

Cites & Insights

Crawford at Large

Libraries • Policy • Technology • Media

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The Front

Being Sensible: Not Taking That ROAD

Those of you who follow me on Twitter or Mokum or Facebook may remember that, a while back, I inquired as to whether you knew of an easy way to get a current export of [ROAD](#), the International ISSN Center's Directory of Open Access Scholarly Resources. One person suggested that I *ask* them whether I could get such an export. So I did.

After I explained what I had in mind, I did get a dataset, and started trying to work with it. Given my limited resources (a fairly old, Core i3-powered, Toshiba notebook with 4GB RAM), that proved to be difficult—but I have colleagues who could probably have helped. (The dataset was 139MB; it's in MARCXML, which has a *lot* of overhead.)

And at that point, before requesting permission to pass the dataset along to these colleagues, I started thinking about things...and decided not to pursue the project.

What Project Would That Have Been?

In a way, similar to [Gray OA 2012-2016: Open Access Journals Beyond DOAJ](#) and [Gray OA 2014-2017: A Partial Followup](#)—that is, seeing how much gold OA publishing is being done by journals *not* listed in DOAJ.

Inside This Issue

The Middle.....	4
Technology.....	12

Of course, the “gray” projects had a subtext: they were based on two blacklists, and involved both expanding those blacklists and investigating actual article counts. I refer you to those publications for more detail, including the fact that most journal *titles* from the blacklists (once expanded) were for “journals”—journal names that didn't exist except as template-driven web pages.

This time around, I would have started with the supposedly-active journals in ROAD, around 30,424 at this writing. I'd remove those that are in DOAJ, around 13,674 at this writing. (Why "around"? I checked figures before writing this little essay, and both databases are changing all the time.) That would leave around 17,150 journals to investigate.

"Investigate" would mean looking at the journal site, seeing whether it was there, checking for fee existence and amount, and gathering at least one year's article counts—and probably noting which were covered in the Gray OA studies.

The result would presumably have been all or part of a *Cites & Insights* issue, before this publication shuts down (currently planned for the end of 2019, but see the next part of THE FRONT).

Why I'm Not Doing It

There are two basic reasons.

First, it would require more time than I could plausibly provide, even if I stopped my increased book reading and movie viewing and abandoned all the other *C&I* issues planned for this fall. At the point I made the decision, there were roughly 16 weeks before December, and I'd definitely need December to make sense of the data.

While it's a fair guesstimate that I've already looked at some 7,000 of those journals (those in *Gray OA*, discounting for lack of ISSNs in some of them), I didn't store ISSNs in the earlier project and wouldn't have current article counts, so I'd have to check all 17,000-odd URLs. That's more than 1,000 journals a week. Since I'd be starting from scratch on all of these journals (unlike a hoped-for *GOA5*, where more than 12,000 entries only require quick updating), three minutes per journal would be a conservative estimate. That means spending 50 hours a week *minimum*—and, frankly, there is no way I'd devote that level of effort day in and day out for an unfunded project, or probably even a funded one. (I've also found that I can't do more than two hours in a row without a break, not and retain a semblance of sanity, and I don't do DeveloperBro crazy hours at age 74.)

Second, based on sad experience with the *Gray OA* project, I question the likely impact. It's not that the *Gray OA* issues didn't get read—as of the end of August 2019, I count more than 5,700 downloads of the first part and, well, 1,700 of the second, although the vast majority of those were in the first year. It's that they didn't, by and large, change the conversation: most preditorials and other commentaries on "predatory" publishing still quote the wildly exaggerated (but peer-reviewed) "420,000 articles in 2014" figures rather than my 255,000 figure for 2014 (of which just under 114,000 articles were in journals that could have been covered in the "420,000" article study based on a small sample).

I believe I've established some credibility for the *Gold Open Access* series, and it's having some impact. I believe that the *Gray OA* project had

only a fraction of the impact, and see no likelihood that this larger study would do much better.

In other words, it's not worth it, at least not for me. It might make an interesting crowdsourced study, but I won't hold my breath. (Incidentally, the first *GOAJ* had more than 21,000 downloads in its first year.)

~~Can~~ Should *C&I* Be Saved?

As things stand, there will probably be three more issues of *Cites & Insights* after this one, with the final one carrying a December 2019 date.

If some of you find that unsettling, I guess I'd like to know why.
My reasons for shutting it down?

- Readership seems to have declined fairly dramatically since early 2018. Through 2017, I could reasonably predict that every real issue would have at least 500 downloads within the first month and usually more than 1,000 over the first year. *None* of the issues after 18:2 had even 300 downloads during 2018, and only two have passed 500 *total* by the end of August 2019. Only one of the 2019 issues has reached 400 (or 150!) downloads by the end of August 2019.
- I no longer feel as though I have anything worthwhile to say about copyright or most aspects of librarianship. Others (younger, more vigorous, better informed, better writers, smarter—or some combination of those) are doing great work; I don't see that my pointing at them is useful in the future.
- If I keep doing *GOA*—which I hope to—this journal will mostly appear in the last half of the year in any case. I'm not willing to stop reading books, going walking, etc., and *GOA* is the best use of the rest of my time from January through June or July.
- I'm old, and have a bit less energy, even though I'm blessed with reasonably good health.
- There are a *lot* of books to be read—ones I missed, one series of 41 books that I'm probably going to reread, and a whole bunch of new stuff from a growing range of writers I'm paying attention to. For too many years I was lucky to read one non-work-related book a month (if that); now, I think one a week is an awfully modest goal.
- There are a lot of movies to be watched, a fair number of TV shows worth watching or rewatching, a lot of music...and maybe even some traveling to do. Oh, and of course lots of good food to eat and good wine (some of it very local) to drink.

If it *did* continue, I would probably change the tagline from “Libraries • Policy • Technology • Media” to “Open Access and Other Stuff.” I’d probably aim for four or five issues per year, almost all in the second half of the year (as long as GOA continues). (The formal subtitle would remain “Crawford at Large,” ‘cuz I’m not about to get a new ISSN.)

What would it take to keep it going? Strong indication that it still matters to a fair number of people. Direct notes to me are fine. Actual sales of the [annual volumes](#) would be great, but I’m not holding my breath. (The complete set—volumes 6 through 18—takes up about 13” of shelf space and would cost \$420. If you’re wondering, other than my own copy, sales for each issue have ranged one to four, with none to date for 2018 and only one per year except in 2006, 2007, 2008 and 2014.)

Of course, I’m tagging even fewer items, even in OA, so the most likely outcome is that the December 2019 issue will be the final one, and that’s probably also the most sensible outcome.

I’m not going away just yet. If feasible, I’ll keep doing *Gold Open Access*. My blog might become more active (or not). I’ll maintain all three domains (the journal, the blog, my personal page) for at least three years after the last GOA. And, of course, I’m still active on Twitter, Mokum, and to some extent Facebook. (And for those who hadn’t paid attention: my no-blocking experiment on Twitter seems to be going pretty well. If Facebook would let me prevent autoplaying animated GIFs, I might try the same experiment on Facebook.)

The Middle

This rarely-occurring section has been used for items that don’t seem to fit neatly elsewhere and aren’t candidates for quick snark (that’s THE BACK). This decade, that’s turned out to be mostly futurism, forecasts and death-watches. This final version is a little different: a potpourri of stuff that didn’t fit anywhere else, dating as far back as 2010 and mostly before 2015 (with one exception). The order is chronological as tagged.

The mismeasurement of science

This post by Michael Nielsen appeared [November 29, 2010](#) at his eponymous blog. It begins:

Albert Einstein’s greatest scientific “blunder” (his word) came as a sequel to his greatest scientific achievement. That achievement was his theory of gravity, the general theory of relativity, which he introduced in 1915. Two years later, in 1917, Einstein ran into a problem while trying to apply general relativity to the Universe as a whole. At the time, Einstein believed that on large scales the Universe is static and unchanging. But he realized that general relativity predicts that such a Universe can’t exist: it would spontaneously collapse in on itself. To solve this problem, Einstein modified the equations of general relativity,

adding an extra term involving what is called the [“cosmological constant”](#), which, roughly speaking, is a type of pressure which keeps a static Universe from collapsing.

Twelve years later, in 1929, Edwin Hubble discovered that the Universe isn't static and unchanging, but is actually expanding. Upon hearing the news, Einstein quickly realized that if he'd taken his original 1915 theory seriously, he could have used it to *predict* the expansion that Hubble had observed. That would have been one of the great theoretical predictions of all time! It was this realization that led Einstein to describe the cosmological constant as the “biggest blunder” of his life.

The story doesn't end there. Nearly seven decades later, in 1998, two teams of astronomers independently made some very precise measurements of the expansion of the Universe, and discovered that there really is a need for the cosmological constant ([ref,ref](#)). Einstein's “biggest blunder” was, in fact, one of his most prescient achievements.

The point of the story of the cosmological constant is not that Einstein was a fool. Rather, the point is that it's very, very difficult for even the best scientists to accurately assess the value of scientific discoveries. Science is filled with examples of major discoveries that were initially underappreciated. Alexander Fleming abandoned his work on penicillin. Max Born won the Nobel Prize in physics for a [footnote he added in proof to a paper](#) – a footnote that explains how the quantum mechanical wavefunction is connected to probabilities. That's perhaps the most important idea anyone had in twentieth century physics. Assessing science is hard.

You could say that the rest of the essay expands on that final sentence, and the extent to which existing metrics for the “worth” of science may be bad for science.

I accept that metrics in some form are inevitable...every granting or hiring committee is effectively using a metric every time they make a decision. My argument instead is essentially an argument against *homogeneity* in the evaluation of science: it's not the use of metrics I'm objecting to, *per se*, rather it's the idea that a relatively small number of metrics may become broadly influential. I shall argue that it's much better if the system is very diverse, with all sorts of different ways being used to evaluate science. Crucially, my argument is *independent of the details* of what metrics are being broadly adopted: no matter how well-designed a particular metric may be, we shall see that it would be better to use a more heterogeneous system.

As a final word before we get to the details of the argument, I should perhaps mention my own prejudice about the evaluation of science, which is the probably not-very-controversial view that the best way to evaluate science is to ask a few knowledgeable, independent- and

broad-minded people to take a really deep look at the primary research, and to report their opinion, preferably while keeping in mind the story of Einstein and the cosmological constant. Unfortunately, such a process is often not practically feasible.

This is a fairly long and detailed discussion. It's worth reading and still very much relevant. I'll just add introductory boldfaced portions, each expanded on by one or more paragraphs.

Centralized metrics suppress cognitive diversity

Centralized metrics create perverse incentives

Centralized metrics misallocate resources

Worth reading. Thirty-five comments go on longer than the article. Some add value.

In multitasking, more than two tasks do not compute

This item is a relatively brief news story by Casey Johnston on [April 16, 2010](#) at *ars technica*, linking to a *Science* article which, of course, is paywalled. (I tagged another 2010 item on multitasking, but it's in *Harvard Business Review* and thus effectively paywalled unless you get there early enough in the month. Too bad: it's a good article.)

The gist here is one of what are by now many studies demonstrating what we tend not to want to believe: "multitasking" is mostly just task-switching, and most of us don't do it very well...and even worse if more than two tasks are involved. The third and fourth paragraphs:

Researchers found that, when single-tasking, subjects used both of their frontal lobes to manage the work. When there were two tasks and rewards in play, each half of the brain was devoted to managing each task and tracking the associated reward. We still can't literally do two things at once, but we can at least monitor both in relation to each other.

However, when researchers had a third task interrupt the second task, subjects' brains would start crashing: error rates shot up, and response times went way down. This suggests there is a strong physical limitation on how many things we can think about at once, namely, how many brain hemispheres we have. The study's authors note that the results may clarify many of the limitations in our decision-making and reasoning abilities.

But do note the last sentence in the first sentence: **We still can't literally do two things at once...** Driving and talking on the phone? There are good studies suggesting that you'd be better off driving drunk.

More than 50 comments, some of them essentially saying "but *I* can multitask just fine," e.g.:

Driving while talking on the phone... I find that easy. I can talk somewhat intelligently while stopping at all stoplights and not running people off the road.

Others do add to the discussion (and at least one wholly misunderstands the issue—yes, *of course* you can do one task while your computer's completing some other task and your washing machine is finishing your laundry! And then there are those who insist on thinking of people as meat computers...

Tools, Not Trends

Wayne Bivens-Tatum posted this [on October 25, 2011](#) at *Academic Librarian*—and while that makes it nearly eight years old, I believe the points WBT is making are still relevant.

The key paragraph is the first:

I've been writing lately about "keeping up." An important part of keeping up is knowing what tools and technologies you absolutely need to use, and what you can ignore for the time being. In academic libraries, it means knowing the tools that students really want and use versus the tools that trendwatching librarians claim they should be wanting and using. You can see some of those tools in the Educause Center for Applied Research [National Study of Undergraduate Students and Information Technology 2011](#). It's worth skimming to get an idea of what technology students use and how they use it. Those who believe that students avidly adopt every information technology and social media trend—and who tell us this is essential for librarians to do as well—might get a few surprises.

The rest is details, starting with the finding that most students (99%) still used old-fashioned email in 2011.

If 99% of the students are using email and it remains a potent form of communication, then I think it's safe to say that librarians shouldn't feel outdated using it in lieu of some trendier but significantly less adopted social media tool. Though it's easy to let it get out of control, email is still a remarkably useful communication tool, and one of the best for reflective, in-depth exchanges among people. That's why 99% of college students use it.

The figures in 2019? I have no idea—and that's *not* the point WBT's making. It's not that things don't change; it's more that the new doesn't rapidly and universally replace the old, at least not usually. And you may find that some of those examples still ring pretty true.

(I've dealt with this The New Always Replaces the Old nonsense for a very long time. A key note: when *Current Technologies in the Library: An Informal Overview* appeared in 1988, one negative criticism was that I

talked about the printed page and didn't include things like, I dunno, personal robotics—that is, that I discussed *current* technologies rather than The Next Surefire Not-Quite-Here-Yet Thing.)

How TED Makes Ideas Smaller

This piece by Megan Garber appeared on [March 6, 2012](#) at *The Atlantic's* website—and I'd argue it's as relevant as ever, and by the way takes a lot less than 18 minutes to read and absorb.

Garber harks back to the Chautauqua movement and how it was received (William Jennings Bryan *loved* it, Sinclair Lewis hated it) and similar responses to TED and TEDx.

The more things change, I guess. Compare those conflicted responses to the Chautauqua to the ones leveled at our current incarnation of the highbrow-yet-democratized lecture circuit: TED, the "[Technology, Entertainment, and Design](#)" conference. TED is, per contemporary commentators, both "[an aspirational peak for the thinking set](#)" and "[a McDonald's dishing out servings of Chicken Soup for the Soul](#)." It is both "[the official event of digitization](#)" and "[a parody of itself](#)."

Garber's key point, I think, is this:

But the ideas spread through TED, of course, aren't just ideas; they're branded ideas. Packaged ideas. They are ideas stamped not just with the imprimatur of the TED conference and all (the good! the bad! the magical! the miraculous!) that it represents; they're defined as well -- and more directly -- by the person, which is to say the persona, of the speaker who presents them. It's not just "the filter bubble"; it's [Eli Pariser on the filter bubble](#). It's not just the power of introversion in an extrovert-optimized world; it's [Susan Cain on the power of introversion](#). And [Seth Godin on digital tribes](#). And [Malcolm Gladwell on spaghetti sauce marketing](#). And [Chris Anderson on the long tail](#).

...

We live in a world of increasingly [networked knowledge](#). And it's a world that allows us to appreciate what has always been true: that new ideas are never sprung, fully formed, from the heads of the inventors who articulate them, but are always -- [always](#) -- the result of discourse and interaction and, in the broadest sense, conversation.

There's more—although it's a fairly short piece—and I believe Garber's case is clear.

Web Design Manifesto 2012

L. Jeffrey Zeldman posted this on [May 18, 2012](#) at [zeldman.com](#)—and, honestly, you need to see it for it all to make sense. The core: *his* personal site now uses fairly large serif type, well-ledged, in a single-column page with wide margins and nothing special going on.

Did I mention that it's *black* type? If not pure black, at least close to it, not the gray-on-white that's so bloody popular and hard to read.

Zeldman's page is not hard to read. Not at all. It's gloriously easy. (I normally force type to Berkeley; when I let the site override my options, I get ITC Franklin Condensed, which is also an excellent serif typeface.)

I'm not going to quote the text itself. It's excellent but really needs the context. Go read it: it's *really easy on the eye*.

By the way, he still uses the same design.

How to Determine If A Controversial Statement Is Scientifically True

This fairly long piece by Alan Henry appeared [June 20, 2012](#) at *LifeHacker*, and still reads reasonably well.

Every day, we're confronted with claims that others present as fact. Some are easily debunked, some are clearly true, and some are particularly difficult to get to the bottom of. So how do you determine if a controversial statement is scientifically true? It can be tricky, but it's not too difficult to get to the truth.

Every internet user has developed a healthy dose of skepticism that keeps us from being duped by things that don't pass the [smell test](#), but it's not enough to just *think* something might not be true. What if you think the statement might be true and you want to learn more? What if you want to respond to the assertion or engage in conversation but you don't know enough to do so?

I'll stop quoting the introduction because it goes off the rails in the third paragraph, using vaccine "controversies" as a *difficult* topic. You know, like climate change and the roughly-spheroid shape of the Earth.

Anyway: the section headings are:

- First, learn to avoid confirmation bias
- Your first line of defense: Search Google, Snopes, and other popular web sites
- The big guns: search public journals and contact science advocates
- Extra credit: visit your local library and consult librarians and reference materials
- A last word: research is great, but don't forget to think critically

Given the vagueness of "science advocates," I'd probably switch the third and fourth suggestions. Still, not bad. Lots'o'comments, not helped by the very first one claiming that scientists just write articles that support whoever pays them and citing good old "We Distort, You Deride" as a source. They do get better after that.

Invasion of the cyber hustlers

This snarky essay by Steven Poole is dated [December 6, 2012](#) at *NewStatesmanAmerica*, but “first appeared in the 10 December 2012 issue of the *New Statesman*.”

I am, to be sure, a sucker for an essay with this tease:

From Jeff Jarvis to Clay Shirky, a class of gurus are intent on “disrupting” old-fashioned practices like asking us to pay for valuable content. Meanwhile, web giants like Google and Apple jealously guard their profitable secrets.

and this lead paragraph:

Like every other era, the internet age has its own class of booster gurus. They are the “cybertheorists”, embedded reporters of the social network, dreaming of a perfectible electronic future and handing down oracular commandments about how the world must be remade. As did many religious rebels before them, they come to bring not peace, but a sword. Change is inevitable; we must abandon the old ways. The cybertheorists, however, are a peculiarly corporatist species of the Leninist class: they agitate for constant revolution but the main beneficiaries will be the giant technology companies before whose virtual image they prostrate themselves.

The whole thing is quite lovely, even if I may not agree with all of it. (I’m not saying I don’t, but that it doesn’t matter.) A few of the BigThinkers pilloried here may have faded away, but some haven’t and others take their place. And, as was demonstrated decades ago, *being wrong doesn’t matter if you’re a BigThinker*. So Jeff Jarvis’ beloved Coursera hasn’t undermined universities yet? Give it time. So print books—and book-length expositions—didn’t disappear by 2015, and in fact print sales are growing? Nah: must be fake news. So Clay Shirky’s absolutely certain projection that...oh, but where to start? At least that ProfoundThinker Seth Godin admits that his purpose in writing a book is to *build his public reputation*:

Books do matter for the cyber-babbler on the make; it’s just that they matter in a different way. Jarvis told this inspirational story in the acknowledgements of his most recent book, *Public Parts*, published in the US last year: “[Seth] Godin is to blame for my writing books. He sat me down one day and said I was a fool if I didn’t write one – and I would further be a fool if I thought that the book was the goal. No, he said, the book would build my public reputation, which would lead to other business. It has.” There you go: if you write a book with the book as the goal, you are a fool. A book’s correct function is that of a business card that gets you invited to where the real action is. Anyone who thinks literature, thought and argument are noble pursuits in themselves is an idiot. This is the proud yawp of the ultramodern philistine.

Speaking of accurate predictions, here's Jarvis again, this time on why newspapers are impractical:

“Production is expensive. Sharing is inexpensive and it scales. Facebook will soon serve a billion people with a staff equivalent to that of a large newspaper.”

Wow. The *Washington Post* has about 740 staff writers (and probably a few hundred other staff), whereas Facebook gets by with only...a bit under 40,000 staff. Well, yes, it serves 2.3 billion, so make that, say, 16,000 staff per billion users. Not some bloated monstrosity like WaPo or the *New York Times* (around 1,300 writers and a few hundred others)...

Fun stuff.

Man Leaves Internet; Is Still Himself

John Scalzi posted this on [May 2, 2013](#) at *Whatever*—and you may have forgotten the experiment that the post discusses.

That headline is basically the summation from Paul Miller, who spent a year offline (on purpose, he wasn't in jail or anything) and [has now posted an article to tell folks what he learned about himself in the process](#). He'd hoped that being offline would help him get in touch with the “real” him; he found out basically that he was pretty much the same person online and offline. Being off the Internet didn't make him into a better or purer person, it just made him a dude who didn't go online.

And, well. Yes. Not terribly surprised about that. The online world can be distracting and alienating, but it is often so because people are often inclined to be distracted and alienated. If you're one of those people, it doesn't matter where you go or what you do, you'll still be inclined toward distraction and alienation. You could be in a monastery on the slopes of the Himalayas and get distracted by the snowflakes. No satori for you! On the other hand, *dude*, snowflakes.

There's more to it (partly personal and quite amusing), but yeah...

As is frequently the case with *Whatever*, the comments are worth reading, even if they do include two linked puns that may be the most atrocious puns based on Zen Buddhism that I have ever had the misfortune to encounter.

What is the revenue generation model for DuckDuckGo?

That's the question Gabriel Weinberg (CEO of DuckDuckGp.com) attempts to answer at Quora, most recently updated on June 14, 2018.

DuckDuckGo has been a profitable company since 2014 without storing or sharing any personal information on people using our search engine. As we like to say, what you search on DuckDuckGo is private, even from us! We're proud to have a business model for a web-based business that's profitable without making your personal information

the product. I'm happy to tell you all about how we make it work (and how other companies can, too).

...

It's actually a big myth that search engines need to track your personal search history to make money or deliver quality search results. Almost all of the money search engines make (including Google) is based on the keywords you type in, without knowing anything about you, including your search history or the seemingly endless amounts of additional data points they have collected about registered and non-registered users alike.

In fact, search advertisers buy search ads by bidding on keywords, not people. It makes intuitive sense, too. If you search for 'car', you are more likely to respond to a car ad than something you searched for last week.

This keyword-based advertising is our primary business model.

Weinberg also discusses why Google does so much tracking: because it's an ad agency as much as it's a search engine.

Interesting article, and an appropriate close to this miscellany.

Technology

Much of this may be tech-related nostalgia—most items are fairly old—but some of it might be amusing or still relevant. Four broad headings (which turned into three during the writing), the usual mostly-chronological order within a heading.

The Net and the Web

Dr. Laura, Associated Content and the Googledammerung

This piece by Scott Rosenberg appeared [August 20, 2010](#) at *Wordyard*, and while it hasn't aged all that well, it's interesting as an artifact. (Rosenberg founded *Salon*, and I could make a remark about “not aging well,” but maybe that's all I need to say.

The topic is Laura Schlessinger's self-immolation by repeatedly using a certain racial pejorative on her talk show—and Rosenberg's desire to learn more about the incident. He went to Google News, and was surprised to find the top return was a badly-written (but *great* for SEO) piece from a hack content farm—the kind of thing Google News was supposed to prevent. And gets to this:

I still feel lucky to be able to use Google a zillion times a day, and no, Bing is not much use as an alternative (Microsoft's search engine kindly recommends *two* Associated Content stories in the first three results!).

But when Google tells me that this drivel is the most relevant result, I can't help thinking, the game's up. The Wagner tubas are tuning up for *Googledammerung*: It's the twilight of the bots.

That's the paragraph that, in my opinion, *really* hasn't held up well. First, I'd argue that Bing is now an excellent alternative and has been for some time (it's my default search engine because I find the results less cluttered and more usable). Second, of course, the last two sentences propose some sea change that has pretty clearly not happened.

One commenter noted that DuckDuckGo (yes, it was around in 2014) “returned entirely relevant results.” I use DuckDuckGo quite a bit—especially if I'm searching something “controversial”—and like it. DuckDuckGo gets some or most of its search results from...Bing.

The Joy of Listservs

That's Farhad Manjoo, writing on [August 5, 2010](#) at *Slate*, with the tease “One of the Internet's earliest innovations is still one of its best.”

During one frenzied weekend in 1986, Eric Thomas, an engineering student in Paris, invented what would become one of the most important things on the Internet: the listserv. Actually, what he created was [LISTSERV](#), a network program to manage e-mail discussion groups. Those with access to the fledgling Internet had been using mailing lists since the 1970s, but the lists always had to be set up manually—only a list manager could keep the group's participants up-to-date, and that took a lot of work. With LISERV came automation: a moderator would set a few simple rules—who could access the list, how often mail would go out, etc.—and then users could manage their own subscriptions.

That's the start. It's not a long article (with *Slate* it can be hard to tell, given the frequency of ad interruptions); Manjoo does recognize that LISERV is a trademark (but used as a generic); even in 2010 topical lists were past their heyday—and they find that unfortunate. [Manjoo's pronoun choice,]

The last two paragraphs—and I'll argue that one sentence in the first of the two is a lot less true than it used to be:

McCullagh points out that different social norms apply to e-mail, too. For example, comments on Facebook tend to be relentlessly positive. Because posts there are tied to your real-life identity, it's difficult to criticize someone sharply on his Facebook page; if you do, it's considered rude, like swearing at someone in his own house. Mailing lists, meanwhile, are very accepting of flame wars. As [James Fallows notes](#), these can sometimes be annoying—especially if you're not a party to them—but the best flame wars can be thoroughly absorbing and informative, and I've even seen flame wars change people's minds.

This leads to perhaps the best thing about e-mail lists: They are just about the only medium online devoted exclusively to *discussing things*. You start a Facebook group to popularize an idea (1 million people against hipsters!), you [start a Tumblr](#) to make fun of the idea ([Look at This Fucking Hipster](#)), and you start a Twitter account to get a lot of people interested in your pithy observations about the idea. E-mail lists, by contrast, are devoted to getting people to talk about an idea. What's more important than that?

Lists are still with us, but continue to decline in importance. Manjoo is also still with us, and I wonder whether their career arc has been upward or sideways (they're mostly at what used to be a great national newspaper these days). They [despise Trader Joe's](#), and I have no idea what's up with that.

On being wrong

Doc Searls posted this on [August 7, 2010](#) at his eponymous weblog (remember when blogs had that longer name?)—and a key portion of it is a dystopian prediction that, at least so far, has been, well, wrong.

The main thrust of the post is interesting, but that's not what I'm highlighting. Here's the key portion of what struck me:

What if the Internet does not persist as an environmental condition?

It certainly won't persist in the forms we know it best right now. Phone and cable companies, by whose graces most of us access the Internet, have self-serving ambitions for the Net that are at variance from the ideals of the Net's founding protocols. Phone companies, especially mobile ones, want to bring the Net inside their billing systems, with [metered charges for data use](#) and national boundaries across which customers [pay huge additional fees](#) for "roaming." Cable companies [wish to become "content providers"](#), as publishing, broadcast and entertainment goods move from paper, airwaves and cable channels to new all-digital forms that display on [glowing rectangles](#) of all kinds.

In other words, I wonder if the world in which Tac and others like him (including myself) find themselves adapting so well isn't doomed to become Business As Usual 2.0.

The reality appears more the opposite: more mobile phone companies have "unlimited" data plans and I know of *no* broadband service that charges for crossing national boundaries. OK, sure, my broadband (one of Comcast's cheapest plans) has a usage limit, but that limit is 1024GB/month, and you can exceed it for two months before changing plans or paying more. I'm guessing Doc Searls would not have considered one terabyte of data per month to be "metered data" for personal use in any real sense even in 2019, much less in 2010.

Why keeping up with RSS is poisonous to productivity, sanity

Jacqui Cheng posted this article on [September 3, 2011](#) at *ars technica*. I'd just deleted a piece bemoaning the fact that browsers mostly stopped showing RSS buttons in 2010 or 2011. That's still true, but it's also still true that RSS hasn't entirely gone away. (Just checked: My Feedly account *had* 854 sources, but of those, 204 were unreachable. After a mass Unfollow, I have 650 sources, of which only 160 have posted anything within the past three months. At one point, I had considerably more than 1,000 feeds.)

Cheng isn't bemoaning a lack of RSS activity: quite the opposite, but of course this is from 2011.

On the surface, RSS seems great for those of us who want to keep up on everything happening on the Internet—and I mean *everything*. As for me, I use RSS regularly at five minute intervals for pretty much the entire time I'm awake. I use RSS for both work and personal reasons—it helps me keep tabs on practically every tech site that matters in order to ensure that I'm never missing anything, plus it lets me make sure I'm on top of my friends' and families' lives via their blogs. If not for RSS, I could never keep up on anything. Or would I?

Twice in as many weeks during the month of August, I was forced to go without my precious RSS feeds. The details don't matter—there were technical limitations on my Internet connections at the time—but my experiences during and after *The Great Breaks From RSS* really opened my eyes to how unnecessary it may actually be to my life. Not only did I manage to stay on top of the important tech stuff just fine, I was faster and more productive while working. I also made more conscious decisions about whose personal ramblings I actually wanted to read at any given time, increasing my focus and understanding of those posts while removing the heavy weight of guilt and obligation to keep up with *everything*.

Dare I say it, but the quality of my life *and* work improved when I went without RSS. And I think it might for you, too.

OK, Cheng's a special case: a big part of her job is to keep *very* current. Did you check RSS "every five minutes" during its peak? I certainly didn't—but too many of us do something similar, and that's *really* what this article is about. (What's the last time you checked your smartphone for texts? Facebook? Twitter? Whatever page you're addicted to?)

When Cheng went to her feeds after the first outage, there were "literally thousands of items piled up from the day before."

And when I ended up sifting through them all, I realized that I hadn't missed a single story doing things the "old fashioned" way—rather, by following all these feeds, I was instead seeing hundreds of iterations on the same handful of stories. And I was wasting time going through them all day long.

And here's what I believe the real takeaway of this article is, and it's every bit as relevant in 2019:

Making a conscious (or unconscious, as the case may be) decision to scan through 20-something RSS items a few times per hour means that you're constantly interrupting what you were doing in order to perform another task. Even if it's a brief task, the very act of breaking your concentration means it will impact the focus and flow of whatever got shoved to the background, and it takes longer to resume that task later when you're done with the RSS scan.

Don't believe me? There have been numerous studies that have shown that humans are notoriously bad at multitasking in this way. Research scientist Eric Horvitz [found in 2007](#) that Microsoft employees took an average of 15 minutes to return to the task they were working on after being interrupted by a phone call, e-mail, or instant message. A 2009 report in *Proceedings of the National Academies of Science* said that [heavy multitaskers tended to be more readily distracted](#) by extraneous information than their more focused peers. And a report published in *Science* in 2010 confirmed that single-taskers could perform work just fine, double-taskers had to split their brain processes to monitor things separately, and [three or more tasks simply caused hell to break loose](#).

Sure, one can undoubtedly argue that keeping an e-mail or Twitter client open requires similar brain demands as regularly checking an RSS client. But as I pointed out earlier, a huge portion of RSS items tend to be repetitive from the reader's end, so the tradeoff offers very little reward for your time. (At least that e-mail from your perpetually confused coworker offers the potential for a fresh chuckle.)

What follows is the reality even for 2010: only 6% of internet-using "consumers" used an RSS feed at least once a week. But I think it's more about the multitasking than about RSS. (Personally? I check Feedly precisely once a day. Usually something over a hundred posts—and usually I read perhaps three items out of that hundred. When/if *C&I* goes away, so will some feeds.)

The comments are all over the place (and *ars technica* comments are frequently worth reading).

One prime source of RSS feeds for me was, and still is, library blogs. How many of those are there? In 2010, I counted 1,304 "liblogs" (see *The Liblog Landscape 2007-2010*, now out of print); I have no idea how many of those are still around or how many more have emerged since then. (Am I curious? Don't ask...)

Google Just Made Bing the Best Search Engine

This piece, by Mat Honan on [January 1, 2012](#), is very much of its time—because the complaint was probably valid for its time, but certainly isn't

now. Understand: I use Bing and DuckDuckGo most of the rest. But, well, here's Honan's complaint:

I just switched the default search engine in my browser from Google to Bing. And if you care about working efficiently, or getting the right results when you search, then maybe you should too. Don't laugh!

Google [changed the way search works](#) this week. It deeply integrated Google+ into search results. It's ostensibly meant to deliver more personalized results. But it pulls those personalized results largely from Google services—Google+, Picasa, YouTube. Search for a restaurant, and instead of its Yelp page, the top result might be someone you know discussing it on Google Plus. Over at SearchEngineland, [Danny Sullivan has compiled a series](#) of damning examples of the ways Google's new interface promotes Plus over relevancy. Long story short: It's a huge step backwards.

Remember Google+? It actually had a fair-sized OA community for a while, and it was such a desert in general that it was sort of likable. But the tumbleweeds took over, and Google shut it down.

There's more, mostly about the extent to which Bing had already improved. And then there are comments: 455 of them, starting with one that also probably made more sense in 2012:

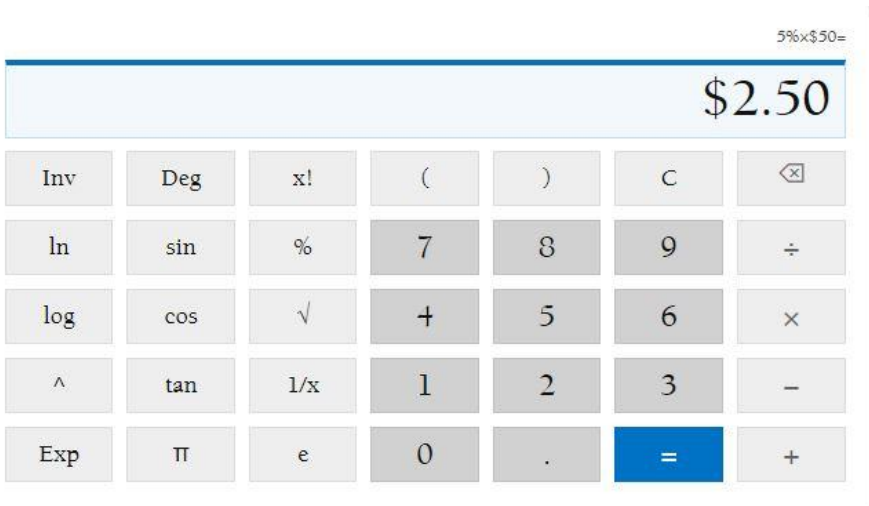
Search for "5% of \$50" in Google (minus quotation marks).

Search the same thing in Bing.

Compare results.

Enough said.

Huh. I did that search in Bing. I got this:



which is pretty snazzy (although the equation is pretty small type). So I did the same thing in Google and got:

5% of (US\$ 50) =
2.5 US\$

[Disclaimer](#) - [More info](#)

Bill	<input type="text" value="50.00"/>		
Tip %	<input type="text" value="5%"/>	-	+
Number of people	<input type="text" value="1"/>	-	+
Tip			\$2.50
Total			\$52.50

which is not quite as neat, but the top box is directly useful.

Worth noting: DuckDuckGo and StartPage don't offer a direct answer. Wolfram Alpha does, but only after grumping at me. Perhaps the Bing/Google comparison was meaningful in 2012? I didn't go through many comments. (Several of them noted how easy it was, back then, to turn off the Google feature Honan disliked—and even his article noted that, but he felt that needing to opt out was enough to make Bing a better search engine. Maybe, maybe not. Or maybe that headline would *attract lots of readers* to plow through Gizmodo ads...)

And that's it. Started with 14; ended with five—and most of the rest just weren't there, even though I'd checked tags just a few months ago.

PCs and Other Devices

This may be a case where “why bother?” comes up a lot as I open older tagged items—e.g., five of the first seven I looked at (the others were 404s and countwalled items, a “countwall” being where you get X free articles per time period). Several items about what was *or wasn't* replacing PCs, why iPads or Chromebooks were *or weren't* The Future, and one pretty sensible piece suggesting that PCs, tablets, smartphones and Chromebooks will coexist for a very, very long time. What's left?

90 percent of US net users don't know from ctrl-F

A brief item by Cory Doctorow, posted [August 20, 2011](#) at *boingboing*—and if that's still true, it's a shame. It's a brief comment on and quotation from a slightly longer item by Alexis C. Madrigal on [August 18, 2011](#) at *The Atlantic*—so what follows is from the original.

This week, I talked with [Dan Russell](#), a search anthropologist at Google, about the time he spends with random people studying how they search for stuff. One statistic blew my mind. 90 percent of people in their studies don't know how to use CTRL/Command + F to find a word in a document or web page! I probably use that trick 20 times per day and yet the vast majority of people don't use it at all.

"90 percent of the US Internet population does not know that. This is on a sample size of thousands," Russell said. "I do these field studies and I can't tell you how many hours I've sat in somebody's house as they've read through a long document trying to find the result they're looking for. At the end I'll say to them, 'Let me show one little trick here,' and very often people will say, 'I can't believe I've been wasting my life!'"

Does this always work, on every application and on every device? Possibly not—but it's sure worth a try! Among other things, ctrl-F is how I count articles in many OA journals, and it's sure as heck how I deal with a 280-item queue in disc Netflix (e.g., finding the next disc of a series we're watching).

Then there are ctrl-C, ctrl-V, and—oops—Ctrl-Z, but first there's ctrl-F (Copy, paste, and undo, if you're among the 90%.)

Welcome to the Microsoft Store

I had to include this Farhad Manjoo piece, posted April 25, 2012 at *Slate*, if only because of the tease:

It's a blatant rip-off of the Apple store. And it just might save the company.

Here's the lede:

Three years ago, shortly after Microsoft announced that it would launch its own retail stores, I [offered the company some unsolicited advice](#): Copy Apple "relentlessly, unabashedly, and completely." At the time, Microsoft was still the world's largest technology company. While it had clearly lost its mid-'90s mojo, it still seemed unlikely that it would slip behind Steve Jobs' juggernaut in revenue, profit, or market value. (Apple has since eclipsed Microsoft in all three metrics.) Yet it was clear even then that Apple's stores were a key factor in its miraculous growth, and Microsoft badly needed a similar retail venture.

In fact, Microsoft has regained its lead in market value, although it's a much smaller company in revenue and profit—but then, it's mostly a software and *cloud services* company, where Apple is mostly a smartphone company. And it's cloud services that has made the difference...a difference that's a little hard to show off in a glitzy showroom

Manjoo oohs and ahhs over Microsoft's Stanford Shopping Center store. It's still there, and as it happens I finally visited in early 2018 (as part of the process leading up to a protastectomy, I had four hours between the first and second parts of an appointment at Stanford Hospital, and spent that time having lunch at, and exploring, Stanford Shopping Center). You can read the article for his take. I didn't find the shop especially "fun," but that's also true of Apple Stores. Neither was it especially bustling. And, to be honest, I'm pretty sure the stores aren't what's saved Microsoft.

Technostalgia: Remembering our first computers

This lovely piece of nostalgia was edited by Sean Gallagher and appeared [December 29, 2013](#) at *ars technica*. The tease and the lede:

Ars editors remember the computers that began their digital lives.

Being a bunch of technology journalists who make our living on the Web, we at Ars all have a fairly intimate relationship with computers dating back to our childhood—even if for some of us, that childhood is a bit more distant than others. And our technological careers and interests are at least partially shaped by the devices we started with.

So when Cyborgology's David Banks recently offered up an [autobiography of himself](#) based on the computing devices he grew up with, it started a conversation among us about our first computing experiences. And being the most (chronologically) senior of Ars' senior editors, the lot fell to me to pull these recollections together—since, in theory, I have the longest view of the bunch.

Considering the first computer I used was a Digital Equipment Corp. PDP-10, that theory is probably correct.

It goes from there, for four pages and quite a few interesting discussions. Some of the more recent reminiscences include an Epson Equity 386SX in early 1987; the Commodore Vic 20 with 3.5KB RAM (boosted to 16KB with a cartridge) and tape drive; an IBM PC in 1986—the one with no hard drive but up to a massive 512KB RAM; and more.

Nearly 300 comments, with a wide range of other examples.

Me? The first computing device that I programmed was an IBM 188 Collator, with 64 bytes (I believe) of honest-to-Gaia visible core memory, the heart of the UC Berkeley Doe Library circulation system that I designed, programmed and ran starting in 1968. Personal? a Morrow Micro-Decision MD2 with, yes, two diskette drives, running CP-M, with either 64K or 128K of RAM, running WordStar and Personal Pearl database (both

bundled), around 1983. That's the computer I used to write *MARC for Library Use*.

Why Some Schools Are Selling All Their iPads

This article by Meghan E. Murphy appeared on [August 4, 2014](#) at *The Atlantic*—and I suspect it's still quite relevant. The tease is important:

Four years after Apple introduced its popular tablet, many districts are switching to laptops.

So the question isn't whether all the kids staring at screens is better or worse educationally than less tech-heavy routes; it's *what kind* of screens they should be staring at, and whether the screen should come with a keyboard. I have my opinions on the question *not* discussed here, but I'm not an educator... this paragraph gives me pause, but again...

[Whether the iPad is the ideal “interactive learning” device is] a question that has been on many minds since 2010, when Apple released the iPad and schools began experimenting with it. The devices came along at a time when many school reformers were advocating to replace textbooks with online curricula and add creative apps to lessons. Some teachers welcomed the shift, which allowed their students to replace old poster-board presentations with narrated screencasts and review teacher-produced video lessons at any time.

Also worth noting: when the tease says “laptops” it mostly means Chromebooks.

An interesting article. Hillsborough, NJ split the difference: it gave iPads to 200 kids and Chromebooks to another 200 or so—and after a year's testing, sold the iPads and distributed several thousand Chromebooks.

While nobody hated the iPad, by any means, the iPad was edged out by some key feedback, said Joel Handler, Hillsborough's director of technology. Students saw the iPad as a “fun” gaming environment, while the Chromebook was perceived as a place to “get to work.” And as much as students liked to annotate and read on the iPad, the Chromebook's keyboard was a greater perk — especially since the new Common Core online testing will require a keyboard.

Another important finding came from the technology support department: It was far easier to manage almost 200 Chromebooks than the same number of iPads. Since all the Chromebook files live in an online “cloud,” students could be up and running in seconds on a new device if their machine broke. And apps could be pushed to all of the devices with just a few mouse clicks.

There's more discussion, and some who are all for the iPad. And it turns out that Hillsborough also had 3,000 Nexus tablets, “handed out by

Google as part of a new pilot program.” From the description of a classroom setting, it appears that there’s no room for boring old books.

OLPC’s \$100 laptop was going to change the world — then it all went wrong

Speaking of schoolroom computing devices, here’s Adi Robertson on [April 16, 2018](#) at *The Verge*.

In late 2005, tech visionary and MIT Media Lab founder Nicholas Negroponte pulled the cloth cover off a small green computer with a bright yellow crank. The device was the first working prototype for Negroponte’s new nonprofit One Laptop Per Child, dubbed “the green machine” or simply “the \$100 laptop.” And it was like nothing that Negroponte’s audience — at either his panel at a UN-sponsored tech summit in Tunis, or around the globe — had ever seen.

After UN Secretary-General Kofi Annan offered a glowing introduction, Negroponte explained exactly why. The \$100 laptop would have all the features of an ordinary computer but require so little electricity that a child could power it with a hand crank. It would be rugged enough for children to use anywhere, instead of being limited to schools. Mesh networking would let one laptop extend a single internet connection to many others. A Linux-based operating system would give kids total access to the computer — OLPC had reportedly turned down an offer of free Mac OS X licenses from Steve Jobs. And as its name suggested, the laptop would cost only \$100, at a time when its competitors cost \$1,000 or more.

Then Negroponte claims that the price would go *below* \$100 and that they’d make “literally hundreds of millions of these machines” available to children. Then the two demonstrated the cranks (to recharge the battery) as reporters watched, in a moment of pure triumph:

Annan’s crank handle fell off almost immediately. As he quietly reattached it, Negroponte managed half a turn before hitting the flat surface of the table. He awkwardly raised the laptop a few inches, trying to make space for a full rotation. “Maybe afterwards...” he trailed off, before sitting back down to field questions from the crowd.

The moment was brief, but it perfectly foreshadowed how critics would see One Laptop Per Child a few years later: as a flashy, clever, and idealistic project that shattered at its first brush with reality.

If you remember the OLPC at all, you probably remember the hand crank. It was OLPC’s most striking technological innovation — and it was pure vaporware. Designers dropped the feature almost immediately after Negroponte’s announcement, because the winding process put stress on the laptop’s body and demanded energy that kids in very poor areas couldn’t spare. Every OLPC computer shipped with a standard power adapter.

That's just the start of the story. Remember how OLPC wouldn't even accept an order for less than a million of them? And it got some orders. But it couldn't sell \$100 machines:

OLPC pushed the laptop's cost to a low of \$130, but only by cutting so many corners that the laptop barely worked. Its price rose to around \$180, and even then, the design had major tradeoffs. The XO-1 was easy to take apart — there were even a few spare screws inside its handle. But things like the screen could only be replaced with OLPC-specific parts. The solid-state storage was sturdier than a traditional hard drive, but so expensive that the XO-1 could hold only a single gigabyte of data. Some users complained that the one-piece rubber keyboard fell to pieces after too much typing. The internet-sharing system barely worked, and it was quickly removed from Sugar.

When OLPC actually *did* produce machines in 2007, the price was \$400 for people who would buy one and have another go to a student, so make it \$200. In all, 600,000 machines were sold in 2007.

The story continued and got more complicated, and Negroponte ~~got bored~~ moved on. The OLPC Foundation distributed a bunch of tablets, but they were Motorola Xooms. A study of the first big deployment of XO-1s (in Peru) found that they weren't improving kids' math or language skills. And, in a few years, OLPC pretty much shut down.

Not entirely, to be sure. Some countries were still using XO-1s or similar devices, albeit not one per child. The OLPC Association claims it shipped three million XO (1 and others) over a decade, even though the current model has the same crappy screen resolution as the original and "less memory and storage than a budget smartphone."

There's a lot more here. Negroponte claims credit for laptops getting cheaper. I question that (I've never been a Negroponte fan), but it's true that, as I write this, you can buy a *new* name-brand Chromebook for \$140 (Samsung, 3.2GB RAM, 16GB SSD storage, 11.6" screen, Celeron CPU) or a used one for \$73 (both from Amazon; Target offers a \$160 Acer; BestBuy has new Dell Chromebooks at \$149 and refurbished Acers and Lenovos at \$90-\$95).

Here are a couple of paragraphs from later in the article. One shows an attitude that I'm not sure how to characterize; the second is just plain interesting:

And even today, co-founder Mary Lou Jepsen believes that laptops are vital for education. "Better teacher training only can get you so far when many of the teachers paid to show up don't and many more are illiterate. Giving children access to information enables them to keep learning, to keep asking 'why' and 'why not.'"

There's surprisingly little hard data about the long-term impact of OLPCs on childhood education, though. Zamora points to some case studies for individual countries, and says OLPC wants to commission

more comprehensive research in the future. But the organization has mostly focused on anecdotes and distribution numbers as markers of success. “OLPC was always very averse to measuring how well they were doing versus the traditional school system,” says Gros. “There have only been a very limited number of attempts to actually measure how well students were doing with OLPC versus not, because it was very hard to do.”

“Education in spite of the teachers” would make an odd slogan... And there’s this neat little paragraph:

Thirteen years ago, OLPC told the world that every child should get a laptop. It never stopped to prove that they needed one.

It’s a long and quite interesting article, and ends:

Years ago, I was one of the people who bought into One Laptop Per Child’s early hype. I yearned for a cheap computer that I’d never have to plug in. I swooned over its adorable design. (Those little ears!) I vaguely believed the crank was real, even after I saw an XO-1 firsthand without one. I became, and remain, a huge fan of the Eee PC that followed it. But I’d never actually used the laptop until a couple of months ago, when I ordered one off eBay on a whim.

Besides a missing battery, my XO-1 works perfectly, or at least, as perfectly as I could expect from a decade-old computer. I’ve showed off its apps to my colleagues, although it’s so slow that some wander away while they’re launching. Whatever people say about its ruggedness, the hinge feels fragile in my hands. It is eminently a children’s machine, not an all-purpose laptop. My adult brain is already trained on other operating systems, and my fingers barely fit the rubber keys.

But I’ve still never seen anything like it.

More than seventy comments. Here’s one I appreciate:

I guess I’m a cynic or maybe just more grounded in reality (also having spent plenty of time working in developing countries probably shaped my views). The problems OLPC faced seemed glaringly obvious to me right from the beginning. **Over the years I’ve noticed that well meaning people in western countries never actually seem ask what kind of help people in developing countries want or need.** [Emphasis added.]

And at least one claims that OLPCs are doing *just fine* in some countries.

Stop trying to innovate keyboards. You’re just making them worse
Peter Bright’s [January 7, 2014](#) piece at *ars technica* is a howl of pain that could probably be said by almost every touch-typist who’s moved from a desktop to a notebook, or from one brand of notebook to another, or...

The key is the tease:

The less standard a keyboard is, the worse it is.

Bright offers examples with photos and discussion. It's better read in the original. I sympathize (although I'm now a seven-finger typist, thanks to a severed nerve, so no longer rely on muscle memory for the right side of the keyboard).

Much of the discussion has to do with function keys—and that discussion made me realize that *I almost never use those keys anymore*—largely because my aging Toshiba with its combined rows messed things up enough that I can rarely be sure just what keystroke combination will *yield*, say, F8.

The keyboard I remember most fondly was back in my desktop days: Microsoft's Natural, a partly-split keyboard that was much easier on the hands. It took me only a day or two for full muscle memory to adapt.

The piece involves some good discussion as to *why* changed layouts are awkward, especially for touch typists:

The reason it's awkward is that in spite of being a touch typist, I don't really know where the keys are. In fact, there's research that suggests that *because* I'm a touch typist, [I don't really know where the keys are](#). I don't consciously think about the physical position of the keys. My fingers just know where to move.

That sounds about right. And let's not even discuss Dvorak, where the Clear Advantages turned out to be largely mythical.

More than three hundred mostly-cogent comments. Didn't read all.

TIME's Machine of the Year, 30 Years Later

This brief piece by Harry McCracken appeared [January 4, 2013](#) at *Time*, and it's a fitting end to this section as a reminder of just how long PCs have been around.

McCracken's announcing a 30-year commemoration of the only time *Time's* Person of the Year was a machine (they reissued the issue in digital form).

When TIME put together the issue, the PC revolution was still young. (The vast majority of homes didn't yet have one.) But it wasn't *that* young: The MITS Altair 8800, the first PC that mattered, came out in 1975. In 1977, it was followed by the Apple II, Commodore's PET 2001 and Radio Shack's TRS-80, the first truly consumery, ready-to-use machines. And another half-decade of evolution occurred before TIME commemorated the PC's arrival so memorably.

In retrospect, what the 21-page Machine of the Year cover package captures isn't the beginning of the PC so much as the end of the beginning. The industry still had room for a bevy of hobbyist-oriented, sometimes downright rudimentary computers from Apple, Atari, Commodore, Osborne, Radio Shack, Texas Instruments, Timex (!) and others. None of them had futuristic features like a graphical user interface and a mouse;

most ran their own operating systems and weren't compatible with anything else on the market.

There's a bit more. McCracken notes that "clones" (basically, computers running MS-DOS/PC-DOS) weren't yet a thing and this about Apple:

The issue does make fleeting reference to two upcoming Apple computers. The first, the Lisa, was formally introduced shortly after the issue appeared. The second was the Macintosh — although the issue calls it both the Apple V and the "Mackintosh" — and it showed up a year after that. They were the first two computers to commercialize the point-and-click interface which originated in the Alto system which Xerox designed in its PARC lab but never put on sale.

The Lisa was an important product which failed, in part because it cost \$10,000; the Mac became the PC industry's longest-running, most influential line of computers. Conceptually, every modern PC — including those that run Windows and Linux — descends from it.

I won't argue with that.

Miscellany

A few items that don't fit in either of the other categories.

Smartphones do too much: convergence is giving way to divergence

Saad Fazil wrote this on [March 17, 2013](#) at *GigaOm*—and while it may oversell what was and is happening, it's a useful reminder that, even six years ago, some people bucked the "everything in one" view of smartphones.

For years, the holy grail of personal tech has been convergence. Now that we essentially have a version of that in the form of smartphones – which allow fairly sophisticated computing for most daily needs, from accomplishing work to playing music – ironically many of us are discovering the need to extract some of those functions and instead carry multiple devices, such as a smartphone, a tablet, and a smartwatch all at once.

I call this trend divergence; let's look at a few factors that are driving it.

Was it a trend? Is it a trend? Or was/is it a realization that we're not all the same and don't need the same things?

Fazil's factors: increasing complexity; horizontal solutions (not sure I even understand that one); master of one. The third one—the desirability of devices that do one thing *really well*—never went away, thus the ongoing success of the Paperwhite and good digital cameras. The first one may not be helped by the choice of examples:

As an example, Google Glass is arguably a better form factor to [capture a video while taking a roller coaster ride](#) than trying to hold onto your

phablet. And a [Pebble Watch](#) provides a simpler and easier interface to view and control music while on the go. Ironically, Moore's Law is also playing a big role in divergence of devices: The ability to fit more power in limited space is crucial for these new form factors to work.

Remember Google Glass? Played much music on your Pebble Watch lately?

Windows and PHP are snowballs. Respect them.

We finish this section (after discarding four items) and this shorter-than-expected roundup with Avdi Grimm's [December 27, 2016](#) piece at *Virtuous Code*. The start:

A young developer newly embedded in the enthusiast programmer community could be forgiven for believing certain truths to be self-evident: that most people use Apple computers. That most websites are written in Ruby, NodeJS or Java. That most tech jobs are at Internet app startups.

The truth is little different:

- [About 90%](#) of personal computers run Microsoft Windows.
- [80% of websites](#) are written in PHP (WordPress alone now accounts for 27% of all websites).
- Relatively speaking, hardly any programmers are working at Internet app startups.

Those numbers may have changed, but probably not a lot. Grimm wondered what traits the first two might have in common.

At first the two seem almost nothing alike. Certainly they come from two very different backgrounds: Windows, with the unimaginable corporate weight of Microsoft behind it; PHP, starting out with no corporate backing but with an endless swarm of eager novices tinkering and showing their friends.

But as I thought about it more, I realized that these two products *do* share one thing in common: an almost maniacal focus on backwards compatibility.

The rest of the discussion expands on this and how the focus on compatibility makes PHP and Windows “snowballs”:

What do Windows and PHP have in common? They are both snowballs that have been slowly rolled over decades, and which have never surrendered a single ounce of the snow (or leaves, dirt, gravel, lost mittens...) that they've accumulated.

They are clunky, idiosyncratic, slow to evolve... and dominant. Despite the concerted efforts of numerous challengers furiously trying to chip away at their position, for years on end.

A bit earlier, there's an example of why what seems foolish from a modern developer's perspective—carrying that old baggage instead of forcing users to shape up:

But then you visit the control room of a plumbing fixture manufacturing plant where the computers are all running a Windows-based control program purpose-built for just this one industry, an application which had its last major update in the Windows 95 era, costs \$10,000 a seat, and which has sold fewer than a thousand licenses over its entire lifetime.

And then you multiply that one example by 100,000 or a million different niche verticals. Ugly little specialty applications, built on APIs long consigned to the deprecation bin of history, still chugging away on Windows XP boxes, Windows 7 boxes, and now Windows 10 boxes.

And there it is.

Masthead

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