Cites & Insights

Crawford at Large

Libraries • Policy • Technology • Media

Volume 15, Number 7: July 2015

ISSN 1534-0937

Walt Crawford

The Front

The Open Access Landscape: An Interim View

If you read <u>Walt at Random</u>, you'll be aware that for the last two or three months I've had a post every Friday looking at one subject area in terms of gold OA activity through the end of 2014.

The full set of subject discussions that extend this summer's *Library Technology Report* issue *Open Access Journals: Idealism and Opportunism* has been posted, and will appear on Fridays from now through September 11, 2015.

I've created a PDF ebook that combines all of the posts with the following refinements:

- Since it's a single book, I eliminated redundant explanations from chapters 2-29, leaving only text that's significant for the particular chapter.
- ➤ Each "book chapter" already has a second figure, not in the blog posts, showing stacked bars for each year with the number of free, paid and unknown-status articles.
- ➤ I added a paragraph to the Fees section for each chapter offering the following information, all based on 2014 numbers: maximum potential revenue from APCs, assuming there were no waivers or discounts; the average charge per article in APC-charging journals; the average charge per article for all articles in the subject area; and the median APC based on article count for articles involving fees: that is, the dollar amount at which half of the articles in APCcharging journals in 2014 cost that much or more and half cost that much or less. That median number is in some ways the most telling number for fee levels; it ranges from \$105 to \$2,177 (no, medicine is not the highest, although it's by far the highest total revenue amount, the only one in the nine-figure range).

The PDF has hotlinks for the table of contents and table of figures and tables. The title is *The OA Landscape 2011-2014*: An Interim Subject View

Later, I'll start working on a much more ambitious book that complements the Library Technology Report rather than extending it. That effort will involve rethinking some of the grading and revising some grades; changing much of the analysis so that it's based on 2014 rather than 2013; attempting to integrate at least 200 or so 2014 titles and possibly some portion of the "non-English" titles; backfilling some numbers...and maybe using a May 2015 DOAJ download as the foundation, rather than sticking with the May 2014 one. Best guess is that this effort will take most of the summer; my target is to have it ready by September 14, 2015 or before. Then, I'll start working on ways to fund and/or justify an entirely new in-depth 2016 study of the OA landscape 2011-2015.]

Getting the PDF of *An Interim*Subject View

This PDF will *not* be available directly via Lulu, and indeed, won't be for sale directly at all. It will, however, be used as an enticement for those of you who either care about this OA research or care about *Cites & Insights* to step up to the plate.

Inside This Issue

Perspective: Thinking About Libraries and Access,	
Take 2	. 4
Porchactive: A Fory Words Part 1	11

To wit: I'm soliciting donations of \$25 or more to <u>Cites & Insights</u>. You can donate from the home page. When I receive your donation (that is, the Pay-Pal notice, which appears with your email address) I'll respond with two links: one to Dropbox for the PDF ebook, one to a special closed Lulu address where you can buy a paperback version for \$7 plus shipping. The PDF doesn't have DRM. I count on your honesty and good will to not distribute huge

numbers of copies, but anybody contributing personally who wishes to send the PDF to their library as an institutional resource is encouraged to do so.

For a donation of \$50 or more, you'll get the interim edition—and when the more extended book is done, you'll get that as well, in an exclusive edition that has hotlinked table of contents and table of figures/tables. (That book *will* be available from Lulu, probably for \$40 ebook, \$45 print book, but neither of those versions will have hotlinks.)

All donations will be considered as encouragements for me to continue the OA research and also continue *Cites & Insights*.

To provide a better idea of what the book includes, here's Chapter 16 (except that, for the two-column *Cites & Insights*, I've had to shrink tables and figures to fit).

16. Library Science

Library Science includes bibliography, archives and museums and some aspects of information science (that did not appear to be based on computer science). It's not the smallest set of journals (two others are smaller), but it was the smallest set of articles in 2013 (second-lowest in 2014): 77 journals that published 1,363 articles in 2013 and 1,460 in 2014.

Grades

Grade	Journals	%J	Articles	%A	A/J
A	56	73%	1,213	89%	22
Free	53	95%	1,158	95%	22
Pay	3	5%	55	5%	18
В	1	1%	37	3%	37
Free	1	100%	37	100%	37
С	1	1%	60	4%	60
Unk	1	100%	60	100%	60
D	19	25%	53	4%	3
Free	18	95%	53	100%	3
Pay	1	5%		0%	0

Table 16.1. Library science journals and articles by grade

Table 16.1 shows the number of journals and 2013 articles for each grade; free, pay and unknown numbers; and average 2013 articles per journal. Since there are no over-\$1000 journals, APC-charging B grade journals, free or APC-charging C-grade journals or unknown D journals, those lines are omitted. Boldface percentages are percentages of all journals or articles; others are percentages of the grade above.

Library science journals are distinctly atypical in that the APC-charging journals published *fewer* articles per journal than the free ones, but there are so few APC-charging journals that this may not mean much.

The percentage of D journals is slightly on the high side but accounts for very few articles, and includes these subgroups: C (ceased), four journals with no 2013 articles; D (dying), one journal with three articles; E (erratic), one journal with three articles; H (hiatus?), two journals with 12 articles; S (small), 11 journals with 35 articles.

Article Volume (including all of 2014)

	2014	2013	2012	2011
Journals	70	71	74	70
%Free	96%	96%	95%	94%
Articles	1,400	1,303	1,406	1,288
%Free	96%	96%	94%	93%

Table 16.2. Library science journals and articles by date

Table 16.2 shows the number of free and APC-charging journals that actually published articles in each year (including *all* of 2014), how many articles those journals published, and what percentage of journals and articles were free. The single journal with unknown APC is omitted.

These are somewhat unusual numbers, as the very high percentage of non-APC journals and articles actually *increased* in 2013 and 2014; after a significant increase in OA activity from 2011 to 2012, there was an apparent (but possibly not entirely genuine) decrease in 2013—and a return to 2012 levels in 2014.

Looked at on a journal-by-journal basis, 36 journals published more articles in 2014 than in 2013; eight published the same number; 33 published fewer articles in 2014. In terms of significant change, 31 journals (40%) published at least 10% more articles; 15 (19%) published roughly the same number; 31 (40%) published at least 10% fewer articles, including seven that—as of mid-April 2015—do not show *any* 2014 articles.

	Journals	No-Fee %	Articles	No-Fee %
Medium	5	80%	349	83%
Small	31	90%	680	93%
Sparse	41	98%	334	97%

Table 16.3. Library science journals by peak article volume

Table 16.3 shows the number of journals in each size category (omitting prolific and large journals,

which don't exist among OA library science journals), 2013 articles for journals in that group, and what percentage is or is in no-fee journals. Only one journal published more than 100 articles (or more than 65 articles, for that matter) in a year. This is one case where library science does follow the overall pattern: larger journals are more likely to charge fees, although the numbers are very small.

Fees (APCs)

APC	Jour.	%Fee	%All	Art.	%Fee	%All
Low	2	50%	3%	46	84%	4%
Nominal	2	50%	3%	9	16%	1%
None	72		95%	1,248		96%

Table 16.4. Library science journals and articles by fee range

Table 16.4 shows the number of journals in each fee range (omitting High and Medium, since there aren't any—the highest APC is \$400) and the number of 2013 articles for those journals. There are so few APC-charging journals that comments about relative balance are pointless. It may be worth noting that only one of the two nominal-fee journals published any articles in 2013 or 2014.

APCs could have yielded \$15,006 in 2014, for an average of \$267.96 per article in fee-charging journals or \$10.28 (the lowest average) overall. The median APC for articles where APCs are involved was \$206, among the ten lowest.

Starting Dates and the Gold Rush

Year	Total	Free%
Pre-1960	1	100%
1970-79	1	100%
1980-89	1	100%
1990-91	1	100%
1992-93	1	100%
1994-95	2	100%
1996-97	6	100%
1998-99	5	100%
2000-01	2	100%
2002-03	9	89%
2004-05	6	100%
2006-07	16	94%
2008-09	8	100%
2010-11	14	79%
2012-13	4	100%

Table 16.5. Starting dates for library science OA journals

Table 16.5 shows library science OA journals by starting date, including the percentage of journals started in a given period that currently don't charge APCs. With so few APC-charging journals, there's no real sense of a "gold rush," although it is true that three of the four started between 2006 and 2011, the period that seems to represent a gold rush overall.



Figure 16.1. Library science OA journals by starting date

Figure 16.1 shows much the same information (with markers so that the separate starting points for fee journals are visible) and also shows the growth trend in library science journals.

Year	Journals	Articles	Art/Jrnl
Pre-1960	1	33	33
1970-79	1	9	9
1980-89	1	21	21
1990-91	1	8	8
1992-93	1	5	5
1994-95	2	41	21
1996-97	5	40	8
1998-99	5	237	47
2000-01	2	21	11
2002-03	9	168	19
2004-05	5	77	15
2006-07	15	243	16
2008-09	7	124	18
2010-11	13	247	19
2012-13	4	89	22

Table 16.6. Library science articles per journal by starting date

Table 16.6 shows journals that actually published articles in 2013, when they started, and average 2013 articles per journal. The 1998-99 time period stands out for fairly large numbers of articles—just as 1996-97 stands out for very few.

Overall, this is a group with relatively small journals and very few APC-charging journals, where OA has stayed fairly steady over the past few years.

It may not be clear from Figure 16.2 but should be clear from earlier tables that the number of articles in APC-charging journals has declined—while the number of articles in the single journal that's "unknown" has grown since 2012. Meanwhile, no-fee OA journals published slightly more articles in 2014 than in 2012, and about a hundred more than in 2013.

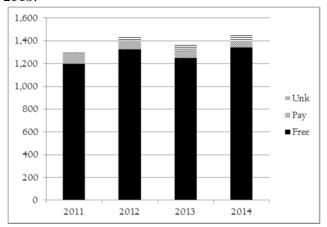


Figure 16.2. Library science articles by year.

Changes in PDFs

In case that horizontal line doesn't make it clear, this section is *not* part of Chapter 16. Instead, it's a note about changes in Cites & Insights that you may or may not notice.

On my seven-year-old (or is it eight?) Gateway notebook, I was using Adobe Acrobat 9 along with Word 2010. Acrobat 9 didn't play well with the newer Word: the extension to create PDFs directly from within Word (using Acrobat, not Word's own PDF facility) didn't work, although print-to-PDF did.

I couldn't justify paying twice as much to upgrade Acrobat as I'd spend for MS Office, so I made do. That meant—given certain infelicities in Word's own PDF process—that you got two choices (after I'd wasted hours and hours trying to figure things out):

- The print-oriented two-column 8.5x11" C&I, prepared by using Acrobat as a printer driver, was reasonably small (Acrobat does excel at "distilling") and such typographic features as boldface showed up, but hyperlinks did not work: the text was underlined, but clicking on it did nothing at all. There were also no bookmarks for headings, a minor point.
- ➤ The online-oriented one-column 6x9" "on" version, prepared using Word's built-in PDF

functions, *did* have functioning hyperlinks (and maybe bookmarks?), but did not show boldface and yielded much larger files.

I've now (mostly) switched to my new (relatively low-end) Toshiba Satellite, Windows 8.1, and Office 2013. I still couldn't see paying more than twice as much for Adobe Acrobat as I did for Office 2013—heck, almost as much as I paid for the computer itself—so I looked for an alternative. (Given how "well" Adobe Reader XI works with Windows 8.1 unless I have Windows pretend it's actually Windows 7—which it offered as a choice using its compatibility tool—I'm increasingly reluctant to have *any* Adobe software, but that's just me.)

I've installed Nuance Power PDF. So far, it looks pretty good—and it does (a) integrate with Word and Excel and (b) offer a surprising range of control over the PDF creation process. It does not "distill" as well as Acrobat, but hey, bandwidth and disk space are practically infinite these days, right?

So starting with this issue, the two-column editions will be larger (per page) than they were, but the one-column editions will be smaller than they were. Both editions should handle boldface and have working hyperlinks. I'm hoping both editions will have working bookmarks if you open the left-hand panel.

(The real test—the ability to produce a book that mixes Word sections with lots of photos with slightly-smaller-page PDFs and produce a single PDF that retains full graphic quality—will come later. That's for my wife's family history/geneaology books, and if it doesn't work, I'll re-install Acrobat 9 and use it as a printer driver only for that purpose. I'll be surprised if that proves to be necessary.)

Perspective

Thinking about Libraries and Access, Take 2

Nearly ten years ago I wrote THINKING ABOUT LIBRARIES AND ACCESS—and I'm not including a link because I'm reprinting that essay at the end of this one, followed by brief "nine years later" notes.

I'm writing this before I look back at that essay, and this set of personal beliefs is really more about OA in general, where I think it is and where I think it might (and might not) be going. Note the flag above: PERSPECTIVE, not INTERSECTIONS (which I use for

most OA discussions, since OA is at the intersection of technology, policy, media and sometimes libraries).

These are my beliefs, not flat statements of The Truth or really even predictions. I believe they're reasonably well-informed beliefs, but they're still beliefs. You may believe differently—and you may be right. In some cases, I hope you're right and I'm wrong.

The Green Problem

All of my research on OA focuses on gold OA—journals that provide all refereed articles for free to all readers on the internet, without registration, charges or authentication.

That's mostly because it's research I can do as an independent scholar, but also because gold OA is clearly real OA: you have access to the final article, as soon as it's published; you can cite it; you can use it.

When it comes to green OA—where the final article is behind a paywall at the time of publishing but some version might be available on some repository at some point—I'm less sanguine.

That's partly because green can't provide any relief to library budgets until some Magic Day When All Journals Become Peer-Review Managers: it's all or nothing.

Until "then"—some great gettin'-up mornin' that I regard as only slightly less probable than the dawn of universal peace among all nations, religions and groups—Green OA means articles that are more difficult to find, may or may not be identical to the published version and are thus not clearly citable, and may well be embargoed for some length of time.

I think Rick Anderson has it exactly right: green OA can only work if it works badly (I don't have a precise link at the moment, but that's the gist). If the big publishers saw any chance that green OA would become a threat of any sort to their profits, they would most certainly clamp down on permissions going forward—and I suspect some of them would find a way to do so retroactively as well.

Elsevier's recent actions should offer some clue: for-profit publishers really don't want *meaningful* green OA. And why should they?

The "visions" I've seen from green-only advocates strike me as magical thinking: They require either a miracle or that commercial publishers aren't reading the visions and paying attention (which, come to think of it, would also be a miracle). (I'm neither the only nor the first commentator to call this magical thinking, to be sure.)

I'm not against green OA; I think repositories are great things, arXiv is doing great work, and so on. But

I also don't believe green OA can predictably provide fully useful and timely access. It may be better than nothing—but, I suspect, only as long as it works badly.

The Likelihood of Universal OA

Where are we at now? In 2014, more than 400,000 articles appeared in OA journals. That's probably 15% to 20% of all scholarly articles (estimates of total article counts vary, and such estimates are beyond my expertise/abilities).

You can add those articles available via green paths, but with the caveats in the previous section: they may not be authoritative versions; they may not be citable; they may be delayed for six months, a year, or more...

What's the total? I have no idea.

How long will it take to get to Total OA—where every scholarly article is freely available as soon as it's "published" (whatever that means)?

I don't believe I'll be alive to see that wondrous day. On good days, I anticipate being around another 30 years (on bad days, I dread the possibility of being around longer than our finances can handle, but that's another essay that I hope never to write). To be honest, I doubt that *you'll* be around to see that wondrous day, no matter how young you are.

I hope I'm wrong. I believe I'm right. I just don't see a path that leads to 100% OA.

What about 50% OA? That might happen during my lifetime. It might not. It requires that scholars start moving from subscription journals to OA journals, I believe—and that libraries start to cancel subscription journals.

The growth rate of gold OA is probably slowing. In some fields, it's gone negative—according to my research, there were fewer gold OA articles in 2014 than in 2013 in fields such as agriculture, computer science (essentially flat), economics (a tiny decline), education, language & literature, law, philosophy (another tiny decline) and zoology. On the other hand, medicine—by far the largest area—grew by 20% or so, and a number of other fields saw substantial growth.

Given funding and pressure from funders, it's quite possible that biomed and medicine in general could reach Majority Gold OA in the near future (where "near" could mean five to 20 years—but I'm conservative on this sort of thing). For the humanities and social sciences? Probably not (I'm an admitted if quiet skeptic on huge grant-funded initiatives in this area, but I could be wrong).

There's a related issue:

When Libraries Will See Relief

There are many good reasons to support OA: access by researchers in developing nations and those affiliated with the 99% of institutions in developed nations (conservatively) that can't afford all the journals their scholars could use; access by independent scholars; access by "ordinary people" who want to understand things.

There is also economics: the damage that continuing price increases is doing to academic library budgets.

If you believe academic libraries only exist to transfer scholarly articles from authors to researchers, there's no problem: shut down the libraries, have an administrative assistant in the provost's office handle the big deals and IT handle authentication, and save all that staff money. You'll have a campus without a library, which to me isn't a college or university at all, but that will free up money. (This should be a strawman, but I've read arguments—including some by narrow-minded OA proponents—that seem to suggest that academic library budgets should be *entirely* available to use for supporting OA or journal publishing in general.)

If you believe academic libraries serve many other purposes, including serving as long-term records of civilization's achievements, then the drastic cuts in book budgets and other library budgets should be cause for alarm and effective gold OA (that is, gold OA that actually starts to replace or shrink subscription journals without adding APCs so high that there's little or no savings) should help.

Has it so far? I don't think so. Will it any time soon? I wish I could be optimistic...

If all scholarly articles were published in OA journals operating with SciELO's efficiency, there would be *enormous* savings. Even at the much higher prices (lower efficiency?) of *PLOS ONE* there would be substantial savings. At the prices charged by some big subscription publishers for so-called "hybrid" offerings? Not so much.

That shouldn't surprise anybody. Elsevier and friends are businesses—incredibly profitable businesses. They're not about to cut those profits out of good will, and they've demonstrated an ability to keep squeezing those stones tighter to get a few more drops of blood.

If scholarly publishing is *just* a business and, worse, if gold OA is regarded as "just a business

model" subject to subconversion to keep those profits coming in indefinitely, then OA isn't going to do libraries any good.

On this one, I'll throw up my hands: I don't know what to believe or expect. My Candide-ish persona wants to believe there will be cost savings (and libraries will be able to keep some of that money to rebuild book collections and improve service). Let's let it go at that.

What Publishers Do & Charge For

I'm trying to avoid a linkfest in this essay, but you can readily find various discussions of what journal publishers do (and charge for)—and some attempts to break down the long lists.

I believe that almost all OA and subscription publishers do responsible jobs of managing manuscripts and peer review. (When I say publishers I'm not including all of the "publishers" with their fleets of would-be "journals.")

I believe that some publishers of both stripes do valuable copyediting. I've read too many complaints not to believe that some publishers (or, really, some journals) do disruptive copyediting—and a growing number, especially in OA, don't do it at all and are quite clear about that. I have no opinion on this matter, but it's clear that many scholars don't think their work requires editing. (I'm not a traditional scholar; I suspect *Cites & Insights* would be better with an editor or copyeditor, and I believe editing has generally improved my traditionally-published work. There is, of course, no possibility that *C&I* will have an editorial staff!)

Beyond that? It depends.

For many fields, a good template provided to authors takes care of layout—and some mathematicians and others have done their own layout (using LaTeX) for years.

Promotion or marketing articles may be a valuable service—or it may be something better handled by institutions.

And so on...

What it boils down to: I believe some publisher expenses are warranted in all circumstances, most may be warranted in some circumstances, and unbundling might make sense—especially when the publisher added-value is asserted to be \$3,000 or \$5,000 or more.

And, oddly enough, that leads us to...

Free and Small?

By now you should know the OA paradox: for 2013 at least, just over two-thirds of gold OA journals were free: they did not charge APCs or other fees, depending on sponsorship or volunteer/subvented labor. For 2013, just under two-thirds of *articles* in gold OA journals were in journals that charge APCs or other fees. For 2014, counting only journals that actually published articles in 2014 and ignoring "unknowns" (journals that probably have APCs but don't say what they are), the percentages are just slightly different: just under two-thirds of journals (65.9%) are free, while almost *precisely* two-thirds of articles (66.6%) involve charges.

I find it enormously encouraging that the shift from free to pay between 2013 and 2014 is so tiny but the fact remains that there's a disjoint situation here: on average, fee-charging journals publish about twice as many articles as free ones.

I believe there's a natural and meaningful correlation here: It's a whole lot easier to produce a small journal without author-side funding than it is a large one. Consider the numbers (2013):

- For journals publishing 1-19 articles per year, 78% are free and they publish 79% of the articles.
- Moving up to 20-34 articles, free still dominates: 74% of journals and 73% of articles.
- At 35-59 articles, free's still major but less dominant: 63% of journals, 62% of articles.
- ➤ Move up to 60-99 articles, what I might call medium-sized, and it's an even split: 50% of journals are free, publishing 50% of articles.
- ➤ But then it shifts toward the APC side—for 100-199 articles, 41% free journals publishing 40% of articles.
- ➤ Getting to fairly large journals, with 200 to 399 articles (the last segment including more than 100 journals), only 25% of journals are free, and those publish 24% of articles.
- Larger, 400-599 articles: 12% free journals, 12% of articles.
- ➤ Very large, 600-999 articles per year: 11% free journals, 10% of articles.
- Finally, the prolific journals with 1,000 or more articles in some years: 8% free (two journals, actually), but that 8% only publishes 3% of the articles from journals in this size range.

I think the message is pretty clear, and I believe it's a sensible message: If you're planning to start a no-fee gold OA journal, don't bite off more than you can chew. If you anticipate more than 100 articles per year, be sure your resources are adequate. Fortunately for humanists like me, smallish journals work very well in the humanities and social sciences.

The Trouble with Beall

You know what? Other than a recent diatribe in a publication that you'd think would know better, where Beall avoids actionable slander by slandering all OA supporters rather than naming names, I don't think there's anything new to say here. Beall's lists are sideshows that damage some worthwhile journals and publishers but mostly highlight hundreds of "publishers" and thousands of "journals" that have, at most, a shadowy existence. That he's taken it upon himself to try to bring down OA with ludicrous charges is sad; that too many people pay attention to him is even sadder.

If you want more, browse last year's *Cites & Insights*. I won't waste more time on him here.

OA and Libraries

I'll keep it short. Academic libraries need OA to improve their abilities to carry out their missions. Academic librarians should publicize and encourage the use of OA (both colors, and libraries should see to it that institutional repositories are available and well-publicized). Many, perhaps most, academic libraries should be part of the game—helping to publish or even publishing OA journals. For those librarians who write scholarly articles, think about walking the talk: There are a fair number of excellent gold OA journals in the field, including *College & Research Libraries* and others.

And academic libraries should get past the idea that resources are more valuable if they're more expensive: They should work to make OA resources as available and attractive as other resources.

Why I Care

Sometimes I wonder. Realistically, given that I haven't published a peer-reviewed article in mumbly-odd years, and given that I never had a chance at tenure or scholarship-based promotion, I have no stake in that part. While I'd sometimes like to have better access to scholarly articles than I do, it's not an everyday problem.

Indeed, I got so fed up with the whole area (and some of the crap I got from certain quarters) that I basically stopped writing about OA here from December 2009 through November 2012 (except to announce

the publication of *Open Access: What You Need to Know Now* as an ALA Editions Special Report in 2011).

Since then...well, you know. The reasons I almost stopped writing about OA have partly disappeared. Here's what I said in November 2009 (repeated in January 2013, when I started covering OA again):

The question now is whether LIBRARY ACCESS TO SCHOLARSHIP should or will remain as an occasional feature in *Cites & Insights*. Here's what I had to say about it on *Walt at Random* (with modifications):

Why I'm considering dropping the section

- Value added: I've never felt I could add much value to Peter Suber's commentaries or, for that matter, Dorothea Salo's (when she was focusing on these issues). I've given up engaging Stevan Harnad or directly discussing his monotone writing. Lately, I'm not sure my synthesis and commentary are adding much value to any of this.
- Effectiveness: Most *Cites & Insights* readers are within the library field, I believe—and that's only reasonable, since that's my background and the focus of most topical areas. So I'm probably not reaching many scientists—or, if I am, I'm probably not doing much to convince them to do more about OA and access-related issues. As for librarians, I'd guess that my readers are mostly already convinced—that I'm neither educating nor convincing much of anybody who doesn't already get it. (I'd guess 1% to 3% of librarians read *C&I*, spiking to 25% or more for one particular issue. Those who need educating are mostly in the other 97%, I suspect.)
- Futility: Given what I'm reading from scientists as
 to how they relate to libraries and librarians, and
 given what I'm reading as to how they make decisions on where to publish and where to exert pressure, I'm feeling pretty futile about the whole
 effort. Not necessarily about OA as such-but definitely about my ability to make a difference.
- LIBRARY ACCESS TO SCHOLARSHIP essays appear to be read and downloaded a *lot* less often than essays on blogs and blogging, Google Books, wikis and the like and somewhat less than essays on copyright and MAKING IT WORK.

More reasons for abandoning this section, reasons that admittedly overlap with the three above:

- The addition of Bill Hooker's Open Reading Frame and Stuart Sheiber's The Occasional Pamphlet may make my contributions even more superfluous.
- It's difficult to escape the conclusion that the "OA community"—the bloggers who focus on open access, notably apart from Peter Suber and Charles

- W. Bailey, Jr.—would be just as happy if I disappeared or, perhaps more correctly, have never been aware (or cared) that *C&I* even existed.
- I grow increasingly convinced that most scientists *just don't care*—either about libraries or about OA—and maybe that's appropriate. I also grow increasingly convinced that librarians can't do it on their own, although it's encouraging to see things like the Compact that recently emerged. Still, it's an uphill battle, and one that I really can't play much part in.
- Every time I see calls for "universal mandates,"
 I want to back as far away as possible.
- One new one: Sometimes it seems as though it's all been said, that we're now engaged in endless rehashing.

Things have changed—and OA-related issues are now among the *most* widely-read issues. Possibly that's because a lot of what I do now is original research (some of it was back then, but not at today's scale). Possibly I've earned a tiny amount of credibility among better-known OA advocates.

In any case, I'm less inclined to go away again.

Here's another blast from the past, this time from June 2006 (with a line at the beginning and end of the essay to separate it, rather than making it all quoted material):

Thinking About Libraries and Access

Libraries—public *and* academic—need to provide both strong physical collections and access to resources beyond those physical collections. Academic libraries should do their best to assure long-term access to resources in *all* disciplines, including those disciplines where the primary publication method is the monograph. I believe libraries should pay more attention to gray material in an era where the lines between traditional and untraditional distribution and publication are growing ever fuzzier. Libraries should acquire, organize, and secure long-term access to the things that make us a civilization, the thinking, knowledge and wisdom set down in articles, books and other media.

Effective long-term access involves several interrelated issues, including:

- ➤ The money to acquire physical resources and provide access to other resources, and to pay the professional staff to determine *what* to acquire.
- ➤ The means—money and procedures—to assure *effective* access, through cataloging and other organization and discovery techniques.

➤ The wherewithal—determination, money, and procedures—to *preserve* physical works and digital resources and assure that future generations can use those resources.

The standing head for *Cites & Insights* discussions of events and commentaries related to issues of access to scholarship is LIBRARY ACCESS TO SCHOLARSHIP, not OPEN ACCESS AND LIBRARIES. That standing head reflects my primary interests when it comes to talking about access, open or otherwise: How trends in access affect libraries' ability to maintain long collections, provide long-term access, and provide access to resources in *all* disciplines (not all disciplines at equal collection levels in all libraries, of course).

Think of it this essay as an extended answer to the question, "Why do I write about library access at all—and why don't I stick to open access?"

I'm tempted to bring in related issues—for example, the role of the Open Content Alliance and Google Book Search in improving *discovery* for books (and, for OCA, access to public domain books). But I'd like to keep this fairly short, so I'll note that a lot of the other things discussed in *C&I* also relate to library access to scholarship.

Fundamental Assertions

I would not dissuade anyone from focusing on open access to scholarly articles (with or without capital "O" and "A") and improving both "green" and "gold" aspects of such access. That's important work. Peter Suber sustains a high level of clarity and completeness in discussing and advocating both forms of open access; Charles W. Bailey, Jr. and (more recently) the bloggers at OA librarian add to that effort, as do others. Many other librarians and scholars are engaged in creating and building OA journals ("gold" OA) and encouraging scholars to deposit their articles in OAI digital repositories ("green" OA). More power to them. Library access involves more and, in some ways, less than open access. My interest is in libraries' long-term ability to serve the full range of human creative activity.

Scholarship and the stuff of libraries are more than just refereed articles

Science, technology and medicine (STM) consume most of the serial budgets of most academic libraries—indeed, STM *journals* consume most of the *acquisitions* and access budgets of most academic libraries. But refereed STM journal articles aren't all there is to science, technology and medicine, and certainly not all there is to scholarly and human creativity.

Even in STM, monographs play a role, as do working papers, datasets, and other "gray" materials that don't fit into the refereed-journal-article mold. Outside—in the humanities and social sciences—monographs and other books may be the primary means of communicating progress. For that matter, serial publications other than refereed scholarly journals play significant roles in the record of human creativity that should be the stuff of libraries.

The current journal model is broken

Too many STM journals cost too much money, and increase in price at too rapid a rate, for libraries to sustain the level of access they need. The cost of STM journal access distorts library budgets, driving out both the less expensive journals and the monographs and other resources. The current model, with several large commercial publishers dominating the field of STM publishing and charging what they believe the market will bear, is unsustainable: It is already breaking down, with even the wealthiest libraries canceling large numbers of journals.

It is apparent that some major commercial publishers fully intend to charge what the market will bear. They have succeeded in acquiring most of the highest-profile journals, including many that were originally modestly priced society-published journals, and in raising prices so as to assure profit margins far in excess of those enjoyed by most book publishers and companies in competitive industries.

I am not arguing that these publishers don't add value. Clearly, they do. I am arguing that the subscription model simply will not stand: That it is already breaking down and will continue to break down, probably at an accelerating rate.

The current model is *also* broken from a philosophical perspective: It makes it more difficult for scholars, especially independents and those at smaller institutions, to keep up with work in their field.

Open access strives to correct the philosophical breakage. Green OA, however, does nothing to address the financial breakage—which means it fails to address *library* issues, vital to long-term effective access. Worse, some green OA evangelists regard library issues as irrelevant and even treat with disdain library efforts to improve green OA—if those efforts *also* meet other needs of the libraries and their academic communities. More about that in a moment.

The breaking model damages secondary players first

Unfortunately, there's some reason to believe that it isn't the big commercial publishers and their overpriced journals that will be hit first as the subscription model continues to crumble. The first to go tend to be journals with smaller audiences and lesser reputations, including many of the more reasonably priced journals and those in the humanities.

The breaking model can cause one specific economic dislocation—and clarifies another economic distortion. The economic dislocation: Journal subscriptions shove out monograph and other acquisitions. Some libraries have protected monographic budgets, and that may be a partial solution. The economic distortion is more sensitive: Libraries have been underwriting professional societies indirectly, and can no longer afford to do so.

That's clear from the surprising alignment of professional society publishers, most of which are by nature nonprofit and intended to promote scholarship, with the commercial publishers in opposing effective steps toward open access. The professional societies admit that profits from non-member journal subscription prices, frequently but not always moderate in comparison with the worst for-profit prices, are used to subsidize other society activities. They argue that loss of those profits will undermine those activities and is, thus, a blow against scholarship. The only plausible response, from a library perspective, is that it is wrong to expect libraries to subsidize professional societies outside the field of librarianship. If other professional societies deserve subsidies from universities, those subsidies should be requested and provided as subsidies, and should be provided out of appropriate departmental budgets—not out of the library acquisitions budget. "That's the way we've always done it" isn't good enough.

Open access publishing is progressing, but slowly

We didn't call it "gold OA" in 1990, but that's when I was first involved with a refereed scholarly ejournal free to all readers, *The Public-Access Computer Systems Review* (it wasn't the first such journal). Since then, thousands of open access journals have been started and more than two thousand survive.

That's a lot—but it's a small portion of the total scholarly journal landscape and a smaller portion of the total article output.

Open access journals can relieve cost pressures on libraries. Open access journals can reduce the cost

structure of the entire scholarly publishing enterprise. Libraries may even be sensible candidates to carry out the modest organizational tasks involved in publishing an electronic-only open access journal.

But open access journals aren't growing rapidly—and aren't displacing commercial journals to a noticeable extent. They may be slowing the rate of increase of overall journal costs, but they are not apparently reducing overall costs. Some argue that a complete shift to open access journals could even *increase* costs to some libraries or universities, but that analysis assumes two questionable points:

- ➤ It assumes a very high cost per published article, at least \$1,500, even though some open access journals that charge author-side fees have considerably lower fees. Sharp analysis and real examples are required to determine just how much an electronic-only journal, paying only for copy editing, markup, and disk space (since most editors and referees work for free, open source journal publishing software is freely available, and there's no need for contract offices) should actually cost.
- ➤ It assumes that all open access journals will be paid for by direct author-side charges, even though *most* open access journals don't currently charge author-side fees (and many subscription journals *do* charge author-side fees), and even though author-side fees could reasonably be built into research grants.

There are several possible reasons for the slow growth of open access publishing. One factor may be the astonishing level of "untruthiness" set forth, on an ongoing basis, by many within the scholarly publishing community: For example, arguments that open access journals will undermine peer review, reduce editorial quality, or in some other manner damage scholarship.

Open access archiving is neither inevitable nor trivial

"Green" open access—either preprint or postprint versions of published articles, deposited in digital repositories that follow OAI models to allow metadata harvesting—has done well in some disciplines, but isn't taking over the world.

Green OA does little or nothing to solve library budget problems, to be sure. To the extent that single-minded green OA advocates dismiss journal publishing and library budget problems as irrelevant, they may encourage a catastrophic failure of the ex-

isting publishing system and the portion of p peer review carried out by that system, rather than a slow slide and conversion from subscription to open access. Such a failure would be unfortunate for green OA, as it would eliminate the chief sources of "branding" for the papers in the repositories.

That dismal scenario aside, the fact is that academic libraries can, and in a growing number of cases will, play a role in making green OA work: To wit, providing professional-quality institutional repositories that have the institutional and staff support to be maintained for the long run. Good institutional repositories aren't cheap (although the software itself may be free), but they are sustainable for the long term, unlike "server in a closet" departmental repositories with no firm base of funding or firm long-term programmatic support.

Library-based repositories should go beyond articles—and doing so doesn't damage the articles

One of the oddest arguments in the sometimes-fractious OA community is that institutional repositories should *only* hold refereed scholarly articles. Library-based digital repositories are likely to go much farther, and probably should: They can and should include supporting datasets, work in progress, and other digital materials created within the repository's scope that don't fit neatly into the refereed-article slot.

As long as it's possible to identify refereed articles, as it always is in any good OAI repository, I can think of no plausible argument for restricting the repository to refereed articles. The arguments for broader inclusion are clear: Such inclusion helps justify the costs of the repository, makes it stronger for long-term use, and improves the library and its parent institution by providing access to important scholarly resources.

If *Time Magazine* sits next to *Tetrahedron* on a periodical shelf, that adjacency certainly does not make the articles in *Tetrahedron* less scholarly, nor is it likely to confuse readers of either periodical. How, then, can the presence in a digital repository of digital objects that aren't refereed articles—and don't have the metadata of refereed articles—possibly damage the refereed articles in that repository? It can't, and any argument that such sharing of repository space is somehow inappropriate should be viewed skeptically.

Conclusions?

I don't have any—or at least I don't have any that haven't been stated here, in previous LIBRARY ACCESS TO

SCHOLARSHIP pieces, or elsewhere. Some will disagree with the assertions here, and they may be right.

I'm an optimist by nature. I believe scholarly publishing and academic libraries will survive for the long term, but with significant changes in both. For that matter, I believe many commercial journals will survive—although, with luck, some will be supplanted by open access journals, either as true journals or as wrappers for sets of repository articles. *Science* and *Nature* probably aren't going away, in print or electronic form. *Tetrahedron* and the *Journal of Economic Studies*? Don't ask me.

How would I change that essay if I was writing it now, nine years later? The dollar amounts are (much) higher. OA journals are doing better—but the rapid rate of growth in 2006-2012 seems to have slowed down, as rapid growth rates tend to do.

Otherwise? Most of what I said then still applies now. At least that's what I believe.

Perspective

A Few Words, Part 1

Indulge me here. Or don't—there are lots of other things to read. Roughly 20 years ago (at the 1995 ALA Annual Conference in Chicago), I received the LITA/Library Hi Tech Award for Outstanding Achievement in Communicating to Educate Practitioners within the Library Field in Library and Information Technology. (Yes, that's the award name. Quite a mouthful, isn't it?)

It came as both a considerable honor and a surprise. Years before, I'd worked with Ed Wall of Pierian Press to design and implement the award, and we'd written it in such a way that I was fairly sure I'd never win it (among other things, stuff appearing in *Library Hi Tech* wasn't eligible). It also came with a nice check and one of ALA's magnificent framed certificates, illuminated initials and all. (Ask anyone who's won one of these—Jenica Rogers, for example—they're impressive! It's the only award that I've hung in my office. Not that there were *that* many to choose from, but there have been a couple of others.)

That award was based on my books and articles through 1994. I thought it would be fun (?) to put together a few words from each of those books, articles, columns and reviews, in as close to chronological order as I can, omitting a few that I no longer have a copy of (hard as that is to believe!) or that are so purely functional that it seemed silly. My plan is to take anywhere from one sentence to one paragraph

of each. Superscript numbers lead to an online set of citations; if you're curious, you can find it at waltcrawford.name/pubsto94.htm. Part 1 goes through 1994. Part 2 (or parts 2 and 3 and 4) start from there and continue to today. It's been a long and odd journey...

(My original title for these pieces was copped from Phil Ochs, "Rehearsals for Retirement." I changed that for two reasons: In terms of paying steady work, I've been retired for a while now; in terms of the stuff I'm still doing, I don't have plans to actually stop.)

Arrangement is more or less chronological—definitely so by year, less clearly so within a year. Incidentally, there *are* peer-reviewed articles here—not many of them, but a few.

1976

There are cases other than phrases in which the simple rule that a word is a series of letters surrounded by punctuation does not work. In the case of acronyms and initialisms, the actual handling is relatively simple; the question is what should be done. In 1973, Berkeley handled acronyms as initialisms, filed at the beginning of each letter and with spaces between letters. In 1974, with the addition of many document titles in which it was difficult to determine whether a title was an acronym or a regular word, that decision was reversed, and all acronyms and initialisms were treated and filed as words without spacing—that is, UNESCO filed after "Unending" rather than at the beginning of the Us.1

1979

Unfortunately, not only is it true that the analyst must listen to the librarian; the librarian must also listen to the analyst and consider some of the realities of the other world. There are genuine trade-offs. Not all your products necessarily require diacritics, and the extra cost of providing them might not be warranted. When you ask the computer center to mount the ALA print train and to provide half a million characters of core and 600 million characters of disk for twelve prime hours every day, you may want to consider that the line printer can print at only a fraction of its usual speed when the ALA print train is mounted.²

1980

For upper- and lowercase use, a five by seven dot matrix is minimal; more is better. Some (very few) terminals use character generation methods that

provide crisp, fully defined characters. If you can pay the price, these are extremely easy to live with.³

1981

Eight of the fifteen agencies made *significant* internal-processing use of the MARC-communications-format structure, including the leader, directory, and character storage patterns.⁴

1982

U.S. MARC requires strong string-handling languages, such as PL/I. Data overhead is fairly high. Record processing is fast, particularly for a format with such extended capabilities. It is possible to process U.S. MARC records on some microcomputers, but most U.S. MARC processing is done on large systems.⁵

1983

At the simplest level, library computing is business computing. Yet library automation has involved years of effort, expensive systems, and highly paid programmers. Are microcomputers and mass-market packages the answer? Should libraries accept the word of these services? How does a library convince its funding agency (or itself) that its needs can't be met by standard solutions?⁶

Five factors cause long searches with some frequency: index selection errors, excess words, extraneous title searches, automatic resumption, and deliberate long searches. A sixth, spelling and punctuation errors, appears less frequently. Many, perhaps most, long responses involve more than one factor. The choice of "major factor" is necessarily a subjective one.⁷

1984

Is it possible to build a fully generalized selection and listing system for MARC records? Yes and no.⁸

Good computer salespersons will determine your needs, talk about price, and show you what they have to offer—or, in some cases, admit that their merchandise doesn't fall into your price range (as another salesperson at a solid, ethical computer store did). The salesperson should be willing to give you a written quotation for a complete system, even when you say you're doing some shopping around. If you bring up a system as an example, they may give you reasons why you would wish to consider other choices, but should not spend much time defaming the system, particularly if they don't know anything about it.⁹

By 1980, it was clear that USMARC is, and will continue to be, a dynamic format, requiring periodic changes to accommodate new features. We saw the likelihood that the needs and desires of RLIN users would change over the years, requiring new products and changes in old products. Some products would probably outlive their usefulness.¹⁰

Fields do not need to be stored in the same order as the directory. Except for control fields, any field can start anywhere in the record. This flexibility helps make maintenance practical. Suppose that you get a USMARC record and want to add hyphens to the 020 (ISBN). The easiest way to do this is to move the new 020 to the end of the record. All you need to do is to change the 020 directory entry and the record length; the rest of the directory, and the rest of the record, is fine.¹¹

Sensible planning requires spotting nonsense and dealing with it. As in most fields, there is a great deal of nonsense in the field of microcomputing. Some of the nonsense is in advertising, books, magazines, and other media; some is in people's efforts to justify buying or owning a computer. Some of the worst nonsense about personal computers involves implicit threats that you'll betray yourself or your children if you don't buy a personal computer right away. If you're like most of us, you'll have to deal with your own nonsense as well as that of others.¹²

Most modern keyboards have delayed repeat on all keys, a feature usually called "auto-repeat" or "Typeomatic": any key held down for more than a second will begin repeating. Deliberate auto-repeat, with a suitable delay, is a desirable feature; a keyboard with a separate "repeat" key is far less desirable, and a keyboard with selective repeat is archaic. At the other extreme, some keyboards develop "bounce": characters repeat when no repeat was intended.¹³

What makes a good microcomputer magazine? Competent writing, analytical and critical reviews, timely and useful information, careful editing, and some focus. Most microcomputer magazines have an intended audience: novices, experts, programmers, specific machine users. In the current state of micromputer hardware and software, any magazine with wholly favorable reviews is probably too dependent on advertising to be worthwhile; some magazines feature sloppy writing or give too much space to interviews and profiles of companies that use microcomputers. Poor microcomputer magazines tend to be unfocussed, fluffy, and error-prone.¹⁴

1985

You may be familiar with acoustic couplers—devices into which a phone handset is placed after a high-pitched tone is received from a computer connection. Acoustic couplers are connected to low-speed modems. Today, most modems do not include acoustic couplers, which are error-prone, do not work well at higher speeds, and do not work at all with many newer telephones.¹⁵

For any online system with a wide range of capabilities, the average response time should not be reported without some qualifying figure. Standard deviation is one such figure and is one that can be calculated in a single pass of reported data, without advance knowledge of that data's distribution.¹⁶

Most printer noise ratings run from 60 to 75 dBA—from the level of classical guitar music to that of piano notes. When PC Magazine ran its own recent, massive tests of printers, impact printers actually measured between 68 and 88 dBA, with many in the 80s. The noise levels, which were generally twice as loud as claimed by the printer manufacturers, ranged near those of a loud piano or full orchestra. Printers are not musical. Daisy-wheel printers sound like soft machine guns, rattling away for what seems like an eternity, as they rap out copy at speeds of 12 to 55 characters per second. Impact dot matrix printers are louder, but the rasping sound does not last nearly as long. In either case, it is nearly impossible to talk on a telephone in the same room when an impact printer is operating, and most of us find it difficult to think with such a printer in the background.¹⁷

Free software for CP/M computers has always been exactly that: free, except for the cost of copying or telecommunications. The IBM PC and MS-DOS brought with them a new variety of "free" software. These programs can be copied freely, and users are encouraged to make copies for others. However, the initial screen or documentation of each program asks you to send the programmer some money if you find the program useful. In some cases, the documentation suggests that you should not keep using the software unless you send in the contribution.¹⁸

Some observers say the personal computer is fundamentally different in 1985 from what it was in 1984: software is finally available for the Apple Macintosh, the powerful IBM PC AT is now available, and there are two brand-new systems combining a low price and high power (the Atari 520ST and Commodore Amiga). Others say that the personal computer industry is in terrible trouble, and is fundamentally

stagnant. As usual, life is more complex than media representations. 19

1986

The authors' vision of conferences as places to make contacts, wheel and deal, and otherwise network is disturbing, but quite possibly accurate.²⁰

Complex societies require technical standards. Industrial and postindustrial societies depend on technical standards for everyday life and long-term progress. Technical standards provide the common bases from which individual developments may emerge. To quote Ken Dowlin, then president of the Library and Information Technology Association, "without technical standards, systems cannot grow."²¹

Writer's block—the inability to put words on paper—is the bane of many writers, both professional and amateur. A computer may not help; if you fail to press the keys, nothing will go into the computer's memory. However, a computer *can* help with one form of writer's block: the fear of the blank sheet, hereafter referred to as the *blank sheet problem*. For many of us, the most difficult words in any manuscript are the title and the first paragraph.²²

INFOMART is a remarkable building: an eightstory glass building, based on the Crystal Palace of London's Great Exhibition of All Nations in 1851.²³

Almost since their inception, teletext and videotex have been viewed as key elements in the "paperless society" and as sources of potentially enormous profits.²⁴

If you don't have a problem, you don't need a solution. In other words, "if it ain't broke, don't fix it." Computerizing your household budget makes little sense unless you want a budget in the first place.²⁵

The earliest "standard number" in the library field, or at least the oldest one still used, started in 1876. That's when Dewey Decimal (DDC) got its start—and, though it isn't part of the NISO numbers game, Dewey Decimal does have some things in common with numbering standards.²⁶

Libraries have special needs, and no single display can be equally suitable for all libraries. Libraries may also require differing numbers of displays, depending on local needs and the nature of the collection.²⁷

A few programs have become known for sophisticated text formatting, usually accompanied by sophisticated editing control. Advanced professional programs can support almost any writing task, including the formatting of books.²⁸

If you compare this issue of the *LITA Newsletter* with Issue 25, you may notice some changes. Headlines are smaller and less bold, bullets are square rather than round, and the text is in a different, slightly larger type—except for Board highlights, which are in a slightly smaller type.²⁹

A good outline processor makes it easier to jot down random ideas on a topic, knowing that you can readily group those ideas and organize them into a workable structure. A good outline processor can also help you to view all of a topic, or a specific portion of the topic, at an appropriate level.³⁰

1987

Desktop typesetting is no panacea. It doesn't support graphics, it doesn't offer the range of fonts and faces available through other methods, and LaserJet output is *near*-typeset-quality, not as precisely defined as true typesetting.³¹

Library literature has a problem with optical storage devices—a problem that eagle-eyed readers will have noted in the last two issues of the *LITA Newsletter*. That problem is the final letter of names of the media. What letter follows the letters *dis*, and in what context? Is it *disc* or *disk*?³²

Online catalog design sometimes suffers from an abundance of opinions and scarcity of facts. RLG was able to use internal capabilities to mount a large-scale statistical study of bibliographic displays, yielding results that should help to guide future designers.³³

Common sense suggests that desktop publishing is more hype than reality, particularly for those working with PC-DOS or CP/M computers. It also suggests that, as with most "hot" topics, there is some reality beneath the hype.³⁴

Patrons don't care whether a system is integrated or linked. As long as patrons can get the information they want when they want it, they don't care where it comes from.³⁵

At today's prices, a person can put together a complete desktop typesetting system for roughly half the price of a good desktop publishing system. The LaserJet has a normal discount price of around \$2,400, and PC-DOS computers with hard disks are available for \$1,200 to \$1,500. Adding \$450 or so for the font cartridge and word-processing system brings the total to a little more than \$4,000.³⁶

PC clones may be the major reason that microcomputer sales improved in 1986. They have certainly been the driving force in lowering IBM's prices and encouraging software and hardware producers to make innovative products available at reasonable prices.³⁷

We tend to use too many special terms, too many abbreviations, too many acronyms and neologisms. We need to look at our writing and speech once in a while, not to eliminate the use of special dialects but to be aware of them.³⁸

MultiMate Advantage uses F10 to activate functions: the key is heavily used. The current release includes a thesaurus. In a recent article on thesauri, the following parenthetical note appears: "(Be careful not to press MultiMate's commonly used F10 key while in the thesaurus. If you do, the computer freezes, and you'll have to reboot.)" ³⁹

1988

The sun should set on activities that don't concern enough people to keep a group vital, active and communicative. The number of meeting rooms at conference is not infinite, and meeting rooms do cost money; new groups will continue to emerge, and inactive groups should make way for them.⁴⁰

No writer would look at a box of Kleenex and write about Cleanecks. When an object consistently carries its own identification, it is only reasonable to use the spelling on the object. Every CD-ROM and every CD carries the phrase *compact disc*, right on the disc, with *disc* in large outline letters.⁴¹

AVIAC, the Automation Vendors' Interface Advisory Committee, has been working on a proposed *MARC Format for Patron Records*. The proposal would establish a standard format for communicating information on patrons. The group is now considering work on a standard format for circulation transactions. The first proposal is disturbing enough to those of us who take a hard line on patron privacy; the second suggestion provides even more cause for alarm.⁴²

A surprising number of programs offer no way to exit unless you have a reference card or keyboard template handy. That can be frustrating, particularly if your reason for exiting is the realization that you are lost and just want to stop. If your only recourse is to reboot the machine, you have not only lost all the work you were doing, you may also feel some justifiable anger toward the program.⁴³

J.L. Baird developed the first videodisc in 1928, recording 50 scan lines (an extremely crude image). In 1959 RCA began to investigate video playback systems, and Philips began work on optical disc technology in the 1960s.⁴⁴

There's more to technological progress than "Big Deals" such as computers, magnetic recording, photocopiers, telefacsimile and fiber optics. Progress also comes in small doses, innovations that improve without startling.⁴⁵

If you are in the market for a personal computer, this may be the best of times or the worst of times. 1988 may be the most confusing period in the past few years. The myth of an "industry standard" has been shattered by the companies that did most to establish the myth.⁴⁶

The best reasons to abandon a standard are that the standard fails to serve a useful purpose, or that there is no likelihood of wide adoption. ANSI Standard Z39.29, Bibliographic References, may be the clearest case of the latter. Eleven years after its adoption, very few journals or publishers require the standard, and most will not accept references created according to the standard.⁴⁷

We gave up some typographic quality two years ago in order to gain space, currency and editorial control without increasing budget. This year, I feel that we've restored and improved typographic quality.⁴⁸

When you prepare an analysis with a spreadsheet, you may want to include the analysis—as a table, a graph, or both—in a report. You can add text to the spreadsheet, but that is usually fairly clumsy. It probably makes more sense to convert the spreadsheet data to your word processing program.⁴⁹

1989

If you observe that a standard flies in the face of common usage, has been around for some years, and seems to offer no real advantages, your best bet is to explicitly ignore it.⁵⁰

Every online system depends on hundreds or thousands of technical standards—from those defining raw materials and electronic components, through many safety standards, to standards for data storage systems, character definitions and telecommunications. You don't need to know what all of these standards are; few of them have any obvious relevance to the library field, but you would surely miss them if they weren't there.⁵¹

Hermann Zapf designed Zapf Calligraphic for Bitstream, Inc., as one of its new type families designed specifically for digital typesetting and for high quality in both medium-resolution (300 dots per inch) and high-resolution (1200-2700 lines per inch) applications. Zapf Calligraphic is a redesign of Zapf's own Palatino typeface...⁵²

By the standards of some computer journalists, five years is two or three lifetimes for personal computing. A power user would be embarrassed to have the same computer on his or her desk that was there a year ago: after all, there are newer! faster! more powerful! computers on the market.⁵³

Consultants in every area may serve as gurus or as guides. A guru, for this discussion, is one who provides the answers without going through the reasoning that leads to those answers.⁵⁴

Only experience will show whether the full US-MARC holdings format can be implemented in a realistic, cost-effective manner. The design is a careful, thoughtful one; its future will depend on its workability.⁵⁵

As it stands, the book combines repetition with brevity in a maddening combination that suggests that this already slender book has an even smaller book, possibly a large pamphlet, struggling to get out.⁵⁶

The major piece of nonsense in the prevailing wisdom of the mid-1980s was the idea that the percentage growth for computer sales could continue indefinitely.⁵⁷

I don't believe LITA could have such a remarkable variety of worthwhile programs without Interest Group efforts. Don't stop working on programs—but remember that there is life beyond program planning.⁵⁸

The cost of memory, now finally falling again, still means that the lowest-cost computers in mid-1989 can be more expensive than in January 1988—although support policies, quality of construction, and hard disk options will generally now be better.⁵⁹

(Yes, I know the title itself [*Information Standards Quarterly*] violates Z39.1 recommendations; that was done intentionally, for what I still regard as good reasons.)⁶⁰

1990

However...when you print a publication on 11x17", center-stapled, it's important to make sure that the number of pages in the publication is divisible by four, since you're printing four pages to a sheet.⁶¹

When a patron gets multiple results and checks one (and only one) call number, the patron is probably getting a pointer—a place to begin browsing in the stack. I do that all the time. So do you, if you are at all typical of experienced library users.⁶²

Early in the design and analysis phase, we decided to work not only with design documents but with computer-based sketches of the system. We

would provide something for the principals to see and, if possible, experiment with.⁶³

If you are buying a new MS-DOS (or OS/2) computer in 1990 and you think there's any possibility that you will want to use it for color graphics of any sort, or for demanding monochrome graphics such as desktop publishing, you should seriously consider a VGA or Super VGA adapter—and you should absolutely avoid CGA and EGA adapters and displays.⁶⁴

The study at hand used *net economic welfare change* as its bottom-line measure: the combined effect of all direct and indirect gains and losses within the U.S. economy. Oversimplifying the conclusions, the report states that a ban on home copying would be a *loss* of \$1.7 to \$4.4 *billion* dollars annually.⁶⁵

How often do those help screens get used? If you're typical, not very often. From what I've heard informally, systems with logging facilities show that help functions are so rarely used that, if they were indexes, they would be prime candidates for removal from the system. Not only in patron access systems, but in most interactive software, even the most superbly-crafted help facilities go unused—even while they could solve most problems that users face. 66

Once an agency knows about a standard, it has a wholly proper question to ask before going any further: "What's in it for me?" 67

Your options for high-quality, cost-effective ty-pography are much greater now than two or three years ago, and it's clear that the situation will continue to improve. Unfortunately, that improvement will be accompanied by some additional complexity.⁶⁸

Document planning improves your control over your budget, schedule, and finished products. That improved control should give you the flexibility you need to respond to library, patron, and community requirements as they arise, without crsis.⁶⁹

Sometimes I stand in awe of the few dozen library folk, many of them in LITA, who really are out there on the leading edge. Sometimes, I'd even like to be one of them. For one thing, it's a lot more fun to keep introducing new ideas than it is to polish up the ideas that have already been instituted.⁷¹

In 1989, the National Information Standards Organization (NISO) celebrated a half-century of standardization for libraries, information services, publishing, and specialized library equipment.⁷²

When you finally move up to a hard disk, it's tempting to think of the hard disk as nothing but a big, fast diskette equivalent. You put all your programs and data on the disk; it's got lots of room. That's a bad way to proceed. In the long run, it will

cause serious problems. The most serious problem with this toss-it-all-in method is that you will run out of directory entries long before you run out of disk space, if you're at all typical.⁷³

The measure of NISO's worth is not how many standards it has developed, but how effective those standards have been—how much money, time, pain, etc., agencies have saved by adhering to NISO standards.⁷⁴

I'd love to see the icon for "books about Japanese baseball, published since 1980 in English." Or, more simply, the icon that will tell me whether the library has Norman Mailer's book with a title something like "Fire on the Moon" without plowing through dozens of authors and titles. (The title is *Of a Fire on the Moon*, so an alphabetic browse just might take a while.) Painless? Intuitive? Plausible on a dial-up line from home at 2,400 bps (if you're really lucky)?⁷⁵

1991

I'm a bit suspicious of the idea that every discipline (or, for that matter, *any* discipline) reinvents itself every decade. Perhaps that's because my degree is in rhetoric, but even cellular physicists might be a tad uncomfortable with the idea that nothing published prior to 1981 is worth reading. Let's not talk about where that leaves librarianship; at least all those who have never read Ranganathan, Cutter, or Dewey would no longer be bashful about it.⁷⁶

What's a HyperSource? It's like a bibliography—but with "non-sequential links" to other printed or electronic publications by the same author "to provide quickly and easily more comprehensive, up-to-date and precise information." As this publication stands, it is simply an unannotated bibliography, divided by subjects within the overall theme of optical technology, with a brief introduction on optical technologies.⁷⁷

The centerpiece article in this issue provides detailed background for the major changes in the new version of Z39.48 now being balloted. Z39.48 [Permanence of Paper] is one of NISO's great success stories and one of its most important standards. The new version applies to coated as well as uncoated paper and should be easier to apply.⁷⁸

What can you do with a hand-held scanner? If you are particularly unscrupulous, you can scan in someone else's signature and add it to a letter or "legal" document that you create. I don't advise that, but you could certainly include your own scanned signature in a mail-merged set of letters you're preparing.⁷⁹

In a very real sense, and unlike many other computer programs, an online catalog is nothing but an interface. A library catalog links library patrons with library collections. A good library catalog brings readers together with materials they need and with materials they can use but were not aware of.⁸⁰

By those standards—and, I suspect, to some readers—books and serials and the physical distribution systems that make them work are hopelessly archaic and should long ago have been swept away by contemporary media.⁸¹

It's hard to call a computer personal if you don't play with it occasionally.⁸²

People make technical standards; time, effort and knowledge go into useful ones. Your awareness of existing standards may make you and your agency more effective. Your involvement and that of your agency can make technical standards more effective.⁸³

Think of the videocassette *Blaze*, starring Paul Newman as Earl K. Long. If I want "likeness" or "aboutness," I could be looking for A.J. Liebling's *The Earl of Louisiana* and Michael L. Kurtz's *Earl K. Long*. But I could also be looking for *The Color of Money* or, for that matter, *The Big Easy* (you figure the connections). Then again, I could be looking for Blaze Starr's autobiography in book form. Related-record searching may help with the first and last cases, but it won't usually help me find those other films.⁸⁴

Technical standards development sometimes looks like collusion.⁸⁵

Do you believe that all text can be improved by making it hypertext?⁸⁶

How could your existing programs possibly be running slower? That turns out to be surprisingly simple. If you have a hard disk and you don't regularly use disk defragmenting software, its virtually certain that your disk has become more and more fragmented. Files have become split across different areas of the disk. When that happens, file retrieval slows down, sometimes quite dramatically. Your programs are files, too; a fragmented program will take longer to start up than one that's stored contiguously on the disk.⁸⁷

"What do you mean two diacritics on one letter? PostScript won't do that!" Ah, but the *Ventura Publisher* equation-builder will, in a rather peculiar way...⁸⁸

If it isn't already obvious, I think good document-oriented desktop publishing is great stuff. Good desktop publishing software will encourage you to design styles for your publications. It will enforce those styles and make them easy to use. It will

handle most of the nuts and bolts of typography and text layout, including crucial details such as widow and orphan control, keeping headings with the following text, handling page numbers and running heads, and so on.⁸⁹

Welcome to the wonderful world of software upgrades—a process that can aptly be described as "The Agony and the Agony."90

1992

Text must stand out clearly on the screen—that is, it must not fade into the background for any typical user. That requires judgment in using highlighting, color, and other special effects.⁹¹

Are we all university and large college types who think that they make up the universe of libraries, or at least the universe of libraries worth considering? No—but there are suggestions that some of us fall into that trap.⁹²

Some of you will already know the prequel to this column's title: Dick Dougherty's ALA Presidential slogan, "Kids who read, succeed." As a rejoinder to those who urge us to move smoothly into a post-literate society, the follow-on is more important: "Those who don't, won't."

Let me mention a test that I find valuable in doing first-level hands-on evaluation of an online catalog; you might also find it useful. I call it the mutter test. It's simple: when you look for something in the online catalog, do you find yourself muttering under your breath? If a system passes—that is, if you don't start muttering—it may not be perfect, but it is at least adequate, for you, for now.⁹⁴

The original Macintosh was extremely limited; by some standards, it was an interesting toy. Then again, the original IBM PC had 64K-128K of memory and used a cassette recorder and 180K floppy for storage; it was toylike by today's standards in terms of power, but (unlike the original Macintosh) it wasn't an *interesting* toy.⁹⁵

Most hardware "quick fixes" don't work very well. PCs need to be balanced. If you add a Super VGA display to an XT-class machine, the display will be slower than you're used to, and will slow your already-slow system even further. 96

LITA people care about libraries and technology. We care about what we are doing now and what we'll be doing in the future. We care about sharing information and wisdom, and want to see that information and wisdom made accessible. And LITA people care about each other.⁹⁷

Progress in public access doesn't come smoothly or uniformly. If you can actually take two steps forward (through a change for the better) and only one step back (because something gets misplaced along the way), you're doing pretty well.⁹⁸

You generally know your hardware situation, since hardware changes tend to be obvious. Software, on the other hand, tends to accrete.⁹⁹

Way back in 1985, when dinosaurs roamed the Earth, LITA remade itself—perhaps the most drastic and successful reorganization in ALA history. LITA eliminated its sections and all of their committees. LITA reconstituted its Discussion Groups (interesting but impotent forums, as in all of ALA) into Interest Groups, with most of the powers of committees. 100

A funny thing happened to benchmark ratings in ads: they've disappeared for all the best systems. That's a good thing, since most commercial benchmark numbers are ludicrous in terms of real-world performance.¹⁰¹

1993

In 1983, you could buy a useful personal computer from a well-known maker at prices ranging from \$1,200 to \$3,000—and way up, of course. That's true today as well, but the definition of a useful personal computer has changed substantially over the years. 102

As for CPU speed, think of upgrading slightly. If you feel a 25Mhz 486sx would be adequate, see how much more you'll pay for a 33MHz 486. If your budget six months ago called for a 33MHz, you can probably afford a 66MHz today. 103

If you don't like the keyboard that came with your computer, you can, *and should*, replace it. You probably won't; that's a pity. Replacement keyboards don't cost all that much (\$40-\$100, roughly, for most mainstream models) and can make a significant difference in ease of use.¹⁰⁴

One crucial part of "information literacy," although it isn't mentioned much, is skepticism. People still tend to assume that if it comes from a computer (or if it comes from the Internet), it must be right—a disturbing and potentially dangerous assumption. ¹⁰⁵

Osborne and Kaypro made their reputations with all-in-one luggable CP/M computers, sold complete with extensive software collections. They weren't road machines; they were cumbersome and required AC power. Like the early Compaq, they were really *transportables*, usually now called "luggables": all-in-one computing boxes with handles, roughly the size of electric sewing machines. Those

systems originated in the very early 1980s and disappeared in the onslaught of IBM compatibles. So, also, did the makers: Osborne in a complex, massive failure involving two different bankruptcies; Kaypro by dwindling away over several years. ¹⁰⁶

We don't lack for dreams of the future, and that's probably a good thing. Prophets and visionaries can also be called dreamers. It's not an insult by any means. I believe in dreamers. We need them, and we should honor them. F.W. Lancaster began dreaming of a paperless future many years ago. Ted Nelson dreamed of hypertext years before there were personal computers: his vision of universal hypertext even carries the dreamlike name Xanadu. Fred Kilgour left Yale to pursue his dream of a nationwide system of shared cataloging.¹⁰⁷

There have been some notable business failures and near-failures in late 1992 and the first half of 1993. FastMicro and Standard Computer, both apparently growing manufacturers that had been around for several years, went bankrupt in April 19893 (although either or both could emerge from bankruptcy). Everex is operating in Chapter 11 bankruptcy, as is CompuAdd—even though CompuAdd was the second-largest direct-order seller a couple of years ago and Everex has been well established for some time. Toward the end of 1992, firms such as Gecco and Scottsdale Systems seemed to be disappearing in droves. 108

Session analysis can be depressing, and probably will be at times, no matter how good the design is. You'll probably find that some of the users (perhaps 2-5%) are incorrigible: they won't read what's on the screen, they won't pay attention to any help, and they will keep repeating the same errors no matter what you do. Some repetitive errors call out for system changes—but some sessions can only be attributed to abusive users.¹⁰⁹

Many (probably most) modern typefaces are based on earlier designs. If you could copyright a type design as such, we would probably see countless lawsuits as to whether a new typeface was original or simply a botched ripoff; it's hard to see how anyone but lawyers would benefit.¹¹⁰

1994

I spent quite a bit of time experimenting with two sophisticated sets of graphics programs (CorelDRAW and Micrografix Graphics Works) in order to prepare this article. It was a frustrating process—not because the programs were hard to use but because I couldn't see that many cases where I'd use more than ten percent of their capabilities. But many of you are more artistically inclined than I am; many libraries can make good use of a steady stream of illustrations for various signs and publications; and these tools, now relatively inexpensive, may serve your needs quite well.¹¹¹

The PS/2 Model 60 cost \$5,295 without display, which got you a 10MHz 286 and a 40ms 44MB hard disk. Even in June 1987, it's hard to believe that a 10MHz 286 with 44MB hard disk could be reserved for the "most voracious power user"—but it did have a tower case and a towering price tag. 112

By mid-1992, I recognized that it was really a matter of *when* I'd move either to Windows or to a Macintosh—but I still thought it might be another two or three years. After all, I'm text-oriented; Ventura Publisher ran very well on my home machine under DOS and GEM, but not at all well under Windows; and I didn't see much need for multitasking.¹¹⁴

I believe that hypertext will be used more where it serves best, not only in help systems but also to convey independent pieces of data and information and follow links among such pieces. I also believe that people will continue to write linear prose and treasure its qualities, particularly for conveying knowledge, wisdom and enlightenment and for entertaining. I believe in a future of prose *and* hypertext.¹¹⁵

If there's one rule every experienced computer user should know, it's this one [If it doesn't make sense, it's probably wrong]. When "the computer" says something that violates your expectations, your first assumption should be that "the computer" is wrong. Check the raw data, check intermediate calculations, check the algorithms. Changes are, something went wrong along the way.¹¹⁶

If your library uses Apple Macintosh computers for most other uses, you should also use them for desktop publishing. For swift performance with the newest programs, you will want a powerful Mac (68040- or PowerPC-based), but any Mac that runs modern System 7 software rapidly should be acceptable. If you plan to use service bureaus to produce your final output, the Mac is still your safest bet. It was there first, and most service bureaus still don't understand PC-based desktop publishing.¹¹⁷

The more important factor: what gets checked, and what gets changed from copy cataloging sources (including cataloging-in-publication records) is only what the library regards as significant. Form of name is significant. Pagination probably isn't. Publisher's name and address don't always seem to be.¹¹⁸

Here it is: my last issue of the *LITA Newsletter*— a few weeks after casting my last vote in six years of LITA Board meetings. Past Presidents don't get columns, and that's fine: I've had more than a fair chance to bore you all with editorials and columns over the past nine years.¹¹⁹

Some Internet navigation tools tend to mask sources, and that can be dangerous. There are thousands of cranks on the Internet now, and there will be even more in the future. Given a few thousand dollars and a few weeks of time, I could prepare a Library of Regress server that could be seen as a serious competitor to the Library of Congress—never mind that everything at the Library of Regress was at least half wrong, or at best meaningless. ¹²⁰

Here's a statistics for the death-of-print crowd: in my home office, I now have the equivalent of roughly 15,000 full-length books stored on a group of nearly-indestructible discs that can be stored in 52 cubic inches, including protective sleeves. Clearly, print is dead: long live the CD-ROM!¹²¹

Coda

So there it is: excerpts from my award-winning professional writing career. During that time, I was also editor of the *LITA Newsletter* for more than half of its entire life and president of LITA for one year (which is really a three-year process). There were also 29 editorials, book reviews and columns that don't show up in this set of excerpts, for a variety of reasons, which appears to bring the total to a suspiciously round 150.

Not bad for after-hours work while doing a more-than-full-time job as a systems analyst, designer and programmer (and, for some years, a manager as well). Naturally, once I was done with the presidency and the *LITA Newsletter*, I slowed down and basically disappeared from the publishing field.

Or maybe not so much. More on that in a later installment

Pay What You Wish

<u>Cites & Insights</u> carries no advertising and has no sponsorship. It does have costs, both direct and indirect. If you find it valuable or interesting, you are invited to contribute toward its ongoing operation. The Paypal donation button (for which you can use Paypal or a credit card) is on the <u>Cites & Insights home page</u>. Thanks.

This issue is about half a page short. Normally I'd fix that—either removing 1.5 pages or adding half a page of new material—but not this time. It's summer. I'm still busy replacing our lawn with more of a xeriscape and trying to get comfortable with the new computer, OS and Office. And doing more OA research. The short final page (in the print-oriented version: it's not unusual in the single-column version) will just have to be what it is.

Masthead

Cites & Insights: Crawford at Large, Volume 15, Number 7, Whole # 186, ISSN 1534-0937, a periodical of libraries, policy, technology and media, is written and produced, usually monthly, by Walt Crawford.

Comments should be sent to waltcrawford@gmail.com. Cites & Insights: Crawford at Large is copyright ©2015 by Walt Crawford: Some rights reserved.

All original material in this work is licensed under the Creative Commons Attribution-NonCommercial License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc/1.0 or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

URL: citesandinsights.info/civ15i7.pdf