's something else about ATPM that you'd like to know.). But just in case you've read this far (We appreciate your tenacity.) and still haven't found that little piece of information about ATPM that you came here to find, please feel free to e-mail us at (You guessed it.) editor@atpm.com.