o you think there's a lot of software for the Mac? There is, but much of it is no longer for sale. For one reason or another-strong competition, poor management, mergers, etc.—some of the best Macintosh software ever written is only available to those who bought it when it was still being shipped or inherited a used Mac with a nice surprise on its hard drive (or floppy). Those who still use it remember. Others probably have no idea what they are missing. So, as 1998 winds to a close, I thought this would be as good a time as any to remember what different segments of the Mac software market used to be like-and why they are different now. This is by no means an exhaustive discussion, and I invite you to write me at <mtsai@atpm.com> if I've overlooked one of your favorites.

Office Software

In the beginning there were only a few applications for the Macintosh. MacWrite and MacPaint come to mind. MacPaint was eclipsed long ago, though I am reminded of it every time I look at the format pop-up menu in the Save As...dialog of a graphics application. I doubt anyone misses it. MacWrite is a different story. I have very fond memories of the first What You See Is What You Get word processor I used. If you have an old Mac lying around (I don't think it will work with System 8.5.1, but I'd love to be proven wrong) take a look at the original MacWrite. It didn't have balloon help, tool tips, wizards, a tool bar, or an animated assistant. But it sure was easy to use, and it did everything most people needed. I think there is still a market for a small, easy-to-use word processor. With AppleWorks growing more complex, perhaps Mariner Write (see the review in this issue) is that word processor. I know I am reminded of MacWrite when I use it.

Still, I know of no word processor available today with the combination of power and ease-ofuse of MacWrite's successor, MacWrite Pro. In fact, there just aren't very many high-end word processors available today. The once-popular WriteNow has not been heard from in some time, and the only real rival to Word 98, Corel WordPerfect, has not had a significant upgrade in years. On the plus side, Nisus Writer seems to be gaining market share now that version 4.x is available for free. Still, I really wish Word 98 had a serious competitors. I guess no one likes to go head-to-head with Microsoft on their turf. Can't say that I blame them.

What about spreadsheets? Today there is only one high-end Mac spreadsheet: Microsoft Excel. AppleWorks and Spreadsheet 2000 are good products, but limited. Again, Apple had what could have grown into an Excel-competitor in Resolve, but let it fall by the way side.

Presentation programs? The venerable Aldus/Adobe Persuasion quietly disappeared, leaving (you guessed it) Microsoft PowerPoint at the high-end and AppleWorks at the low end. (I don't consider authoring environments like Director and SuperCard part of this product category.)

Disk Repair Utilities

The situation with disk repair utilities is discouraging. I and many other users have had bad experiences with Norton Utilities 4.0, whose new interface is a step backwards and which, by most accounts, was released months before it was ready. There is no disk repair package today that can compete feature-for-feature with Norton Utilities. Micromat's TechTool Pro is improving with each version, but it still cannot repair the range of problems that Norton can. Alsoft's new DiskWarrior shows great promise from my limited experience with it, but it will never be a replacement for Norton, since it only performs one kind of disk repair function. Several years ago, however, there were other options that rivaled Norton Utilities, each of which bested it in at least one area:

Fifth Generation's Public Utilities was the first to include an idle time scanner for disk damage. Then Symantec acquired Fifth Generation Systems. The updated FileSaver in Norton 3.0 included an idle time scanner similar to Public's. Public was never heard from again.

MacTools Pro from Central Point was the first to include an idle time scanner (AutoCheck) that could repair disks. It also included an innovative feature called RAMBoot that copied a minimal system folder to a RAM Disk, restarted using the RAM Disk, repaired the startup drive, and restarted using the hard disk. Sure beats using a bootable CD-ROM, in my opinion. MacTools also included the ability to save preferences sets (sort of like Retrospect run documents) for commonly used types of disk scans. Then Symantec acquired Central Point Software. To my knowledge, none of MacTools' innovations found their way into Norton Utilities.

First Aid HFS, from DataWatch Corporation, remains the best file recovery program (especially for floppies) that I have ever used. To my knowledge, the last version was released in 1992.

Gone But Not Forgotten

Yet another Symanteced (acquired and killed) product is MORE, the Mac's first outliner. Outlining software is somewhat out of fashion right now. Its proponents say that's because most people these days haven't used MORE. MORE has an incredibly loyal following; no outliner today has the power and elegance that MORE did in the mid-eighties. I don't know if they're right, because I don't have a copy of MORE, and can't buy one. No one can. (And the fact that MORE is no longer for sale doesn't make pirating it legal.)

Another cancelled Symantec product (this is the last I will discuss, honest!) is the Symantec C++ development environment (formerly THINK C). In the early 90s, Symantec C++ had no competition. When Apple released the first Power Macs, Metrowerks stepped in with CodeWarrior, which, unlike Symantec C++, could create PowerPC native code. CodeWarrior quickly took over the market. Not long after, Symantec C++ was cancelled as the company decided to focus its Mac efforts on Java tools. Metrowerks, now with the monopoly, has continued to improve CodeWarrior, but the product has become bloated.

Backup Software

Retrospect, from Dantz Development, is one of my all-time favorite pieces of software not only because it has gotten me out of many a jam, but also because I find it exceptionally well-designed. Still, I am a bit disturbed that its competition has disappeared. Retrospect still has no support for differential backups, which Fifth Generation Systems' FastBack did back in the days when programs were marketed as "System 7 Savvy."

Compression Software

Once there was a lot of competition in the Mac compression market. Stuffit was the most common. DiskDoubler had the best interface and was the most flexible. Compact Pro had a loyal following of shareware users. Now Compress compressed slowly, but tightly. AutoDoubler provided the best transparent idle-time compression. Today, Stuffit has a virtual monopoly, and Aladdin just released what I would term a disaster. Stuffit Deluxe 5.0 is a fine product, but its file format is incompatible with earlier versions of Stuffit, and it includes no way to save files using the old format. Even worse, many Macs can't meet the system requirements of Stuffit Expander 5.0, so they will never be able to read files compressed using the newer version. And since Stuffit's compression engine is an extension, there's no way for versions 4.x and 5.x to coexist. In short, this means that if your e-mail program uses the Stuffit engine to encode attachments, installing Stuffit Deluxe 5 means that your recipient had better have Expander 5.

Graphics Software

Adobe Photoshop has one of the strongest software monopolies ever. Photoshop 5.0 is better than ever, but when it was released there was a lot of talk about it not being a big enough step forward to warrant the version increase from 4.0 to 5.0. When I got my first Mac, Photoshop faced some serious competition in Letraset's Color Studio. Since Color Studio disappeared, other companies have tried to usurp the Photoshop monopoly. So far, none have succeeded. Lots of other graphics software that used to be published by small oneproduct companies now seems to be published by MetaCreations, and I haven't heard any news about great products like Color It and SuperPaint in years.

AppleWorks

AppleWorks is an odd piece of software because it is quite good despite the fact that it has not faced serious competition in years (remember MS Works, BeagleWorks, and GreatWorks?). AppleWorks was rarely, if ever, marketed. In fact, I get the impression that it was designed to be good software, not to sell. (I'll bet that most AppleWorks users have it because of a bundle.) In fact, I think this is the reason that (at least until version 5) it did not experience much feature bloat. It remains an example of what simple, elegant Mac software can be. I wonder what Mac software would be like today if Claris had continued to make Pro and integrated versions of all its products (e.g. MacWrite Pro and ClarisWorks, Resolve and ClarisWorks, MacDraw Pro and ClarisWorks).

What is Happening

In my view, software quality is declining. There is still plenty of innovation. For the most part, you've probably already read about it online or in print, so there's no point in my reviewing that here. Overall products, however, are not as high-quality as they once were. Software is harder to use because it is more complicated, and also because (it seems) less thought is put into interface design and more into increasing feature counts.

Many people, even computer professionals, refuse to upgrade to the latest versions of Microsoft products because they don't want to relearn something that already works well for them. And while software is becoming more complex, documentation is becoming slimmer. Some companies no longer provide full manuals for products, instead including "quick start" or "getting results" guides. Others provide documentation, but only electronically. In my opinion, there's no substitute for a nice bound book.

Think about what some of your most-used programs were like several versions ago. Chances are they fit on floppy disks, were easier to use, and crashed less frequently. Mac OS 8.5.1 is being touted as the most stable system software release in recent memory. Stability is quite good, but my Mac was more stable with System 7.1 tuneup.

Software today is considerably more complex. The quickest way to write software is to use an object-oriented programming language like C++ so that you can easily reuse as much old code as possible. Without object-oriented programming and frameworks like Metrowerks' PowerPlant, development of today's complex software would not be possible in the time frames that customers expect. The price to be paid is that the more general a programming solution, the more suitable the code is for reuse, but the less tuned it is to solving a specific problem. The result is slower and larger than a less general solution. This is one reason why Microsoft Word seems to get no faster despite the fact that processor speeds continue to improve exponentially.

At the opposite end of the spectrum is WriteNow, a once-popular word processor that was written in 680x0 assembly language. Because it was so finely tuned to the 68K processor, WriteNow was the fastest word processor on the market. But when the PowerPC came along, its authors faced the insurmountable problem of rewriting it for the PowerPC. There lies the trade off between writing software quickly and writing software that runs quickly.

The increasing bugginess of software has two causes. First, with more Mac models and software than ever before, developers face the ever more daunting task of testing their software on as many configurations as possible. Secondly, I believe the current purchase/upgrade model of the software market encourages incomplete testing. There's an enormous temptation to ship software before it is ready, not only to beat competitors to market, but also because these days it is pretty much expected that there will be a bug-fix x.0.1 release shortly after the main release. Some customers refuse to buy x.0 products because they are known to be buggy. And this creates a vicious circle where developers have less and less incentive to make the x.0 release bug free. (Never mind that many release public betas.)

With the current model of software upgrades and the lack of competition described above, there is less incentive for companies to create good products. They can make customers pay for bug fixes that should never have been required (Windows 98). And since the system software is constantly changing, customers may be forced to upgrade to a buggy version because it supports HFS+ or Mac OS 8.5—unless they choose to not use the software at all. Even if they don't want to upgrade, they may have no choice if they want to read files from their coworkers.

The result? Upgrades are not as substantial as they once were, yet they are becoming

increasingly more expensive. I do not know of a solution. (But I am pretty sure that subscription plans are a step in the wrong direction.) Ideally, companies would make all bug fix releases free and charge only for feature-adding upgrades.

Software in 1999

All in all, most software upgrades are improvements, even if they don't meet our expectations. Still, I wonder how much better today's software would be if the product categories described above still had the competition they did in the Mac's early years.

In 1999, I look forward to more companies bringing back support for the Mac. We really do have less software to choose from than PC users, and in some areas, it shows. Especially, I hope that new developers will choose Mac OS X and its market-leading Yellow Box development environment for their new products. Most truly great software is created by new, unestablished developers who are more concerned with creating ground-breaking software than creating reasons for their customers to upgrade. Such developers were attracted to the Macintosh from the beginning. With Apple's renewed success, perhaps they will be again.

"The Personal Computing Paradigm" is copyright © 1999 by Michael Tsai, <mtsai@atpm.com>. Michael still bemoans the loss of OpenDoc, a software model that made so much sense for consumers that it made very little sense for established developers.