Cites & Insights:
Crawford at Large

Volume 1, Number 3: March 2001 ISSN 1534-0937 Walt Crawford

Living with Contradictions

The White Queen in Lewis Carroll's *Through the Looking-Glass* has useful advice for those trying to find the one true path for the future. When she tells Alice that she's one hundred and one, five months and a day, Alice responds, "I can't believe *that!"*

"Can't you?" the Queen said in a pitying tone. "Try again: draw a long breath, and shut your eyes."

Alice laughed. "There's no use trying," she said: "one *can't* believe impossible things."

"I daresay you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour a day. Why, sometimes I've believed as many as six impossible things before breakfast." (p. 200 in the Modern Library edition of *The Complete Works of Lewis Carroll.)*

Substitute *contradictory* for *impossible*, and I'm on the side of the White Queen. It's too easy to assume that if A is going to happen, that means that B can't possibly happen—or, vice versa, that B precludes A. But many contradictory situations arise because we substitute "all" for "most," and the world is much subtler and more complex than most of us wish to consider. When I see "we all" in an article, I'm finding it useful to raise the same immediate yellow flag that I do when I see "inevitable." "We all want to be connected all the time." "We all use cell phones." "We all watch too much television." "We all" is generally a dangerous oversimplification. Take away the simplification, and contradictory trends can be reconciled, if only because life tends toward complexity.

A recent piece in *The Industry Standard* entitled "Living with contradictions" makes some interesting points. "Sustaining contradictory ideas simultaneously is one of the hardest things for the human mind to do, and that goes a long way toward explaining why this kind of in-between position seems to be rare." That comes after the author's suggestion that it's true *both* that "the Internet is changing everything" *and* that "a few big, traditional companies will continue to be major players in many industries." He further notes that some Internet stocks were still good investments at their peaks—while most Internet stocks were absurdly overvalued. His most heretical stance: "Amazon, most likely, will neither overtake Wal-Mart nor fade into oblivion, but rather end up somewhere in between."

Inside This Issue

I'm not sure that everyday people have that much trouble handling ambiguous or contradictory ideas—but the article is certainly right in noting that "the dynamics of the media and public discourse tend to polarize the discussion." Ambiguity doesn't work well in headlines or make a pundit's reputation, so the tendency is to simplify at the expense of the truth.

"Categorical statements about the future of the Internet Economy…are likely to be proven incorrect. Wisdom lies in the ability to identify and interpret the subtleties, and to accept that the world is a complicated and contradictory place." You could substitute "media" for "the Internet economy" or almost any hot topic you choose.

Can A Copy Improve on the Original?

A few months ago, I was mentally belittling Michael Fremer (a staff writer for *Stereophile* and *Stereophile's Guide to Home Theater* who firmly believes that LPs offer better sound than CDs) for one particular article. As part of evaluating some device, he noted that he gets better sound from CD-Rs than from the

source CDs. My response was, in essence, "That's impossible. How can a copy of a compact disc possibly offer *better* sound than the original?"

The *ad hominem* answer would be that the CD-R copy is "better" in a special sense: that it loses just enough of the CD signal to show a bit of euphonic distortion, making it more "musical" than the original. Another *ad hominem* answer is that it's all in Fremer's head.

Maybe that's a lack of flexible thinking on my part. Bob Starrett's "The CD Writer" in the September 2000 *EMedia* carries the title "High fidelity: archiving audio to CD-R." In this one-page treatise, he notes that he has opined that "the discs you make yourself have much lower error rates than the pressed CDs that you buy at the store." Challenged to demonstrate that assertion, he grabbed a bunch of AOL CD-ROMs, tested them for Block Error Rate (BLER), then copied one to CD-R and tested the resulting BLER.

Part of the essay was his surprise that the AOL spam tested as well as it did: error rates of 5.8 to 7.3, far below the maximum allowable 220. But his CD-R copies had BLERs of 1.1 to 1.4: "Like I said, recorded discs generally have lower error rates than pressed discs."

Audio CDs tend to have considerably higher BLERs than CD-ROMs. When he tested six brand-new CDs, four had BLERs between 10 and 24, while one had a disturbing 142. His copies tested at 1.7 or so: that seems to be fairly consistent.

So what? From one perspective, none of this should matter. A good CD drive should be able to recover data *perfectly* from a disc with BLER less than 220—after all, if it didn't recover the bitstream, how could you cut a "better" CD-R? On the other hand, discs with higher BLERs are likely to be more susceptible to failure through fingerprints and scratches.

Applying a little White Queen thinking, Michael Framer may not be as crazy as I thought. A disc's BLER *should* be inaudible as long as the bitstream can be recovered fully—but that's also supposed to be true of a disc drive's jitter rate (which I'm not about to explain here). Reasonably sound tests suggest that keen listeners can hear the difference in drives with high jitter rates; is it possible that a high BLER also influences the sound in subtle ways?

That leads us into difficult territory, as Dana J. Parker discusses on the last page of that same *EMedia* in "The green flash and other urban legends." You may know about the green flash that supposedly appears just as the sun sinks below the horizon—but that's not the green flash she's interested in. Parker wants to poke fun at the kind of device that *Stereophile*'s writers seem to tout with regularity—one reason I treat parts of *Stereophile* as a humor magazine.

There's the classic green marker. For a decade now, some people have claimed that you can improve the sound of a CD by marking the inner and outer edges with a green felt marking pen. Today, Audio Prism sells "CD Stoplight," a device that "reduces jitter" by absorbing "stray light" within a CD player—and, indeed, that's one of the devices *Stereophile* recommends. Then there's the more expensive CD Blacklight, a disc that you expose to bright light, then set on top of your CD. It glows—and supposedly increases stability, reduces electrostatic discharge, and reduces jitter. Other devices claim to reduce electrostatic discharge—which, as Parker notes, should be irrelevant for an *optical* medium.

Maybe so—and you won't find any of these bizarre accessories on my CDs. But it's possible to make a case of sorts. Yes, the device reading the CD is a laser; yes, the optical path should be impervious to electrostatic issues. But that CD rides on a physical assembly (and the optical signal is immediately converted to electrical form), and it's not inconceivable that electrostatic interference could play a role at either of those two points. Unlikely, but not *impossible*—any more than it's impossible for a copy of a CD to sound better than the original. Dana Parker, meet Robert Starrett.

Admittedly, some tweaks go beyond the wildly improbable. One $180 device claims to "polarize the polymer" on a CD "in such a way as to maximize the laser's ability to retrieve stored data." For a mere $20 per pack, you can get Rainbow Electret Foil. Attach a little strip of this foil over the CD logo on a CD, or on the speed indication on a record label, or on a tape cassette—or on a bottle of wine or a plant. It claims to "neutralize the adverse energy [created by interaction of all spinning discs with the gravitational forces] by inverting the energy pattern and therefore restoring it to a naturally occurring environmental pattern." You say your wine and plants don't spin all that much? You gotta believe!

There are three messages here:

- The improbable isn't always impossible. I disagree with Bob Starrett a *lot*, but I see no reason to doubt his BLER tests.
- The conclusion above leads too many people into total credulity, where they'll believe almost anything if the claims are packaged properly.
- When it comes to the musicality of your sound system, the perceived quality of your wine, and many other areas, the credulous people are absolutely right. If they believe a device works, then it does *for them*.

One of the Web's better humor sources (either the Brunching Shuttlecocks or Modern Humorist) had a wonderful piece in early 2000. It looked just like the dreamy ads for prescription drugs you see in all the best magazines these days—but it was for the ultimate drug, Placebo. The testimonials from satisfied users could be just as genuine as for any other drugs—and the motto was dead on the money: "Placebo: It works because you think it does."

When you're truly bored and find yourself reading the tiny print that accompanies one of those ads, pay attention to the clinical results. In a surprising number of cases, clinical effectiveness is demonstrated by the drug yielding a *slightly better* result than a placebo—e.g., improving the condition in 18% of cases as opposed to the 15% of cases where the equivalent of water did the job.

PC Values: March 2001

March's standard configuration includes 128MB SDRAM, 16x or faster CD-ROM, AGP graphics adapter with *32MB RAM* (a change in March 2001), V.90 fax/modem or 10/100 Ethernet adapter, wavetable sound card, speakers, and a 15.6-16" (viewable measure) display. "Pluses" and "Minuses" are shown where applicable, along with hard disk size and software. Top systems are priced from "recommended systems" on company Web sites.

Note: Price ranges have been lowered to reflect market realities. The new ranges are:

- Budget, $800-$1,449 (down from $1,000-$1,799)
- Midrange: $1,450-$2,099 (down from $1,800-$2,449)
- Power: $2,100-$2,750 (down from $2,450-$3,149).

One side effect of this change is that Other, Power systems reappear. For the next few months, changes in value will only appear where previous best-value systems were in the same price ranges.

- **Top, Budget:** Dell Dimension L866: Pentium III-866, 20GB 7200RPM HD. *Minuses:* No dedicated display RAM. *Pluses:* DVD-ROM. *Extras:* MS Works Suite 2001, Harmon Kardon surround sound system. $1,099, VR 2.66 (+18% since 12/2000, +28% since 9/2000).

- **Top, Midrange:** Dell Dimension 4100: Pentium III-1000, 40GB 7200RPM HD. *Pluses:* CD-RW drive. *Extras:* MS Works Suite 2001, Harmon Kardon surround sound system. $1,599, VR 2.11

- **Top, Power:** Micronpc Millennia MAX XP: Athlon-1200, 60GB 7200RPM HD. *Pluses:* 256MB RAM, 18" display with 64MB display RAM, DVD-ROM and CD-RW. *Extras:* MS Office 2000 SBE, Altec Lansing speakers with subwoofer. $2,242, VR 1.85.

- **Other, Budget:** CyberPower Athlon Lightning DVD: Athlon-1200, 30GB HD. *Pluses:* 256MB RAM, 18" display, DVD-ROM and CD-RW. *Extras:* WordPerfect Office Suite, Altec Lansing speakers with subwoofer. $1,250, VR 3.12.

- **Other, Midrange:** ABS Performance System 2: Athlon-1100, 30GB 7200RPM HD. *Pluses:* 18" display, DVD-ROM. *Extras:* WordPerfect Office, Altec Lansing surround sound system. $1,478, VR 2.29.

- **Other, Power:** ABS Performance System 1: Athlon-1100, 40GB 7200RPM HD. Like midrange, but with 256MB RAM, CD-RW (and DVD-ROM), 64MB display RAM, Cambridge Soundworks surround sound system, Ethernet card. $2,288, VR 1.90.

Bibs & Blather

What better name for personal notes & comments? "Bibs & Blather" is the truly self-indulgent part of *Cites & Insights: Crawford At Large*, putting the "zzz" in Zine. Just two quick notes this time:

- The April issue (Vol. 1 No. 4) will be a few days late. Expect to see it around April 5 or 6.
- If you're a Florida librarian, maybe I'll see you in Orlando April 11-13. I'll give the opening keynote for FLA's annual conference (and speak at a program later that day), and I'll be at as much of the conference as possible.

MusicMaker RIP:
Right Service, Wrong Time?

By all rights, MusicMaker should have worked. The Web site listed songs from tens of thousands of CDs, with brief samples available for many songs. You chose the songs you wanted—at

least five and no more than 15—and MusicMaker turned them into a CD. You had some control over the CD label and the artwork for the jewel box. A couple of days later, you had a CD containing your own mix of music.

There were no copyright issues. MusicMaker had arrangements with the record labels and was paying appropriate royalties. There were no sound quality issues. You were getting CD Audio tracks, not compressed versions. But there were two major issues, at least until recently:

- The CDs were expensive, at least when compared to used CDs or carefully-chosen boxed sets. You paid $5 for the CD itself and $1 per song, more for songs longer than four minutes (I believe). Thus, a ten-song CD cost $15; a 15-song CD cost $20. Maybe that's not too much to get the songs you really want, but it was enough to discourage newcomers.
- MusicMaker wasn't that well known. Meanwhile, Napster led many people to believe that getting just the songs you want *absolutely free* was sensible and appropriate.

MusicMaker took steps near the end of last year to address both issues. Full-page ads in a range of newspaper supplements and magazines (typically four-color where that was available), running in January and early February issues, advertised the service and offered half price for lifetime, as long as new customers went to a specific Web subsite and ordered their first CD fairly soon.

At half price, I would use MusicMaker to fill in pieces in my small music collection. When 1,300 LPs turned into a few dozen CDs, I lost thousands of songs that I don't care about and quite a few that I do. $10 for a 15-song CD would be great; I was ready to order.

Except that I'd read that MusicMaker had gone under. Sure enough, every one of those Web subsites (and the primary MusicMaker site) disappeared by the time the ads ran. The company lacked sufficient capital; chances are, the commitments made for those ads pushed them over the edge.

There was one other problem by that time, which knowledgeable readers will have already spotted. Namely, MusicMaker was *not* making custom CDs; it was making custom CD-Rs. When the company began, that wasn't much of an issue: after all, every properly built audio CD player will play audio CD-Rs. But by January 2001, some 13 million American households had DVD players—and I'd guess that millions of new DVD owners did exactly what we did. To wit, the DVD player *replaced* the CD player. Sony DVD players work very well—but they don't play CD-Rs. Neither do most other DVD players, with a few exceptions (e.g., Philips), usually touting that as a feature. (It's not a Sony scam to protect intellectual property. Sony DVD players *will* read most CD-RW discs, as will most other DVD players but very few audio CD players. It's a question of wavelength and reflectivity: basically, you need two lasers or some very fancy optics to read CD-R and DVD on the same drive.)

I knew I wouldn't be able to play MusicMaker "CDs" on our DVD player. That might have been OK. I could play them on my PC (most DVD-ROM drives can read any CD format), which is where I do most of my music listening anyway. If it got to be a problem, I could buy a CD-RW drive and copy the CD-Rs to CD-RWs.

I was astonished to read a newspaper review last fall, where a supposed technology columnist tried MusicMaker. He thought the sound quality was great, but he noted that his DVD players wouldn't play the MusicMaker disc—and didn't seem to understand that this was predictable. Average DVD owners would not be aware of this incompatibility or would assign it to manufacturer fiendishness or MusicMaker incompetence; in either case, they'd never order from MusicMaker again.

MusicMaker is no more. Maybe lower prices up front would have helped. Maybe they needed more advertising early on. Maybe the combination of Napster on one side and DVD incompatibility ruined their chances. Maybe, like too many .coms, the business plan just didn't work. Too bad.

Addendum: The Alternatives

After writing this essay, I read about iMix.com in *EMedia*. It seems that iMix was adding custom DVDs to its existing custom CD service, and that it was well established as the custom CD engine for CDNow. "Oops," I thought, "I missed the surviving competitors to MusicMaker."

Half an hour and dozens of few dead links later, I withdraw the Oops. iMix is dead, with a Web site announcing that fact. CDNow offers custom CDs, but only within a handful of "custom collections"—e.g., you can choose any 12 of some two dozen Bob Marley pieces for $16.99, or any 12 of 150 jazz cuts for $15.99, or any 12 of 180 R&B pieces. There seem to be fewer than 20 "collections" in all. One of the largest seems to be "oldies," but that includes a mere 20 groups, only five or six of them well known. The pricing is almost always $15.99 or $16.99, always for a maximum of 12 cuts. It's pricey, but mostly it's extremely limited.

K-Tel had an enormous range of licensed oldies and was in the custom CD business, but the Web

sites are all dead and the corporation seems to have disappeared. RocketE produces custom CDs at the old MusicMaker price ($5 plus $0.99 per song, with higher charges for longer songs), but the source material appears to be a large handful of independent labels and obscure groups. One site, which shall remain nameless, promises custom CDs—but the site is rife with misspellings and grammatical errors, and the business model is "tell me what you want and send me a personal check; in a few weeks you'll get your custom CD." Sure.

I still think it's a good idea, but the casualty rate suggests that it isn't a good business.

Press Watch I: Articles Worth Reading

"WAP, Bam, No Thank You, Ma'am," *Suck* (January 29, 2001), http://www.suck.com/daily/2001/01/29/1.html

Am I going too far afield citing a *Suck* piece as "press"? Perhaps, although this odd Web site frequently includes cogent cultural and technological criticism mixed in with a level of skepticism that makes me a true believer by comparison. If you've never encountered *Suck*, be prepared: the writers have no fear of blunt language.

The target this time is the wireless application protocol—WAP. Some would have us believe that we're all going to use the Web over cellular phones; WAP's the protocol that gets us there. Or, to combine the promise with this counterpoint: "Heralded as the Second Coming of the Internet, WAP is an unmitigated disaster—a half-finished, half-assed service enthusiastically targeted at mainstream consumers without the reliability, convenience or price that those silly mainstream consumers have foolishly come to expect."

In one brief essay (five pages printed out, but it's 12-on-14 point type and the lines are only 3.5" wide), this snide column points up the problems that lead me to believe WAP won't do nearly as well as the cellular folks would have us believe. Key points include the absurdly low resolution of WAP phones, the incredible hassle of entering data on a numeric keypad, the charming combination of extremely slow data rate and per-minute charges, and "the ultimate near-pointlessness of browsing anything while you're sitting at a bus stop."

Can you use the Internet on a cell phone? Sure, to some extent, and one chief proponent is a few doors down from RLG: TellMe. TellMe and its competitors use voice recognition to offer select bits of information, Internet-sourced but delivered in a manner that cell phones do well: the spoken word.

Nickell, Joe Ashbrook, and Michele Yamada, "Exporting Japan's revolution," *The Industry Standard* 4:5 (February 5, 2001), pp. 106-17.

Oddly enough, this article relates to the *Suck* essay—but it's about a different kind of cell-phone based Internet service. NTT DoCoMo offers i-mode, a form of Internet access and two-way e-mail using digital cell phones. Seventeen million people use it in Japan. If you buy the claims of DoCoMo's honchos, we're *all* going to use tiny phones to listen to music, read books, check e-mail, and watch television or movies. (They show Japanese teenagers using the phones: when I say "tiny," I'm not exaggerating.)

What do people use i-mode for? "Mostly to entertain themselves with such offerings as cartoons and astrology." Naturally, whatever works in Japan will work *even better* in the United States. Kei-Ichi Enoki says flatly, "We will *all* eventually have our own wireless phone. The PDAs and PCs will all be secondary. We humans, it does not matter whether we're American or Japanese, we are all lazy in nature. It's just too much for all of us to carry two devices around."

The article is both well reported and modestly skeptical. It notes a few differences between Japan and the U.S. For example, more Japanese consumers have cell phones than home phones in Japan—because it can cost $700 to install a home line. As you might expect, that also means that dialup Internet service hasn't caught on very well, and the difficulties of Japanese text have limited PC acceptance in general. But none of that matters, according to DoCoMo; we're all ready to abandon our big screens and comfortable keyboards so that we can view movies on one-inch screens while we're out on the town.

While not directly related, I found the lead to one of the news items in the *next* issue of *The Industry Standard* interesting: "With demand for mobile phones slowing, Ericsson, the world's third-largest supplier of the devices, became the first to abandon the market and close its handset division." Draw your own conclusions.

A Reuters story dated February 23, 2001 offers more insight on the inevitable success of the "wireless Web." An online survey of 3,189 residents of the U.S., Britain, Germany, Finland and Japan found that a mere 15% of cell phone and PDA users were connecting to the Internet with the devices. The high was Japan with 72% (as you'd expect); the low was 6% in the U.S. Worse yet for such wonderful

areas as "m-commerce" (mobile commerce), less than 1% of those surveyed did wireless shopping. The story includes an interesting comparison regarding ease of use, using Amazon (one of the few commerce sites that works on cell phones). Buying a book took 143 keystrokes on a PC—and 366 on a cell phone.

What does this all mean for libraries? Primarily that the drastic changes needed to make your Web catalog work on cell phones might not be the highest priority change for you or your catalog vendor.

Lake, Matt, "Best free stuff online," *PC World* 19:3 (March 2001), 92-103.

One of today's major understatements, growing larger every week: "Great Web freebies aren't as plentiful as they were before the dot coms ran into financial trouble." Still, this article includes 60 "useful gems" ranging from Freeserver's free hosting and 20MB server space to Software602's free word processor and spreadsheet. It's a well-organized list with reasonable writeups. At the time of this writing, I can't be sure whether all of these sites still exist: none drew an immediate 404, but several failed to load in any reasonable time. I'll save this article; it will be interesting to see how many of these freebies are around in July (roughly half a year after the article was written).

Stories Between the Ads

Much of the raw material for *Cites & Insights* comes from magazine articles, primarily in personal computing magazines, as long-suffering readers know. I should note that PC magazines represent a fraction of the magazines I read regularly (omitting those circulated at RLG): either one-fifth or one-seventh, depending on how you measure. (Several magazines have disappeared or changed focus in the past few years, reducing the load considerably.)

Nonetheless, I do read a *lot* of PC-related magazines and have been following them for more than a decade. In that time, some titles swelled to absurd thickness, laden with page after page of ads occasionally interrupted by editorial copy. Given the snide assertion of some media analysts that "content" in any medium is just stuff to wrap advertising around, I wondered just what percentage of these magazines did represent editorial content—and whether there are consistent patterns.

Last fall, from October through November, I measured the content of the five PC magazines I subscribe to, along with the non-PC, non-library magazine you see mentioned most frequently in my writing. I included five measures:

- Page count (as indicated by the page number on the last page).
- Editorial pages, which I define as pages containing articles, columns, letters, reviews, and other narrative content.
- "Stuff," which I define as pages that are neither ads nor "editorial" in traditional ways. This includes endless lists of Web sites, photos and blurbs that appear to be taken from press releases rather than early reviews of products, mastheads, and other—well, stuff. (For most magazines, "stuff" ranges from two to six pages. *Computer Shopper* is a grotesque exception, with 30 to 40 pages of "stuff.")
- Line size as a measure of type density; this is the "leading" size, the number of points between the bottom of one line and the bottom of the next line. I added that measure when *Macworld*'s redesign went from a typical 11-point or 12-point leading to a 14-point leading that yields relatively few words per page.
- Text size: the portion of each page that isn't headers, footers, and external margins, measured in tenths of an inch.

Those raw measures yield three derived measures:

- Editorial percentage: the number of editorial pages divided by the total number of pages.
- Gross editorial: similar, but with "stuff" added to editorial pages. This is the inverse of the ad ratio—whatever isn't "stuff" or editorial is advertising.
- Editorial Size: text size for an issue, multiplied by editorial pages, divided by line size. After cumulating three months of data, I calculated a "page equivalent" from Editorial Size, normalizing *actual* editorial pages to "typical" pages. If you want to know what a "typical" editorial page looks like, you're looking at one. I used *The Industry Standard* as my norm (12-point leading and text size of 59 square inches); those are also the relevant figures for *Cites & Insights: Crawford at Large.*

Findings: Winners and Losers

It's worth noting that *PC Magazine* used to be at least 50% thicker than it was last fall; the same goes for *Computer Shopper*. But then, even *Macworld*, never a massive magazine, has slimmed down.

In terms of *gross* editorial percentages, most PC magazines fall into a narrow range: an average of 34% for *Computer Shopper* and between 35.5% and

36% for *Macworld*, *PC World*, and *PC Magazine*. *The Industry Standard* breaks 40% (barely), while *FamilyPC* tops out at 47% gross editorial pages. For comparison, the November 2000 *American Libraries* yields 53% gross editorial copy (noting 30 pages of classified ads).

Net editorial percentages also cluster, with one major exception: *Computer Shopper* falls to 23%. Otherwise, *PC Magazine* is lowest at exactly one-third (33.3%), *PC World* and *Macworld* run between 34 and 35%, *Industry Standard* falls to 39%, and *FamilyPC* tops out at just under 45%, if I'm very generous about their articles of minimally-annotated Web sites.

The more interesting numbers, I believe, are the normalized editorial pages—particularly when adjusted to note publishing schedules. *Macworld* is the clear underachiever with an average of 57 equivalent pages. *FamilyPC* does a little better, averaging 70. *Computer Shopper* and *PC Magazine* almost tie, with 92 and 91 pages respectively—but *PC Magazine* appears 22 times a year, for an effective 160 pages per month. *PC World* has more text per issue (these days: that was not the case) than *PC Magazine* but substantially less per month: an average of 100 normalized pages.

Finally, *The Industry Standard* averaged 97 normalized editorial pages per issue—and it's a weekly, for a total of nearly 390 pages per month.

If there are lessons here, I think they come from the narrow range of gross editorial pages. That is, this kind of magazine will devote just over one-third of its pages to editorial matter. When *PC Magazine* ran 400 pages per issue, it had much more exhaustive stories than in its current 230-page issues. On the other hand, 160 normalized pages per month in *PC* still represents a *lot* of copy. The publication you're reading averages 750 words per page; at that rate, you get more than "a book a month" from *PC Magazine*—and more than a quarter-million words each month from *The Industry Standard*.

The Convergence Chronicles

John Dvorak is one of those crotchety types full of strange ideas and opinions who, once in a while, makes good sense. One recent example is his December 5, 2000 *PC Magazine* column making fun of Microsoft's .NET initiative. He quotes part of the .NET Web page, as follows:

> "Your beeper goes off; the seller has accepted your counter-offer! You punch up MoneyCentral and drag 1000 shares of MSFT into your checking account. You confirm the sale and accept the commission, then drag the down payment into the Chicago Title escrow account. Message from Bob: 'We got it?!?
>
> "The weather report for Saturday is for clear skies, 75 degrees Fahrenheit. Tammy and Joe's computer says they'd love to play. A 1:00 P.M. tee-off time is secured, dinner reservations are made, and Sandra is lined up to babysit. You find out about it on the display of the stationary bike at the athletic club."

It's hard to argue with Dvorak's next line: "Does anybody think this kind of nonsense is going to be pervasive?" Networked stationary bikes, maybe. Babysitters who are so wired that they respond automatically to computer-initiated requests, probably not. Confirming a $50,000 stock sale from a beeper: maybe among Microsoft's multimillionaires?

While I love his rejoinder to Sun's slogan—"The network is a peripheral!"—it's not that simple. For some people, the network is indeed becoming the computer, but for most of us, I think Dvorak's likely to remain right: "The personal computer is the default device for computing, period. Other devices are used only for convenience or emergencies." The second statement certainly overstates the primacy of PCs. I certainly can't argue with his note that people may not like the idea that Microsoft is monitoring whatever they do.

[Inside]: Is This Trip Necessary?

A few of you insiders have heard of inside.com—a hot Web site giving the inside scoop on media in this digital age. Portions of inside.com are free, but the good stuff requires a subscription. Supposedly, subscriptions haven't been going well—and that's hardly surprising, since it's tough to get people to pay for online content.

So here's *[INSIDE],* a fortnightly print magazine with a first issue date of December 12, 2000. I was offered a complimentary subscription by qualification, probably because I get *The Industry Standard* as a comp and the new mag is produced "in partnership with *The Industry Standard.*" While I'm not that anxious to increase print overload these days, *Industry Standard*'s involvement made it interesting.

So here it is: 112 pages, 61.5 pages of editorial content, loads of little squibs and opinion pieces with a handful of slightly longer articles. That's a *lot* of editorial content, although most of it's fluffy. The editorial belief in convergence can hardly be overstated. The first editorial says flatly: "As all media is

digital and everything becomes networked…" Bye-bye print book and magazine—but why is this being said in a new *print magazine*? Later, one of the esteemed columnists (who I've never heard of) says,"Every aspect of life will be, without doubt, thoroughly and deeply digital." Enjoy your meals, sex life, hiking and cruises while you can: *every aspect of life* is going digital.

I started making individual notes, then stopped. What's the point? I read the entire issue, with some effort. It's one-sided, dreary with that clarity of a single bell rung repeatedly, with mediocre writing and no apparent insight. Unfortunately, *The Industry Standard* is involved on the *production* side, not the editorial

The mailing area says my subscription lasts through November 26, 2003. I'm thrilled. Of course, *[INSIDE]* could improve; some magazines do. At this point, I see a weak attempt to bail out a Web site that isn't working as a business with a print magazine the very existence of which denies its own editorial attitude. Such is life in the new economy.

Interactive TV

PC World offers a surprisingly laudatory look at interactive TV in the January 2001 issue. "Whatever you call it, it's the couch potato's dream: a boob tube that allows you to e-mail mom, order pizza, and watch any episode of the *Beverly Hillbillies* whenever you want." I'm so excited! And there are so many choices too—AOLTV ($15 a month *above* AOL membership), WebTV, ReplayTV, and TiVo, to name only a few. You may have thought that ReplayTV and TiVo were personal video recorders, but redefining "interactive" is part of the game.

Do people want to write e-mail while watching TV? Are you anxious to reduce the TV picture to one-fifth of your screen so that AOLTV can surround it with "chat rooms and TV-themed Web content"? Or is interactive TV really all about Wink's "buy Jennifer Aniston's dress" service?

"Serious channel surfers who would like to harness the power of digital technology to render their hours of self-imposed sofa sitting more fun and informative will love interactive TV." I saw very little fun or informative in the offerings discussed in the article, and if *West Wing* or *Buffy* is on I certainly don't want it shoved in a little corner. The article concludes, "Passive TV is going the way of rabbit ears." Maybe.

The Metrics section in *The Industry Standard* for January 15, 2001 looks at projections for interactive TV. It's a remarkably self-contradictory two pages. One study says that seven out of ten adults aren't interested in any form of interactive television. A chart shows that market "analysts" assure us that anywhere from 24 to 44 million households will be using interactive TV by 2004, doubling or tripling each year—even though actual numbers say that there are, at most, 2% more internet TV users in the last quarter of 2000 than there were in the last quarter of 1999 (just over one million). And both Forrester and Jupiter assert that U.S. households will spend $5.6 to $5.7 billion in interactive-TV commerce in 2004—up from between $0 and $0.3 billion last year.

Most of us don't want it at all, "it" doesn't really do much, but we're all going to get it anyway. Sounds good to me.

Terapin CD Audio/Video Recorder

Sound & Vision for December 2000 includes a test report of this novel device: a $599 standalone CD recorder that also records video in the Video CD (VCD) format. If you've never heard of VCD, don't be surprised. It's done fairly well in Europe and parts of Asia, but never caught on in the United States. Maybe that's because VCD offers "near-VHS" quality, with less snow than tape but plenty of compression artifacts (pixelation and frozen backgrounds). You're putting half as much video (as a DVD) on a disc with one-seventh the storage capacity: that means using three times as much compression.

MPEG-1, the format used for VCD, doesn't attempt the quality of MPEG-2 (used for DVD). This unit shows measured recording performance roughly comparable to a cheap VHS recorder (*not* the superior S-VHS, which you can buy for less than $150 these days)—but measured performance doesn't show the artifacts. Measurements show that you're throwing away more than half the resolution of broadcast TV or DVD; that's subtractive distortion. Pixelation and freezing are additive distortion; if you're paying attention at all, additive distortion is always more offensive than subtractive distortion.

As a CD recorder, the unit isn't bad: copies of audio CDs are bit-accurate. As a CD player, the unit's not great but not terrible. The unit might make sense to store recordings such as videotaped council meetings where visual quality doesn't matter much—a binder of CD-ROM pages provides much more compact (and probably longer-lived) storage than videocassettes. But as a quality visual recorder, the reviewer comments: "If I saw video of this grade from a rental tape I'd return it for a refund." The unit is not ready for prime time—and with DVD

recorders likely to drop below $1,000 in the next three years, it's hard to understand the market.

Another review of this unit appears in a very different source, the March 2001 *PC World*. The discussion lacks any measurements but offers subjective comments. "When I recorded a one-hour show, the results were viewable but not as sharp as those from my M661 Toshiba VHS recorder." That's VHS, not S-VHS, and the writer notes that performance was particularly bad "on shows with movement, such as sporting events." Or dramas or movies or situation comedies or reality programming…almost all TV except talking heads. The reviewer notes that material transferred from home video recorders didn't seem to lose as much quality—because there wasn't much to begin with. The overall suggestion: wait for better designs.

Downloading Audio

Every convergence believer lauds MP3 and other Internet audio formats as heralding the rapid inevitable death of CDs: why ship all that plastic when you can download? This is hardly a new theme. In *PC Magazine* 18:5—a cover date somewhere in March 1999—John Dvorak said flatly, "The MP3 format and the trading of music on the Internet will destroy the music industry within the next two years." At the time, I noted my willingness to make a bet: I'd pay John Dvorak one percent of my adjusted gross income for 2001 if he'd pay me one percent of the gross revenue of "the music industry" (excluding downloads) in 2001. By his standards, it's a safe bet: there won't be any music industry in 2001.When *PC Magazine* 20:5 appears (two or three weeks from this writing), I intend to send Dvorak a reminder of his flat assertion. To date, the old-format music industry has been growing, but for all I know there may be a sudden collapse within the next week.

I'll get back to that projection (and others like it) later. For now, it seems worth noting a couple of related items from the January 2001 *Stereophile*. Barry Willis' "As We See It" (p. 3) discusses proposed watermarks for digital music and the facts of life about casual copying. He doesn't believe that MP3 and Napster represent a serious threat to the recording industry. His reasoning regarding "lost sales" makes some sense:

> Such losses are extremely hypothetical. The most likely and reasonable scenario is that most people, especially near-destitute college students, would not be willing to pay for copied recordings. They would simply live without them. Freely copied music is of marginal and transitory interest—for background listening only. As far as I know, no one is building a library of MP3s.

Those last two sentences may explain the frequent assertion that 128K MP3 offers CD-quality sound. It doesn't, not even to my half-deaf ears on PC speakers, but it's close enough for background music. Watermarking to prevent copying may be pointless; people who care about the music will buy it.

At the other extreme, those who listen *very* carefully and have top-flight playback equipment do (and should) object to watermarking, asserting that any watermark that can survive copying will be audible. I can almost guarantee that devoted *Stereophile* readers, the ones who hear big differences between $1,000 amplifiers and $50,000 amplifiers, will hear audible distortion in any recording they know to be watermarked—whether the distortion is there or not. But then, watermarking is also pointless in one respect. To quote Willis again: "If a watermark can be detected, as it must be in order to work, it can be removed." (The SDMI people, trying to establish "secure" digital music formats, offered a "hacking" challenge for their proposed watermarks. Teams at Princeton, Rice, and elsewhere claim that they did indeed remove the watermarks.)

So why have watermarks? Casual copying doesn't hurt the industry; high-end buyers most certainly won't pay extra for better-than-CD recordings if they're watermarked; and watermarks won't deter pirates. Willis thinks there's a different motive: preparation for future subscription music, where you listen to streamed digital music and the watermarks assure that you can't sell that music to anyone else.

Later we read about a serious attempt at commercial downloading. In October 2000, Medeski, Martin & Wood released *The Dropper*. At the same time that Blue Note shipped the CD to stores, Liquid Audio and 900 participating Websites made the album available for downloading—at $15.99. I've never used Liquid Audio and won't attempt to comment on sound quality, although I'll assume that it isn't better than the CD itself. (An uncompressed CD would take hours to download even with broadband connections, so Liquid Audio must involve substantial compression.) Which raises the question: *what's the point*? I checked the Web on January 21. Tower Records has the CD for $12.99. The Liquid Audio download was nowhere to be found, so I could not check the download size.

It looks as though Blue Note and other "forward-looking" record companies think that you should pay as much *or more* to download a slightly degraded version of an album as you do for the CD. Then you can spend a little more to burn your own

CD-R and possibly print out the CD cover and liner notes. What's the point? So far, I think commercial downloads make sense only to convergence freaks.

There are, of course, "reasonable answers" for Web music. Tower's Web site offers portions of several tracks from the CD, just as various sites do for almost every CD now on the market. Reasonably priced custom CDs, where you choose just the songs you want, make enormous sense (whether as physical products or as downloads, given broadband)—but the biggest name in such custom CDs, MusicMaker, disappeared at the beginning of 2001. (See the separate essay in this issue.)

FinePix 40i

It's a digital camera! No, it's an MP3 player! Maybe it's Fujifilm's bizarre attempt at consumer convergence. At $699 *before* you upgrade the measly 16MB memory, it's awfully expensive for an MP3 player. You can't listen to MP3 *while* you're taking pictures; the more music you have, the fewer pictures you can take; and the device burns through batteries faster than either a camera or an MP3 player would. For that matter, the description in *PC World*'s March 2001 writeup makes MP3 operations sound kludgey. But hey, it's convergence in action.

The Inevitability of Internet Gaming

Who knows convergence better than Sega? Sega's Dreamcast was the first game console with Internet capability built in. That competitive advantage had interesting results, according to a news item in the February 12, 2001 *Industry Standard*: "Sega confirmed it would cease production of Dreamcast…by the end of March. Scrapping the entire Dreamcast division will cost Sega…about $685.5 million." Sega will morph into a game supplier for other companies' consoles.

Press Watch II: Commentary

Crawford, Leslie, "Wild about reading," *FamilyPC* 8:2 (February 2001), p. 42.

In some ways, this item is nice (although naïve). The writer seems astonished that youth are not only "wild about Harry" but that the Potter books "made them hungry to read more." I suspect a few thousand ALSC members would point out that children have been avid readers *before* Harry Potter, but never mind. The article goes on to quote educators on the importance of reading. So far, so good. But then:

"What better way to tap into your child's enthusiasm for reading than by introducing her to an online community of fellow page-turners?" Yup: the rest of the article highlights Web sites related to children's literature.

Are you surprised to find that *FamilyPC* thinks that all the best sites are .coms? I quote: "Not surprisingly, the best kiddie-lit sites are run by the top children's book publishers." Before listing Scholastic, Houghton Mifflin, and Penguin sites, the article does mention a couple of .org sites (bookadventure and worldreading).

Is the best response to an enthusiastic young reader really "Put down that book and come explore on the computer"? Would one possible way to tap into that child's enthusiasm be to take her (or him) to the public library to check out more books? Are there no library sites related to children's literature? The article mentions one "Newbery winner," but with no indication that these medals are awarded by a (gasp) nonprofit professional organization.

Product Watch

Microsoft Office 2001

The new Macintosh release of MS Office must be hot stuff indeed, based on the January 2001 *Macworld*. A feature article devotes six full pages to the new version—and another *four full pages* appear later on in the review section. That's ten out of a total of 57 editorial pages (including letters). Office gets four mice in an adulatory review.

That's particularly interesting given the Mac attitude that Bill Gates is the Devil incarnate. Ask 100 Mac owners what they use for word processing and spreadsheets, then ask the 95 to 98 who answer "Word and Excel" why they've sold their souls to Satan. It's one of the great paradoxes of the PC field: MS gained a stranglehold on Mac applications long before WordPerfect and Lotus started to fade away in the Windows market.

StarBand

If you're desperate for broadband Internet access and can't get cable or xDSL, here's an alternative with some promise. StarBand, formerly Gilat-To-Home, is a satellite-based Internet service—and, unlike Hughes' DirecPC, it's a two-way link. Upload speed should be roughly 50Kbps, but download should average 500Kbps, down to 150K at peak

times. That's not great, particularly for $60 to $70 a month (and $400 to $900 equipment costs), but it's better than ISDN.

You get StarBand through Radio Shack or EchoStar DISH dealers. Radio Shack sells it along with a complete PC and antenna; EchoStar costs a little more per month but lets you use your existing computer (with a USB connection for the dish). The dish is 24x36" and must be professionally installed.

Netscape 6

Netscape claims that Netscape 6 is a production version, and a *PC Magazine* review (January 2, 2001) gives four dots and seems generally favorable. But there are oddities in the review.

Consider these two remarkable sentences: "Some are concerned that Netscape 6 is not quite 100 percent compliant with several industry standards, including HTML, DOM (Document Object Model), ECMAScript standards, and a few others. We did not do extensive testing in these areas, preferring to use the browser extensively in the area it is intended for—the Internet."

I had this idea that HTML was fairly fundamental to the World Wide Web portion of the Internet—which is the portion that browsers deal with.

If *PC Magazine* seems happy enough with Netscape 6, *Macworld*'s full-page March 2001 review shows less satisfaction. The two-mouse rating may be all you need to know: Such low ratings are rare. The buying advice: "Skip this sequel. It's bloated and frustrating to use, and it lacks the well-thought-out user preferences and application shortcuts of Microsoft Internet Explorer."

Polymeric LED Displays

The route to better displays might desert LCDs altogether. That's been true for years, but few of the competing technologies have made it from lab to retail—just as LCD still hasn't closed the price/quality gap with CRTs.

Here's another contender, from Delta Optoelectronics: Polymeric light emitting diodes (pLED), based on Dow's polyfluorene copolymer, a two-layer film that emits light when exposed to electricity. A quick piece in *PC Magazine* enthuses that pLED displays "are brighter than today's small LCDs, have richer color, can be viewed from a variety of angles without backlighting, and offer a high-speed refresh rate that the company says is more than a thousand times as fast as what's found on current LCDs." The displays also require very little power.

Unfortunately, after so many "any day now" display technologies, you have to say "show me the units." If the displays can be mass produced, scaled to reasonable sizes, and turned out at good prices, and crafted with much higher resolution than LCD, great: more power to them.

Toddler Software

A January 2001 *FamilyPC* roundup reviews nine new educational programs and gives Recommended seals to eight of them. Two of the reviews bother me, including the top-rated product, Knowledge Adventure's *JumpStart Toddlers Deluxe 2 CD Set*. This and Disney's high-rated *Mickey Mouse Toddler* both target children aged 18 months to 3 years, encouraging them to learn through play and exploration.

I thought it was well established by now that toddlers should be experiencing the real world—playing with blocks, shaping clay, crawling or walking around seeing non-virtual reality. Praising *JumpStart*'s "ability to hold the attention of restless toddlers" suggests that it's better to have a child sitting in front of that screen. This is good?

Big LCD Screens

PC Magazine for January 16, 2001 reviews an LCD screen that could make me drool—if I won the lottery. The Eizo Nanao FlexScan L771 offers native 1600x1200 resolution on a 19.6" screen and weighs a mere 20 pounds. It's a "5.6 megapixel" display based on the notion of counting each color as a separate pixel. Surprisingly, the inputs are strictly analog: the unit won't accept today's digital LCD signal. Otherwise, it seems like a fine machine, with no apparent defective pixels, smooth color changes, and good scaling of lower-resolution images.

There's one little problem: it costs $5,500—as the reviewer says, "two to four times as much as the rest of your system." On the other hand, I can't imagine adding a 20"-viewable CRT to either my home or PC: these displays are too heavy to handle and too big to fit. If cost is no object, the FlexScan could be promising.

Macworld for February 2001 reviews a 17.3" wide-format LCD screen from Silicon Graphics that seems reasonably priced at $1,400. It offers very high resolution (1600x1024), vibrant colors, and a reasonable viewing angle. Unfortunately, it does a terrible job of scaling; the only alternate resolution is 800x516, which yields blocky icons and text.

PC World for March 2001 discusses the new "cheaper" 17" LCDs and the Really Big Screens, including NEC's $3,899 20" LCD and Pioneer's $13,000 PDP-502MX 50" plasma screen. The article mentions four 17" displays, including a $2,900 Eizo Nano unit but also Samsung's $1,199 SyncMaster

170T. That's the lowest price I've ever seen for a 17" display, and the unit does include both digital and analog inputs.

Downsizing Removable Storage

What this world needs is another removable storage format—or maybe another half-dozen, all of them mutually incompatible. If that seems stupid to you, add "very small" before "removable" and maybe you'll buy it. A piece in the February 2001 *PC World* discusses several new devices, noting "an overabundance of standards threatens mass confusion."

Consider Toshiba's $599 MK2001MPL: a 2GB hard disk in the form of a PC Card. It's absurdly expensive as a hard disk (you're paying close to $500 for the form factor), but it should work on almost any notebook computer. That sets it apart from most of these other devices, with the partial exception of IBM's lower-capacity Microdrives—but then, Microdrives cost *even more* per gigabyte.

Then there's Flotek's Pokey: $250 for 6GB, $399 for 20GB. It's not that tiny (5x3x0.5") and it's limited by a USB connection, but you get a lot of portable storage at a reasonable price.

Three competing standards for pricey flash memory devices (CompactFlash, SmartMedia, and Memory Stick) make that field utterly confusing; now comes MultiMediaCard, smaller than the others (postage-stamp size) and even more expensive.

Last year, I noted that a new write-once miniature disc was being hyped; it's supposedly nearing the market. DataPlay discs are "half-dollar size" and store 250MB per side; this article doesn't mention a price, but I recall a $5 price point. I still wonder whether this one makes much sense, but I'm not a venture capitalist.

The article ends, as every good roundup of this sort must, with the "any day now" promise that holographic storage "will make today's magnetic memory as outmoded as punch cards." When will we get practical holographic storage? "Perhaps within a couple of years"—the same answer we've heard for, what, a decade now? Some day that may be true. Meanwhile, the most primitive forms of magnetic storage (hard disks) have proven remarkably resistant to overwhelming competition.

A separate "First Look" in the February 6, 2001 *PC Magazine* offers a four-dot review to Calluna's moveIT Drive—and I just don't get this one. Alfred Poor seems jazzed by the idea that this PC Card hard disk has the same capacity as a CD-ROM or CD-R but is faster and smaller. Great—but it's also $399! You're adding very little capacity to a notebook PC at a per-megabyte price that makes the Toshiba look good by comparison. I'm sure there's a market for this, but I'm puzzled.

FlyLight

Much as I seem to revel in putting down bizarre new products and categories, it's more fun to celebrate good ideas and worthwhile new products. Kensington's $20 FlyLight looks like a neat little device that fills a real need; if I owned a notebook computer, I'd go directly to www.Kensington.com.

The FlyLight (as described in the February 6, 2001 *PC Magazine*) is an LED light on a gooseneck with a USB connector at the other end. You plug it into your notebook (assuming you have a spare USB port), angle the thin gooseneck, and light up your keyboard (or reading material) with just enough localized light to work in difficult situations—while everyone else in your airplane row is watching the movie, for example. The light's supposed to take little enough battery power that your notebook's run time should be two minutes less per hour. LEDs don't give out a lot of light but they're extremely power-efficient.

Plastic Chips

The same February 6, 2001 *PC Magazine* has an intriguing "Pipeline" writeup about Plastic Logic, a new company that "allows manufacturers to print plastic onto a polymer substrate. The result is a plastic-based transistor that is inexpensive and flexible." It's not a threat to CPUs (slow and limited), but the cheapness (it's like inkjet printing) and flexibility could make the technology useful for displays.

The company says the technology doesn't require expensive manufacturing facilities. I didn't see the level of hype one expects for revolutionary new technologies; this one looks to be useful if it works out. Naturally, my final paragraph about polymeric LED displays applies here as well—but sometimes one of these techniques *does* work in production.

Multilevel CD

Consider this one an early warning—similar to plastic chips, but perhaps closer to product reality. *EMedia* for January 2001 discusses an announcement from TDK Electronics Corporation and Calimetrics. Calimetrics' MultiLevel Recording technology uses shades of gray to store more information on optical media. The first drives should record more than 2GB on ML discs (at the equivalent of 36X CD-R speed) while also serving as 12X CD-R/CD-RW drives.

So far so good—but don't DVD-R and DVD-RAM record even more than 2GB on the same size

disc? Of course they do. Currently, recordable and rewritable DVD media are expensive, and the drives cost considerably more than CD-RW drives. The new format will supposedly serve as a "bridge between recordable CD and recordable DVD technology." Of course, we don't know what the prices of these ML discs and drives will be (and won't until the end of this year).

As an ignorant observer, I'd have to wonder whether the new discs and drives will offer enough cost advantage to overcome compatibility issues. If, at that point, I can buy a recordable DVD blank for $10 or two ML blanks (with the same total capacity) for $6 total, I'd go for the DVD blank.

PlayJ: Free Music Legally?

Here's a "service" that pushes the boundaries of what people will tolerate for "free." PlayJ is a proprietary music format that embeds ads in the music files. EverAd (love that name!), the company behind this brainstorm, calls it "feels free" and hopes to extend it from music to software, games, and *ebooks!*

You can't burn the PlayJ files onto a CD-R or copy them to portable players, but PlayJ files will work with most MP3 software (including RealPlayer and Windows Media Player) once you add the PlayJ plugin. You can then listen to PlayJ tunes *free* (at, presumably, "near-CD" quality similar to most MP3 files) and legally.

One little catch: an ad takes up half of your screen. You can't reduce it, close it, or hide it, and it stays there as long as you're listening. The company's CEO says, "If it's a choice of free vs. paying, the consumer would rather put up with advertising. It's one banner, not 10 on a homepage."

How many people are so desperate for free tunes they'll give up 50% of the screen? It might make sense if you're not using the computer: dim the monitor and let the ads roll on. Otherwise, I believe this exceeds the acceptable-annoyance threshold.

I also wonder when advertisers will recognize one problem with schemes such as this and free ISPs. Are people who are so cheap that they'll put up with these intrusions really the most desirable customers for most products? Supposedly, Oracle is one of the early advertisers. I'm trying to form a mental picture of people who are likely customers for Oracle's software and who are so cheap that they'll give up half their computer screen for some free music. I draw a blank.

All the information and quotes in this piece came from the September 18, 2000 *Industry Standard*; I just hadn't gotten around to commenting. A quick check shows that PlayJ still exists. For a fine example of clueless record executives, I give you Karl Slatoff, VP of new media for BMG, one of the Big Five record conglomerates. "He compares the PlayJ model to using a popular song in a TV commercial, though with the former you get ads with your music and in the latter you get music with your ads. 'It's the same concept—using music to sell products.'" Sure it is.

Trends and Quick Takes

Your Personal Locker

We sometimes see the world through the narrow prism of our own interests. I was amused by a letter in the final issue of *Grok*, discussing the reasons that Internet retailing isn't doing so well. This person thinks "the biggest problem is that not-at-home consumers can't securely receive delivered goods." His prism: his company picks up and delivers dry-cleaning, "yet only a small number of families in each of the neighborhoods we serve have been willing to give us a try." His reasons? People aren't at home to meet the driver; there's no secure place to leave the stuff; and people aren't thrilled having unattended goods at their door.

As far as this goes, it's fairly perceptive, although it's lacking in some elements. I know that there's a dry cleaning shop at each of the neighborhood centers where we buy groceries, pick up hardware, or shop for "drug store"-type sundries. We use the cleaner that combines convenience with reasonable quality and turnaround; it's never more than a few minutes out of our way to drop off or pick up cleaning. I suspect that's true for most people in urban and suburban neighborhoods: coping with dry cleaning every few weeks just isn't a big deal. But it's certainly true that, in today's "leisure economy," most couples both work full time and "full time" seems to creep upwards from 45 hours (with lunch) rather than downwards.

Here's the writer's remedy: "I believe that bigger and more functional mailboxes can solve these kinds of problems for the entire delivery-based economy." Hmm. What would be needed here? Tall enough for to handle dry-cleaned dresses (say five feet tall at a minimum), big enough to handle typical packages from a variety of vendors, and *locked*—but with skeleton keys for every possible vendor. In other words, YourLocker, the real-world extra that you need to participate in the New Economy.

How big would YourLocker be? *Who would pay for it*? Would it be refrigerated? Finally, when you

add it all up, does this all encourage you to buy into the "delivery-based economy"?

Follow-up: zBox thinks they know how big this device should be: 24x21x32". The company plans to launch this product this quarter. It's locked, with a keypad; the user has a single code for all purchases—but zBox's "smart technology" generates a new code for each delivery person. The box is free—sort of: you pay at least $5 per month for the zBox Plan.

It's not refrigerated so forget groceries. It's not tall enough for the most important dry cleaning (dresses, tuxedos, full-length coats). But it must be great. According to *Computer Shopper*, "During beta trials, zBox found that consumers using the zBox increased their online and catalog shopping volume by 700 percent over the same period a year before." Aren't you desperate to *buy seven times as much stuff*?

IT's Coming!

Isn't hype wonderful? Dean Kamen has invented some remarkably useful devices. By now, most of you have heard of "It" or "Ginger"—whatever "It" may be. *[INSIDE]* (February 6, 2001) offered some comments on "news" coverage of this Emperor's New Gadget and the bizarre claims made for it. The always-sensible Steve Jobs says, "If enough people see the machine, you won't have to convince them to architect cities around it." "Build" or "design" cities is old-fashioned, particularly when you can verb a noun. Read carefully enough, Jobs can't be wrong in this case. If enough people see Doggie Diners, you won't have to convince them to design cities around them either; you'd be laughed at if you tried.

John Doerr says "It" will be "more significant than the World Wide Web." Somebody (Jeff Bezos, I think) claims that "It" will make Dean Kamen richer than Bill Gates.

The article goes on to include various speculations on what "It" might be (with most centering around some form of personal transportation, presumably one that doesn't add to energy shortages or pollution—which, these days, means it can't use either electricity or fossil fuels). The editor of *Scientific American*, Walter Mossberg of the *Wall Street Journal*, and graphic designer "and futurist" Richard Saul Wurman all offer their ideas, which mostly boil down to meaningless blather.

We do know that "It" is a publisher paying an advance much larger than the profits on all of my books put together, for a book about a topic that can't be named until "It" is unveiled. Now *that*'s effective hype. Who knows? Maybe Kamen really does have a fuelless magnetic-levitation frictionless high-speed skateboard with no safety hazards and with capacity to haul groceries. Sounds good to me.

Quote Without Comment

"Cheat Sheet," *The Industry Standard* 4:6 (February 12, 2001), p. 23: "**Earth's Lowest Elevation:** Amazon.com pledged to turn a profit by the fourth quarter, just a few weeks before ice is expected to cover the walls of hell."

Later in that same issue (p. 55), Cory Johnson discusses Amazon.com as "a great charity." He's a big Amazon fan and notes, "Its convenience and utility have convinced many that it's a business. But as a business Amazon has been an utter failure… And yet, as a charity Amazon has excelled… In 1999 and 2000 alone, America received more than $3 billion in subsidized books, music, and videos from Amazon." Even in the last quarter of 2000, each sale came in at a 6.2% loss—which is a lot better than the *26%* loss in the last quarter of 1999. "Now that's corporate giving."

Amazon lost $1.4 billion in 2000. As he points out, that's almost twice as much as Ford Foundation's annual giving. It's a cute article (isn't it great that Amazon subsidized books, not SUVs or junk food?) with an odd ending: "When America has to actually pay for the costs of its reading material, it will be a sad day indeed." Charming, if undermined by the graphic just below showing annual retail book sales (unit sales, not dollar sales) from 1996 through 2000, with the online portion broken out. Online bookselling played a role in the record-high 2.3 billion books sold in 2000—but it represented considerably less than 10% of those sales.

Review Watch

Digital Cameras

Grunin, Lori, and others, "Pix that click," *Computer Shopper* 21:2 (February 2001), pp. 122-8.

Three-megapixel cameras provide half the resolution of 35mm film cameras, but that's enough for many applications. The five units reviewed here cost $749 to $999. None of them scored as well as Epson's PhotoPC 3000Z ($999), which has been around for a while. As a result, there is no Best Buy, but the $999 Olympus C-3030 Zoom rates significantly higher than any of the others. The cheapest camera falls behind: Toshiba's $749 PDR-M70 offers below-average image quality, both as described and as illustrated in sample prints (which, unfortunately, lack a 35mm standard for comparison).

Graphics and Displays

Breen, Christopher, "Graphics cards," *Macworld* March 2001, pp. 92-3.

It's been odd that affordable Mac graphics cards have lagged so far behind PC cards for the past two or three years. For a while, only ATI made midrange add-on graphics cards for Macs. That's changing, but the gap is still there: "None of the cards delivered the kind of performance you see from their counterparts running on a fast PC"—possibly because none of them appear to use nVidia GeForce chips, which dominate fast PC graphics.

Three cards tie for four-mice ratings, but ATI's $280 Radeon Mac Edition gets the editors' nod for overall performance. It topped the competitors on three of four speed tests—but, although it's an AGP card, it won't fit in a Power Mac G4 Cube. Two cards from 3dfx, the $170 Voodoo4 4500 PCI and $230 Voodoo5 5500 PCI, also get four mice and are called "a solid choice for those with PCI Macs and a desire for reasonable frame rates at higher resolution." Two of the other cards have specific features to recommend them—but it's hard to understand $799 for Appian Graphics' Jeronimo 2000, the slowest card and one of two totally lacking 3D acceleration. Note that only the ATI includes DVD support. I found one aspect of these tests confusing. To wit, the ATI Rage 128 AGP graphics support that came with the test system (a Power Mac G4/500) outperformed most of the add-on cards on most tests; it's just not clear that anyone but gamers stands to gain much from these add-ons. (I'm not a Mac user *or* a gamer; I may be missing the benefit.)

Notebook PCs

Somers, Asa, "And then there was light," *PC Magazine* 20:4 (February 20, 2001), pp. 154-67.

This roundup covers eight "ultraportable" computers—weighing 3.7 pounds or less without AC adapter, with at least a 500MHz Pentium III, all priced between $2,300 and $2,900. All but one have 600Mhz or 700MHz CPUs with 500-550MHz SpeedStep modes; all but two have 12.1" active-matrix screens; half of the units provide 20GB hard disks, the others 12GB (with one 10GB slacker).

If you travel a lot and need a handy computer, these lightweights offer more power and better features than earlier ultralight generations, and the price premium isn't as bruising as it once was: note the lack of $4,000 beauties. You still give up lots of screen space, convenient access to CD-ROM or DVD drives, and—critical to touch typists—absolutely full-size keyboards on most models. The reviews are thoughtful, with illustrations and sidebars to help you decide whether you should stick with a heavier notebook.

Editors' Choices are the $2,649 HP OmniBook 500 and $2,500 IBM ThinkPad X20 34U. Both offer fine ergonomics and good features (they're the most full-featured machines in the roundup) along with good performance. Compaq's $2,868 Armada M300 and Sony's $2,399 VAIO PCG-SR17K both earn four-dot ratings; the Compaq is unusually thin, while the Sony actually weighs less than *three* pounds while offering some unusual features.

If you read this review, go to page 87 in the same issue. Bill Howard's column, "When light's not right," offers some good reasons that he believes "you'll be happiest with a 4- to 5-pound two-bay machine with a 14-inch display." It's a convincing list, particularly for fast touch typists.

Somers, Asa, "The price is right," *FamilyPC* 8:2 (February 2001), pp. 98-103.

The six family-oriented notebook computers in this roundup all cost less than $1,500 and come from vendors with good reputations for notebooks. (Toshiba and Sony may not be first-tier for desktops in the United States, but they're among the biggest notebook makers.)

Top rating goes to HP's $1,299 Pavilion N5135, with a slightly larger display than most low-priced notebooks and front-edge CD controls that work while the notebook is "off." Other Recommended seals go to Apple's $1,499 iBook, the most expensive unit but very cool, and Dell's $1,299 Inspiron 3800—uninspiring but solid.

Somers, Asa, "Upwardly mobile," *Computer Shopper* 21:2 (February 2001), pp. 114-19.

It appears that Ziff-Davis has one person reviewing notebook computers for all of its magazines—or maybe Asa Somers is a group pseudonym? This review includes five notebooks that "let you make a fashion statement without paying for it in power or performance." The minimum configuration includes a Pentium III-600, 128MB RAM, 14.1" screen, 6GB hard disk, CD-ROM drive, and 4MB graphics RAM. Prices range from $1,998 to $2,399.

The Best Buy rating goes to HP's $2,399 Pavilion N5190 for its features, even though it's the second-slowest performer and considerably heavier than some other notebooks. It must be the DVD drive—or those front-edge controls that let you use the HP as a CD player while it's "powered down."

If you're not so enamored of these features, you might prefer one of three systems that tied for sec-

ond place. Gateway's $2,378 Solo 5300CL is almost two pounds lighter than the HP and offers much better battery life (and better performance on every benchmark). Dell's $2,349 Inspiron 4000 weighs less than the HP but more than the Gateway and has mediocre battery life—but offers the best performance on all benchmarks. Toshiba's $2,199 Satellite 2805-S301 is heavy and only slightly faster than the HP (and the battery life's a bit worse)—but it has a DVD drive and it's a little cheaper.

As I read the reviews and consider the systems, the choice seems fairly simple. If you're primarily interested in DVD and CD playback, the HP shines. If you want to eliminate one-quarter of the weight, add an hour's battery life, and speed up applications, buy the Gateway. I never realized replacing a $50 CD player was such a vital role for a $2,400 notebook computer.

Printers

Long, Ben, "Multifunction printers," *Macworld* March 2001, pp. 90-1.

Wouldn't it be great to read a review that includes $199, $400, and $799 units and concludes that the $199 choice is a great buy? No such luck here. If you're a Mac user on a tight budget, the $199 Canon MultiPass C555 may suit your needs—but you're better off with the $400 Brother MFC-7400C and likely to be *much* happier with the $799 HP OfficeJet G85.

All three units handle all four "octopus" jobs: scan, fax, copy, and print. All use inkjet printing on plain paper; all can handle color throughout (including color fax). All three include OCR software.

The two cheaper units look and work like plain-paper faxes; the HP has a flatbed scanner, making it bigger but more flexible. The HP runs faster, does the best job as a computer printer, and offers much better scanning and copying. It gets the highest rating (four mice) and appears to better the other units in almost all respects. Incidentally, while all three connect via USB, you can add Ethernet connectivity to the HP with a $250 JetDirect print server.

Storage

Miastkowski, Stan, "Livin' large," *PC World* 19:3 (March 2001), pp. 106-16.

Big hard disks keep getting cheaper—and inexpensive hard disks keep getting bigger, although the ratios aren't linear. This article suggests that today's "sweet spot" is 40GB; that's probably right, although that's also a *lot* of hard disk unless you're editing videos or "borrowing" vast quantities of MP3 files. The review covers ten drives from four big manufacturers that sell direct to users: IBM, Maxtor, Seagate, and Western Digital.

Maxtor gets Best Buy nods for the $300 DiamondMax Plus 60 (60GB, 7200RPM) and $180 DiamondMax VL40 (40GB, 5400RPM). The larger Maxtor offered the best performance, but most disks offered very good performance. Seagate drives seemed to be slowest of the lot, while Western Digital's upgrade kits weren't as good as the competition. Overall, the reviewers found every disk to be worth recommending: "Everyone is building a good-quality drive."

Tax Software

Yakal, Kathy, "Tax-time bytes," *PC Magazine* 20:4 (February 20, 2001), pp. 186-8.

One pleasure in moving to *Cites & Insights* is that I can mention tax-software reviews while they're still meaningful. If you've followed "Review Watch" in the past or know much about the field, there will be no surprise this year. TurboTax Deluxe, now called Quicken TurboTax Deluxe 2000, gets the Editors' Choice nod (from this editor as well: I've used TurboTax for years). While it isn't mentioned in this review, MacInTax is now called what it is—TurboTax for Macintosh.

Kiplinger TaxCut Deluxe also gets a five-dot rating. The difference between TaxCut and TurboTax has never been enough to justify switching.

The Details

Cites & Insights: Crawford At Large, ISSN 1534-0937, is written and produced monthly by Walt Crawford, an information architect at the Research Libraries Group, Inc. (RLG) Opinions herein do not reflect those of RLG. Comments should be sent to wcc@notes.rlg.org. Visit my Web site: http://walt.crawford.home.att.net.

Our current motto is Hanlon's Razor: Never attribute to malice that which can be adequately explained by stupidity.

URL: cites.boisestate.edu/civ1i3.pdf