

# Cites & Insights

Crawford at Large/Online Edition

Libraries • Policy • Technology • Media

Volume 13, Number 7: July 2013

ISSN 1534-0937

## Libraries

# The Big Deal and the Damage Done

At the beginning of May 2013 I published [The Big Deal and the Damage Done](#), a study of spending in U.S. academic libraries between 2000 and 2010. The study looks at changes in serials spending, all other acquisitions spending (“books,” but it includes back runs of serials, ebooks and all other acquisitions), and what’s left over for everything else academic libraries spend money on. What follows is Chapter 1 of that book. The book is available as an ebook and in a special “campus license” version explicitly allowing mounting on a campus server with no simultaneous user limits. Details follow this chapter (and appear on page 11).

## 1. Overview

When publishers began offering Big Deals and other forms of serial bundling, they were touted as win-win-win situations: Publishers could remain profitable, libraries could slow down the rate of increase of serials spending and users could gain access to many more serials.

## Inside This Issue

Technology.....	12
The CD-ROM Project.....	20
Media: 50 Movie Comedy Kings, Part 2.....	31
The Back .....	43

When there’s that much money at stake (over \$1 billion since at least 2002) and only one aspect of library collections and services is being addressed, it’s fair to wonder whether there might not be some losers in with all that win. Given that some publishers and librarians *continue* to tout the Big Deal as a wonderful thing, some going so far as to say that the serials crisis was solved in 2004 with the widespread adoption of Big Deals, it makes sense to look more closely at the current situation.

I believe that Big Deals did some good—but they also did some damage, damage that gets worse as the amount spent on serials (in Big Deals and otherwise) continues to ratchet up faster than inflation.

Damage is done to scholars and students in the humanities and social sciences, where books continue to be key, as money continues to be shifted to serials (most of it for STEM—science, technology, engineering and medicine) at least in many libraries.

Damage is done to libraries as serials take an ever-bigger chunk of the total budget, leaving less for not only books but also staff, preservation, computers, archives, programming and new initiatives.

I began looking at actual numbers while preparing a preconference on open access. One of the sillier arguments against open access (and especially against gold OA) is that there's really no serials problem—that Big Deals solved it.

That's only true if "solved" takes on a fairly unusual meaning. In 1996, before Big Deals had become common, taking U.S. academic libraries as a whole, serials took 17% of all spending. Books (including back runs of serials and other materials) took 10.4%.

In 2002, at which point Big Deals were well established, serials were up to 22.5% of all library spending—but books were up a little too, taking 11.9% of library spending.

In 2010, serials were up to 26.1% of all library spending—nearly as much as books and serials combined in 1996. Books? Down to 10.6%--frequently of reduced budgets.

Meanwhile, the remainder budget—that is, everything *except* current serials and other acquisitions—fell from 72.6% to 63.3% of library budgets overall. That's a serious drop.

How much of serials spending is for electronic access? At a minimum, it's grown from 15% in 1998 (the first time it's broken out) to 70% in 2010, doubling its market share since 2004 (when it was 35%).

## Change in Actual Dollars

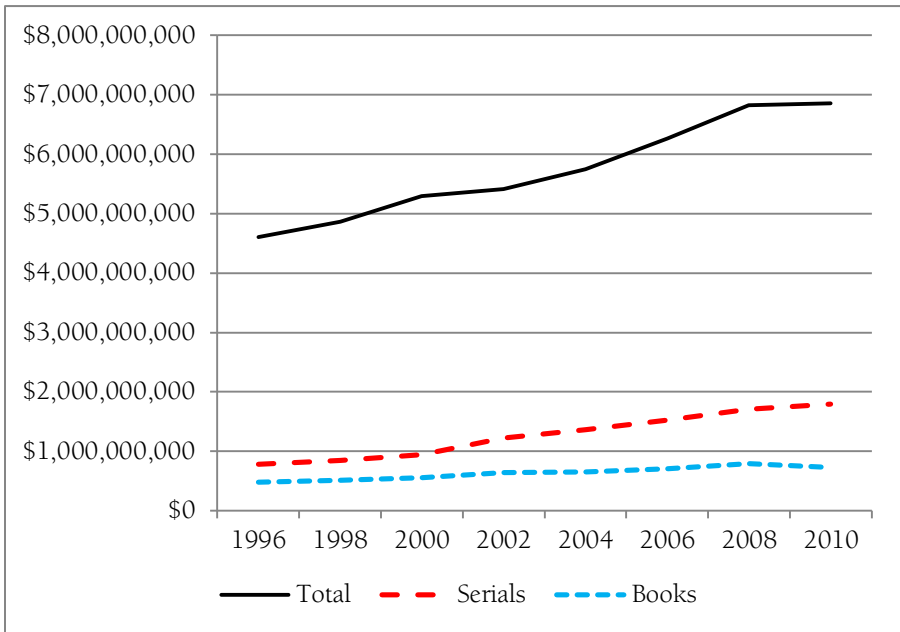


Figure 1.1 U.S. academic library spending, not adjusted for inflation

It's possible to look at Figure 1.1 and say, "that's not so bad—sure, serials are growing a little faster, but everything else is also growing." But Figure 1.1 is misleading in three ways: It represents a changing set of institutions over time; it's not adjusted for inflation; and including total library spending tends to mask other differences.

So let's do one other graph without adjusting for inflation—a graph representing the same data, but viewed as percentage change rather than actual dollars.

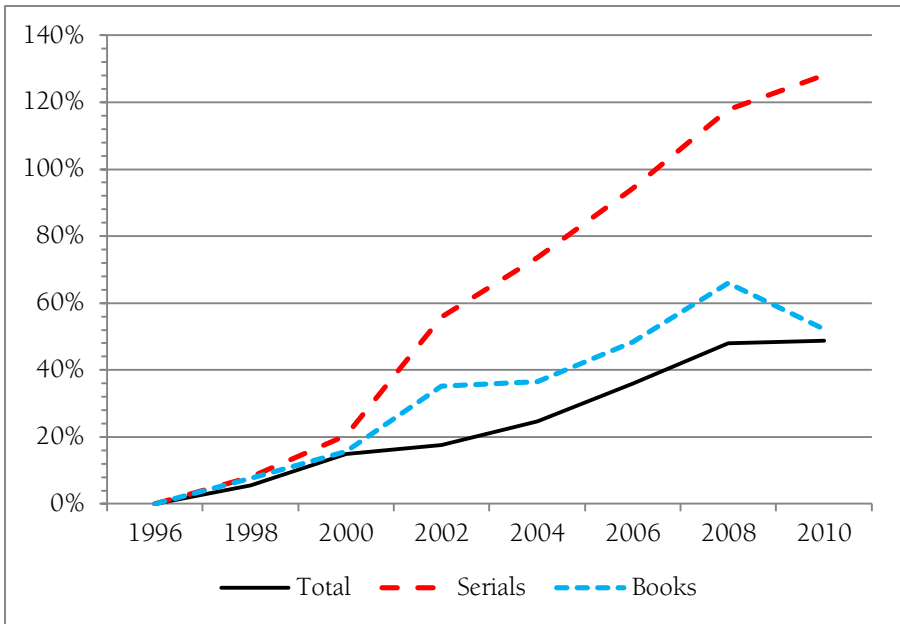


Figure 1.2 Changes in library spending, not adjusted for inflation

Figure 1.2 is considerably more dramatic—and note the *drop* in spending for books since 2008, along with the flattening out of overall spending. But this graph still doesn't adjust for inflation.

## Inflation

The remainder of this study *does* adjust for inflation, choosing 2002 as a baseline because it's the first even-numbered year in which serials expenditures passed \$1 billion and because, once adjusted for inflation, it represents the high point for books (that is, *all* resources other than current serials) spending.

Thus, to the extent that actual dollar amounts appear in the rest of this study, all amounts are expressed in 2002 dollars with a few clearly stated exceptions in Chapter 11. Percentages used to deflate or inflate other report years (based on U.S. CPI):

- 87.1% for 1996
- 90.6% for 1998
- 95.7% for 2000
- 105.0% for 2004
- 112.1% for 2006
- 119.7% for 2008

➤ 121.2% for 2010.

Much of the study deals with percentages rather than whole numbers; that makes inflation irrelevant for single-year measures but affects year-to-year changes, consistently smaller when adjusted for inflation.

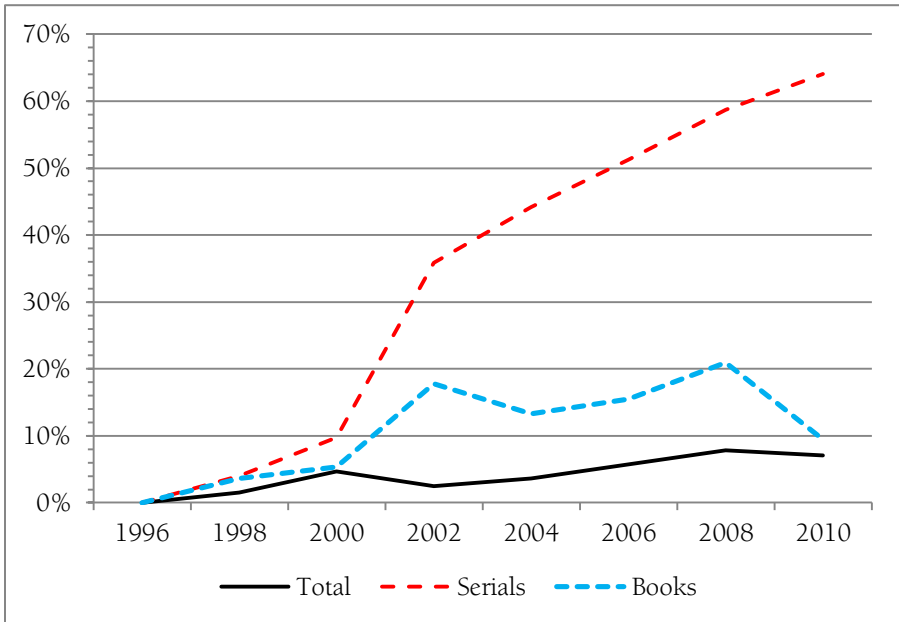


Figure 1.3 Changes in library spending, adjusted for inflation

Figure 1.3 shows the same information as Figure 1.2, adjusted for inflation. Even though this figure is still problematic (as discussed below), it's enough to make a couple of things clear:

- While the Big Deals and other changes in serials spending *have* slowed the rate of increase (compare the rise from 2000 to 2002 with that since 2002), that rate remains unsupportable for the long run and is far higher than inflation.
- While *on the whole* academic libraries managed to continue to increase spending on other materials (including back runs of serials but also books, etc.) for a while, that has waned—and dropped sharply from 2008 to 2010.

Even without going further, it seems fairly clear that the academic library field as a whole has lost flexibility and cannibalized other spending in order to maintain current serials—and that book purchases are beginning to suffer.

But the big picture is inherently problematic. It's dominated by very large institutions—and it includes a shifting array of institutions.

# Normalization

The rest of this study removes institutions to create more comparable sets—trimming to create a universe that offers fair comparisons.

Before doing any other work (including Figures 1.1-1.3), I deleted institutions that were reported as child institutions (in which case the budgets were reported with the parent institutions) and those that reported no library spending at all (making them useless for calculations). That reduced the dataset sizes (for given biennial reports) from a range of 3,683 to 4,166 to a range of 3,480 to 3,889. (The appendix spells this out in slightly more detail.)

For Figures 1.4 and 1.5, I eliminated institutions that reported either no books expenditures or no serials expenditures. That eliminated anywhere from 69 to 255 institutions, leaving a range of 3,364 to 3,778. The remaining institutions account for at least 97.9% of all spending in 1998 and 2000, and at least 99.6% in 1996 and from 2002 through 2010.

## Changes and Eserials after First Normalization

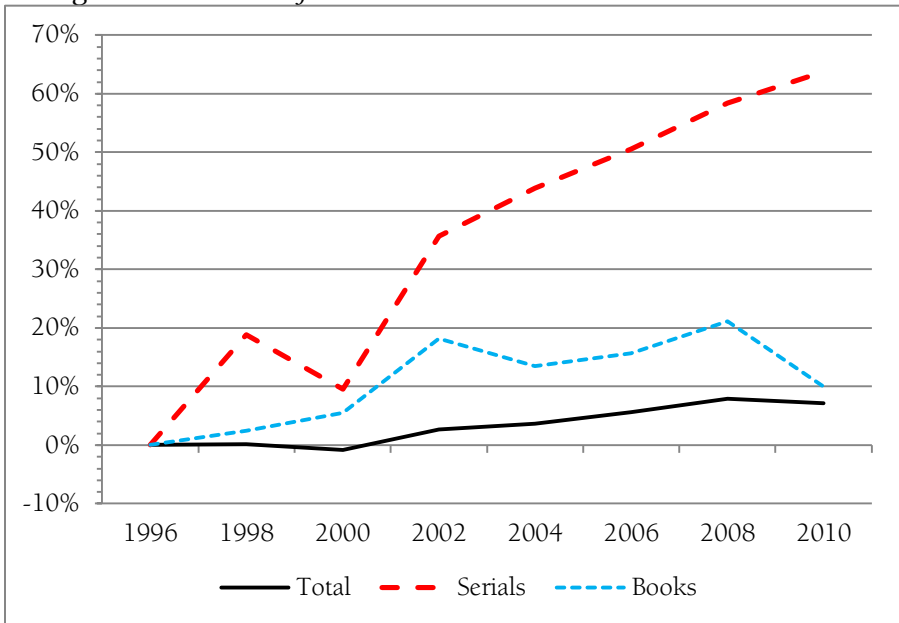


Figure 1.4 Changes in spending, normalized universe

Figure 1.4 is more dramatic than Figure 1.3 but also more realistic. It's also the first case in which numbers go negative: Libraries as a whole failed to keep up with inflation from 1996 through 2000, although not by much.

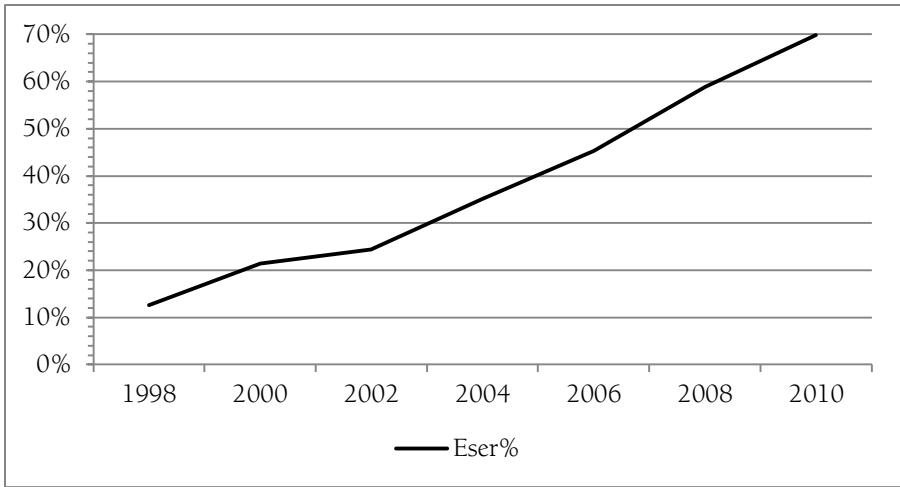


Figure 1.5 Eserials as percentage of serials spending

Figure 1.5 shows the *minimum* percentage of total serials spending represented by eserials. The percentage is almost certainly understated, since at least one library with high-seven-digit serials spending reported \$0 eserials spending in 2010 (or failed to report and no figure was imputed by NCES).

## Final Normalization

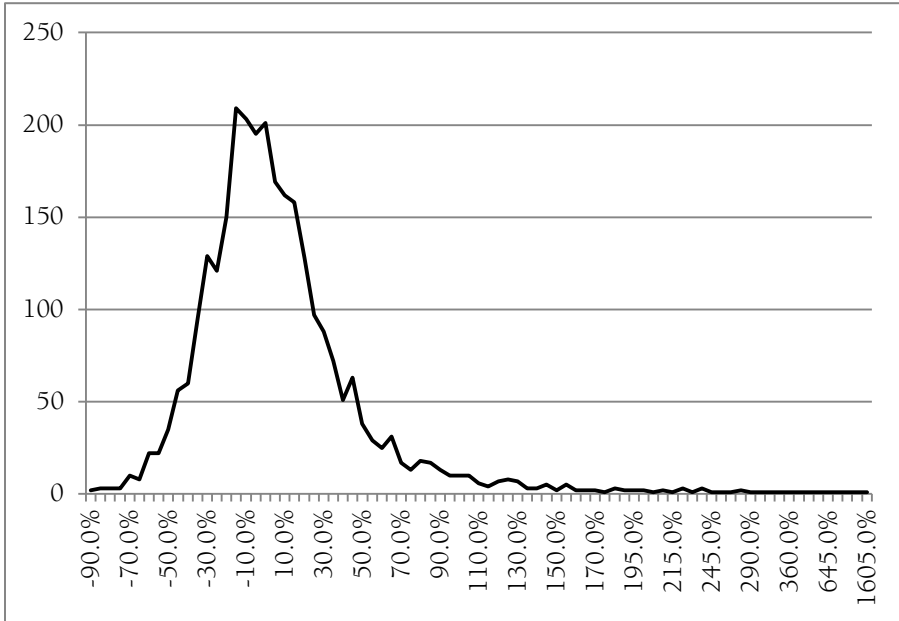
What's reflected in Figures 1.4 and 1.5 is *still* a changing set of institutions from year to year. That's fine for looking at medians, first quartiles and third quartiles, and for doing single-year distributions and other analysis—but it's not valid if you're trying to compare totals across time. For those purposes, you need to include only institutions that appear in all of the years you're considering.

The more years included, the more institutions disappear. Looking at the situation, specifically the numbers reflected in Figure 1.4, I concluded that it was sensible to start the rest of the study at year 2000—dropping 1996 and 1998 and including institutions that didn't appear in both of those years. Since 2000 was the point at which serials spending began an unbroken climb, it's a good starting point.

Removing partially missing institutions (including new libraries and ones that weren't there in some report for one reason or another) reduced the number of institutions to 2,837—a drop of at least 527 institutions. Those 2,837 libraries account for 94.9% to 97.1% of all spending—and that's the largest set for which year-to-year changes are fully meaningful. (How big is the set? For 2010, the *inflation-adjusted* total spending is \$5.4 billion 2002 dollars, including more than \$1 billion for e-serials.)

That leaves one other problem, if you're attempting to look at the results of increased serials spending: Some institutions (or at least their libraries) grew so rapidly during the decade or, in a few cases, shrank so rapidly that overall growth or shrinkage can mask the effects of diverting money to current serials.

Figure 1.6 shows changes in spending for 2010 as compared to 2000 for



the 2,837 libraries present in all six datasets, rounded to the nearest 5%.  
 Figure 1.6 Changes in total spending, 2010 compared to 2000, for 2,837 libraries

This graph convinced me that it was reasonable to ignore the small number of libraries at the left edge of the graph (from -50% down) and the right edge (from 100% up—noting that the horizontal axis is non-linear above 170%). If you look carefully at that graph, you'll also see the unfortunate truth: more libraries are to the left of 0% than to the right of it. (The peak is at -15%; the second, lower peak is at 0%.) Most academic libraries have not kept up with inflation since 2000. (That's *barely* true: 1,443 out of 2,837 lost ground, but only 1,354 managed to beat inflation by 1% or more.)

Leaving out those libraries that more than doubled in inflation-adjusted spending between 2000 and 2010, and those that lost more than half their budget within that decade, removes 201 libraries: 7.1% of the 2,837 representing no more than 2.5% of spending.

Overall, the 2,636 libraries remaining represent roughly three-quarters of *possible* academic libraries (although there would be no way



to look at all of those libraries in any systematic way), but those libraries represent 93% of 2010 books spending, 95% of 2010 serials spending (and at least 96% of eserials spending) and 94% of total library spending for *all* academic libraries in 2010.

Chapters 2-10 of this study consider 2,636 libraries or library systems during the period from 2000 through 2010. As appropriate, I note the number of high-growth/high-shrinkage libraries omitted and the maximum number of libraries that *could* have appeared in that category (that is, the peak number for any given year). That last figure may be meaningless, as it measures very little but volatility.

Chapter 11, looking at aspects of the overall universe of academic libraries not covered in this chapter, includes all 2,837 libraries for which year-to-year comparisons can be made.

## Overall Changes for 2,636 Libraries

Consider overall changes for the remaining 2,636 libraries—always using the year 2000 as a baseline, always using dollar amounts adjusted for inflation normalized to the year 2002. (In other words, all dollar amounts are in 2002 dollars.) The first graph, Figure 1.7, is the equivalent of Figures 1.2, 1.3 and 1.4, but with a cleaner set of library inclusions and starting four years later. The rise in serials isn't as dramatic (they were already up 10% in 2000), but it's now clear that, at best, books have done no better than stay even: They're essentially down to the same level as in 2000. That's across the board. The damage is really in the details, as we'll see in the rest of the study.

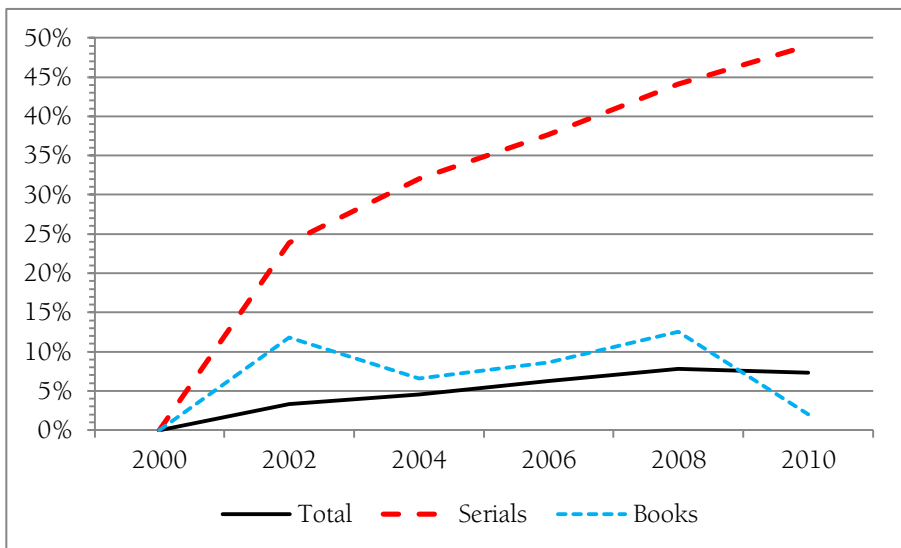


Figure 1.7 Changes in spending 2000-2010 for 2,636 libraries

Consider the median for each spending level—and the *remainder* of the library budget, what’s left after acquisitions and serials subscriptions. Figure 1.8 shows the results.

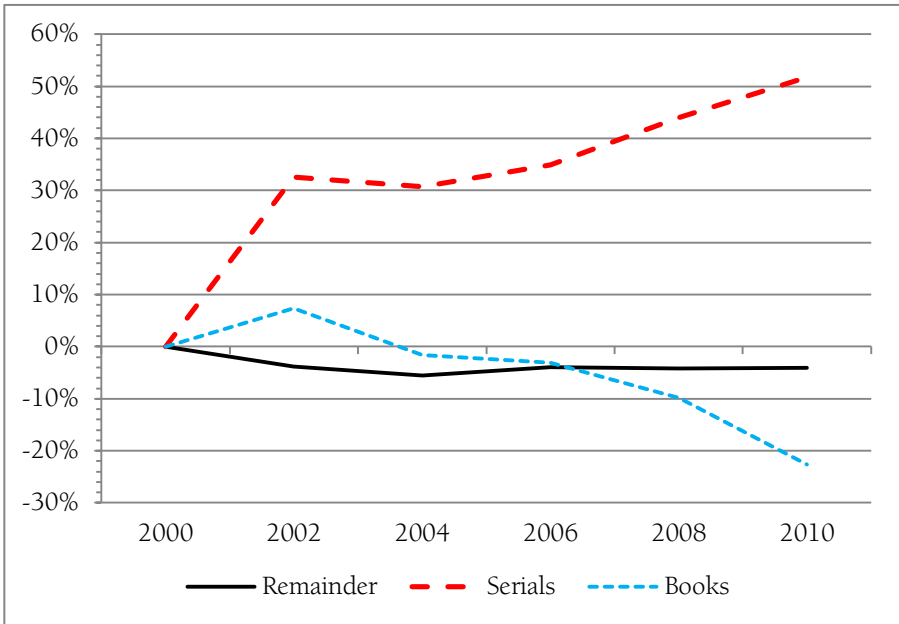


Figure 1.8 Median changes in spending, 2000-2010

There’s a modest but real loss in remaining dollars (a little over 4%): the median library has less money to spend on everything else than it did in 2000. There’s a *substantial* loss in book money (and AV and backsets and ebooks) in 2010 as compared to 2000: nearly 23%. And that, for academic libraries as a whole, is a striking indication of the damage done.

Again, though, the damage really is in the details—some sectors suffered more damage than others and some libraries have managed to do reasonably well in the face of rising serial prices. The rest of this study looks at libraries divided three ways: By overall budget size, by sector as defined by NCES, and by Carnegie classification.

## Clarifications and Comments

Chapters 2-10 include many graphs showing changes in spending formatted similarly to Figure 1.8: Three lines that begin at 0% and move up or down. Unless otherwise noted, these lines are always for the *median* value of a particular measure, rather than the total or average. An optimist could look at Figure 1.8 and say “well, half the libraries saw serials spending increase by *less* than half—and half of them did better than cutting book spending by 22%.” A pessimist could flip that: half the libraries saw serials spending increase by *more* than half, and half the

libraries saw *more* than a 22% cut in book spending. In either case, the median figure for a group is the most meaningful single figure, as it always means that half are at or above that point and half are at or below that point.

In case it isn't clear, I'm not suggesting that academic librarians have been doing anything wrong—unless it's an inability to maintain solid overall budget growth. For most libraries, serials bundling and Big Deals represented a plausible solution to a critical problem: it was indeed a win-win, at least for a while. But it didn't solve long-term problems in any area—and it's causing significant problems for those fields that depend on books, for long-term collection maintenance, and for library flexibility to do anything *except* maintain serials subscriptions. I believe that represents major damage, damage worth exploring. As should be obvious, I don't have answers to offer, although I believe that open access may be key to library sustainability and improvement.

---

## The Rest

What appears above is the first 11 pages of a 131-page book. If anything, the remainder of the book is more troubling than Chapter 1.

For the rest, you can pick up [a PDF ebook](#) (no DRM) for \$9.99 or [a paperback for \\$16.50](#). There's also a "[campus license edition](#)" ebook for \$40, which includes an *explicit* statement that it's OK to mount it on a library or campus server that allows multiple simultaneous use. If you're reading this in print or otherwise can't click through from those links, the links are also available at the bottom of the [Walt at Random home page](#)—or just go to lulu.com and search the words "big deal damage" (leave out the quote marks!) or for Walt Crawford.

Here's *part* of the concluding chapter:

---

How bad is the damage? There's no simple answer, but I can add a few more notes based on analysis of the full 2,837 institutions, including those rapidly growing or falling in library budgets and omitted from most of this study.

## One Quarter Billion Dollars in Books (etc.)

Here's one way to look at it—calculated two different ways:

- For all libraries where book spending (adjusted for inflation) dropped between 2002 and 2010, to get back to the 2002 level—adjusted for inflation, but with nothing more to account for the huge increase in titles published over the past decade—would cost \$245,235,005 in 2010 dollars.
- Among those libraries spending at least \$1 million in books in 2002, where book spending *at least* kept pace with inflation since 2000, the

median increase over inflation between 2002 and 2010 was 16%. If we assume that 16% real growth over the decade is a reasonable goal, and noting that “books” includes ebooks, back runs of serials, and basically everything *except* current serials—then the restoration required would be \$279,223,718.

In fact, in 2002 dollars, *total* spending for books fell from 2002 to 2010 by about \$90 million while total spending for serials rose by about \$270 million—but the fall in books spending is a bit misleading, since 22 libraries at the top of their game managed to spend \$50.8 million more on books (after inflation) just among that group.

Incidentally, those top 22—the only libraries spending at least \$1 million more on books etc. in 2010 than in 2002, after adjusting for inflation—are *not* all big private universities. Fourteen of the 22 are public universities. At the other extreme, two university libraries—the two at which I’ve spent the most time, oddly enough—are nearly tied for needing the most money to restore their books budgets based on my second calculation: Right around \$5 million each, a little more for UC Berkeley, a little less for Stanford.

## \$400 Million—or \$1.4 Billion

It’s been a tough decade for academic libraries in general. More than half of the libraries overall lost ground to inflation between 2000 and 2010. In order to restore those libraries to the same total budget (adjusted for inflation) they had in 2000 would cost—in 2010 dollars—\$394,378,207.

But given increased serials prices and other issues, it’s not at all clear that just keeping up with inflation is good enough. Among the minority of libraries where spending *did* increase faster than inflation, the median increase (adjusted for inflation) was 25%. What would it take for every library where spending failed to increase by 25% above inflation to reach that level? \$1,392,776,477—a level of funding that’s clearly not about to happen. (Although, in some Erewhon where all serials became fully OA overnight and all current-serials funding remained with libraries, there would be *more* than enough money to cover this level of restoration.)

I’d like to believe that the \$279 million figure noted earlier is plausible. I don’t know how you’d actually get there, but it’s possible. \$1.393 billion? Probably not....

---

# Technology

This time around, this infrequently appearing section is a true miscellany, some of which might better belong in THE BACK—and some of which is as

much about personal taste as technology. A dozen items, some fairly old, because a dozen seems about right.

## PCs MUST...

There have been some interesting commentaries in the library field about the many speeches and articles that say “Librarians *must...*” or “Libraries *must...*”—commentaries that I delight in seeing, since I’ve been grumping about this absolutist nonsense for far too long. But of course it’s not just libraries.

The new editor at *PC World* is off on a mission. In Jon Phillips’ March 2013 “Editor’s Letter,” he notes that *PC World* has been publishing for 30 years—and has his list of things the “entire PC platform” *must* do right away: Instant on, every time; Easy plug-in upgrades; Seamless-over-the-air updates. Without getting into an extended discussion of this here’s his take on the first:

Instant on, every time: It’s unforgivable that the term “boot time” is still in our lexicon. We should be able to turn on a computer as quickly as we turn on a TV or a tablet. Optimizing operating systems will always help, but we really need to ditch traditional mechanical PC hard drives once and for all.

It takes roughly half as long for my HDTV to boot up (if by that you mean getting to a picture) as it does my PC. (That’s from a cold start; from sleep or hibernate mode, I think the PC’s faster than the HDTV.) But never mind that. Basically, Phillips is saying that *everybody should pay 10-25 times as much* for mass storage because he doesn’t like hard drives. What’s that? You can have a little solid-state drive for startup and a big hard disc for everything else, if you’re offended by waiting 30-45 seconds for a cold boot? And you’re one of those who has a *lot* of music, videos or photos, and you can’t see spending \$680 for one terabyte of solid-state storage (two 500GB drives) when you can buy four times as much storage in a single \$150 4TB hard disk? [Prices as of May 18, 2013.] Tough. We really need to ditch mechanical PC hard drives once and for all: All of us. *PC World* has spoken.

Yes, I think it’s remarkable that you can now slap 500GB of solid-state storage into a package the size of a small internal hard drive and sell it for \$340 or so. I assume they’ve made this storage durable enough that the read-write cycles will outlast the PC (or maybe the assumption is that you’ll get tired of the PC long before the SSD reaches its limit). But it’s also remarkable that the same size drive bay will hold 4TB of hard disk storage at less than four cents a *gigabyte*—especially to an old fart like me who remembers his first 10MB hard disc, which probably added several hundred dollars to the cost of the computer.

## Ready for 4K?

Once most folks who cared about the difference owned HDTVs and Blu-ray players, the studios and manufacturers needed to find another way to keep us buying. That way: 4K—a new HDTV format with four times the pixels of boring old HDTV. And, as noted in the April 2013 *PC World*, the Blu-Ray Disc Association is studying whether Blu-ray can be extended to handle 4K movies.

The piece includes this interesting parenthetical note about market demand for 4K media: “(Such demand seems likely, in view of how much better 4K content looks than current 1080p material.)”

How much better *does* it look? Unless you have a *big* screen and *sit real close*—what they’re calling the “immersive experience”—no better at all. Some engineers say you need at least a hundred-inch screen for any difference to be visible. The big selling point seems to be that you can sit 1.6m from the screen (call it 5 feet) and never see pixels. Of course, if you only have a 60” screen and sit, say, 8 feet away—well, you’re out of luck.

You might find Geoffrey Morrison’s [“Why Ultra HD 4K TVs are still stupid”](#) worth reading, noting that Morrison *has* a huge screen—a projector—and personally wants 4K. He includes a chart that relates distance from the screen to size of the screen and what resolution your eyes are (typically) *capable* of perceiving. So, for example, if you have a 40” set and sit more than seven feet away, you probably can’t perceive the difference between 720p and 1080p resolution. For most people to perceive any benefit from 4K on a 60” TV, it looks like they’d need to sit within six feet of the screen. Do you *really* sit that close to your big TV? We don’t; for us, 4K is a non-starter. Even if broadcast stations could handle it (they can’t). Even if cable would transmit it (unlikely in the near future). Morrison figures that most people usually sit nine or ten feet from their TV screen (that’s about right for us)—which means you’d need at least an 84” screen for there to be any visible advantage to 4K. And, as he says, very few people are going to deal with screens that huge in their living rooms. That could change, of course, but probably not rapidly.

A key section of Morrison’s discussion is the finding that most people used to sit nine or ten feet back from a standard-definition TV—and most people *still* sit nine or ten feet away. The cinema lovers at THX say you should have a 40-degree viewing angle—which means a 90” screen if you’re sitting nine feet away! People haven’t moved closer because of HDTV, by and large: There’s good reason to believe most people don’t really *want* an immersive TV experience, at least most people who don’t have home theaters.

Am I saying 4K makes no sense? Not really, any more than Morrison is. On the other hand, I think it’s about as inevitable as universal 3DTV. Which is to say, not so much...

## BSG qØ1 Signal Completion Stage

Another case where I'm not sure if this belongs in TECHNOLOGY or in THE BACK. It's a long, serious review by John Atkinson—editor of *Stereophile* and also the one who runs instrumented test reports on equipment and sometimes has fun squaring his results with those of the reviewer—of a \$3,995 piece of equipment that, well, “completes signals.”

What does it do? He discusses that. He's not entirely clear. It seems to be a variation on the Blumlein Shuffler, an 80-year-old technique for messing with sum and difference signals in a stereo source to alter the apparent soundstage. But it's a patented technology and it may not be that simple. In any case, it's messing with the signal—in ways he found consistently worthwhile, “usefully increas[ing] stereo's sense of envelopment,” but which make him nervous. Especially for four big ones. I've heard matrixing systems do remarkable things—the “surround” option on my old Altec-Lansing PC speakers (currently filling in for the TV soundbar we haven't yet purchased) uses shuffling or matrixing to create a wide, almost surround, image. Can it be worth \$4,000? Damned if I know. Obviously, it's out of our league. But it seems to be less unicorn-dusty than some stereo exotica.

## Mastered for iTunes

Following up on stereo exotica, here's a piece by Chris Foresman [on April 29, 2012](#) at *ars technica*: “Does ‘Mastered for iTunes’ matter to music? Ars puts it to the test.” I'm not an iTunes user (at least not intentionally), but apparently Apple launched this program as a set of recommendations for engineers to follow so that AAC files will sound as good as possible. (I use MP3 at the highest data rate, 320K, so I don't have a horse in this race.)

Apparently some readers didn't think you could make AAC sound as good as uncompressed CD; some felt you should have access to the higher-resolution audio now used in most recording studios; and some suggested that most people can't tell the difference *anyway*, so why bother? (That last version ticks me off, and there may or may not be a separate essay on a related topic in a later issue: Because most people can't appreciate a better product, *it shouldn't be offered*? Since when did mediocrity become not only the norm but the optimum?) At least one recording engineer thought the whole “Mastered for iTunes” process was nonsense.

For this story, *ars technica* looked into the technical aspects of Mastered for iTunes and did some of their own testing. This summary bothers me a bit:

We came away from the process learning that it absolutely is possible to improve the quality of compressed iTunes Plus tracks with a little bit of work, that Apple's improved compression process does result in

a better sound, and that 24/96 files aren't a good format for consumers.

I don't doubt the first two. I do doubt the third, unless you add "most" before "consumers." There's a reasonable discussion of the technology, although saying that the Nyquist-Shannon sampling theorem means that 44.1kHz sampling (CD rate) enables frequency reproduction up to 22.05kHz, while true, oversimplifies: There are good indications that there can be *effects* on lower frequencies of that sampling rate. At least for some listeners. (I could get into a discussion of the pre-echo caused by standard digital-to-audio filters, for example, but that's way too geeky for *Cites & Insights*.)

One clear good thing about the iTunes recommendations: They discourage extreme level compression, which is one of the worst problems with contemporary audio (and has nothing to do with CDs). Apparently Apple's also improved the AAC compression process and it does appear to improve the results.

Other than the usual unfortunate universalisms, it's a fairly interesting article. I never did see an explanation as to why 24/96 files aren't good for consumers with plenty of storage space, but maybe that's expecting too much.

## Sometimes Technologies Do Disappear

In this case, the technology is rear-projection TV (RPTV)—for some years the best buy in high-def TV, if you had room for the generally huge cases. Mitsubishi made a *ton* of these monsters over the years—and in mid-2012, Mitsubishi was the only maker left, offering sets in the 73" to 92" range.

No more, as noted in an April 2013 *Home Theater* story. Mitsubishi didn't introduce any 2012 models and announced it was selling off what was left of 2011 models. It will still service existing sets and build professional devices, but that's it. While RPTVs first appeared in 1947, they came of age in the 1980s as the only way to get a TV screen bigger than 40". Now they're gone. With front-projection TV taking over in home theaters and ever-bigger-screen LCD and plasma screens everywhere else, it's no great surprise.

## Mobile Usability for Cats: Essential Design Principles for Felines

I *really* couldn't resist citing [this April 1, 2013 item](#) at Jakob Nielsen's *Alertbox*, and I'm sure the date is entirely coincidental. The summary:



Summary: Feline users require special considerations, including larger tap target zones for paws, continual animation, and audible vocalization.

Since, as noted, cats are taking over YouTube and cats using iPads do so well, it's reasonable that you'd try to optimize apps for cats. "With their lack of opposable thumbs and ever-shifting focus, cats are certainly a challenging target audience."

I'll leave it at that. This is one you need to read for yourself.

## 3-D Printing

A couple of items on 3-D printing, noting that I'm not following this in general and haven't formed any firm opinions. The article I tagged is by Will Oremus at *Slate* on [February 24, 2012](#), "Will 3-D Printing Change Your Life?"—and the subhead gives it away: "Probably, but not in the ways you'd expect." (The URL has a more dramatic title: "3-D Printing Hype: Will Every Living Room Have One?" So it goes.)

Oremus links to some of the more sensational articles about 3-D printing—and also to Christopher Mims' naysaying "Why 3-D Printing Will Go the Way of Virtual Reality" ([January 25, 2012](#) in *MIT Technology Review*). (Essentially, Mims says "great for prototyping, terrible as a replacement for manufacturing," and *at least for now*, that sounds about right.) He also points out that many of the discussions have been confused and misleading—e.g., a report that a *home* 3-D printer can churn out "everything from a new necklace to a replacement car part." As Oremus points out, the "home" part of that is tricky: most home 3-D printers use one form of plastic. Period. I suppose you can make a necklace out of ABS, but probably not a really great one. Which is a major issue: For a 3-D printer to actually *replace* manufacturing, it needs to be stocked with all the materials used in items—3-D printers can't transmute one element into another. They're not replicators, nor are they ever likely to be.

But professional 3-D printers are already in use and can replace some traditional techniques to good effect. Thus, 3-D printing *could* affect your life ("transform" may be a bit strong) without you ever knowing about it.

## Buying This Thing Will Make Me Happy

What a lovely title—in this case for [River Clegg's piece](#) at McSweeney's (not sure when it appeared: I tagged it on March 12, 2012).

It's quite nice. It's brief. It begins...

I know what you're thinking, so don't even say it. Buying that thing won't make you happy, is what you're thinking. Buying things never makes you happy, so why would you buy this thing? It won't make you happy.

But you haven't seen this thing.

It's really cool. They just started making it and not many people have one yet...

Go read it. You'll enjoy it. I think (or iThink?).

## Standby Power

[The table's](#) a little old (although it may have been updated since I tagged it on January 19, 2011), but it's still important and interesting—and it's from a reputable source: Lawrence Berkeley Laboratory. What it is, is a summary table of the standby (parasitic) power consumption of a wide range of consumer products—what these devices use when you're not using them but haven't unplugged them.

Some are pleasingly modest—e.g., a room air conditioner pulls 0.9 watts, really not enough to worry about. Some are only worrisome of you have a *lot* of them—e.g., the average for a bunch of mobile phone chargers was about 3.68 watts while charging, but still 2.24 watts when the phone was fully charged.

Some are more disturbing: the average for 52 desktop computers in sleep mode was 21 watts (the maximum was 83!)—and notebooks weren't a lot better at an average of just under 16 watts.

Then there are the killers: set-top boxes with DVRs. In one group, the average when a DVR was on but *not* recording was actually higher than when it was on and recording—37.6 watts compared to 29.3 watts. Digital cable boxes with built-in DVRs were even worse: 44 watts, TV off or on, and still 43.5 watts if you turn “off” the device using a remote. (I love it: for set-top boxes that *don't* have DVRs, figure 24-29 watts if it's “on,” the higher figure if you're actually watching TV, 17.8 watts if it's turned off by remote...and 17.5 watts if you turn it off using the switch.) That's just a bit of the table, which has useful accompanying information.

## A California-sized Solar Panel

It's been almost two years since Jon Udell [posted this](#) on his eponymous blog (the post is dated July 12, 2011, but there are a number of textual changes that may be somewhat more recent). Udell cites another commentary that includes this note about solar power:

If California were to rely on solar power for its electricity consumption, the entire state would have to be covered with photovoltaic cells.

That struck Udell as wrong (for good reason!), so he did a bit of investigating. He concluded, “A California of solar panels could more than power the world.” It wouldn't make sense, of course, but... He goes on to describe using Wolfram|Alpha to test the thesis, based on the

assumption that a typical PV panel produces about 10 watts per square foot.

It's an interesting article and I was involved in an interesting discussion in the comments. I think it's still worth reading, even as time has gone by (and solar panel efficiency has gone up). I believe we (mostly Udell with a little prompting from me and others) reached the conclusion that the total energy needs of the world projected to 2030 could be met by covering roughly one-360<sup>th</sup> of California (about 455 square miles) with solar panels.

## Just a Little About QR Codes

I've largely been ignoring QR codes (which puts me in good company, as that's precisely what most people do with them, but I don't even *have* a smartphone, so...) but I tagged Chris Silver Smith's guest piece in *Search Engine Land*, [posted July 18, 2011](#), and it reads very differently two years down the line. The title: "Are QR Codes Good for Local Marketing? A Contrarian View."

As I read it, Smith was being contrarian in suggesting that maybe you *shouldn't* bother with QR codes (although the fairly long column actually argues both sides). In July 2011, that attitude probably was contrarian: Marketers (and bleeding-edge libraries) were jumping all over themselves to QR everything.

In mid-2013? To suggest that QR codes might not be all that wonderful? Not contrarian anymore. Indeed, it's fairly mainstream. Which makes Smith look pretty good.

## After the Flood

It's been a while since I pointed you to something by Jason Scott (usually on his *ASCII* blog)—and [this August 28, 2011 post](#) is well worth pointing to, both for what it says directly and for what it says about Scott's attitude toward what I regard as the best of the Internet Archive.

On one level, the piece is about the availability of the *complete* run of *Compute!* magazine (ads and all—and that's important), plus *Compute! Gazette* (the Commodore-oriented spinoff). And some others, a growing collection. Scott talks about the magazines, how they were actually scanned, how they were *indexed* (which is fairly critical) and the like. He didn't do any of the scanning or most of the indexing. What he did do was to sweep them all into archive.org. "I got these 500 magazines up in about 3 days. 72 hours."

That's not really what the article's about. It's really about the significance of gathering all of this stuff and providing good metadata. Here's the lead paragraph for that second portion of the article:

The often-automatic and frankly *entirely valid* question that comes from encountering, say, a 500-issue online stack of 1980s computer and technology magazines is “Why are you doing this? What purpose could this serve?” And my general answer has always been “*Get the fuck out of the way, we’re losing precious items while we dawdle and diminish*“, and while that is definitely still the case and my fight goes on to rescue lost data and artifacts, the question’s relevance and merit begins to leak into the margins of my work.

He addresses that issue, including some discussion of archivists and what they do. (Psst, Jason: For every librarian blogger “who would tie my shoelaces together if they saw me waiting near a platform,” I’d bet there’s at least a dozen of us who would cheer you on, even if you don’t use the right terminology all the time.) He discusses when and why metadata and curation are important. It’s a good read.

I don’t see myself going through old issues of *Compute!* any time soon—but I do remember a series of articles I wrote that depended heavily on the availability of ten years’ of *PC Magazine* bound volumes. Back then, I was able to use my wife’s college library. These days, I’d probably go to the Internet Archive if I was doing something similar—and if they had not only the fully scanned volumes, but also metadata and indexing, well, *wow*.

A note for those who’ve heard me say less than 100% positive things about Brewster Kahle at times: No, I don’t see a contradiction. I think what Kahle and IA are doing is wonderful. Doesn’t mean I worship him or think he’s infallible.

## The CD-ROM Project

# Moving Toward the Finish Line

It’s been a while since the last set of CD-ROM retests—partly because the last few have been so discouraging, partly because original work and other stuff has been so much more fun. But that stack of CD-ROMs is still sitting there, and it’s time to finish it off.

These are miscellaneous CD-ROMs, most of them rendered less useful by time alone—e.g., encyclopedias and atlases. The usual drill applies: Quick notes from my original review (generally more than a decade ago), then a quick test of whether the thing will install *at all* and run on a Windows 7 notebook. If so, some notes on it; if not, maybe notes on current alternatives.

This is a stream-of-consciousness essay: I’m commenting on products (the original review and the current case) as I go through them.

# Time Multimedia Almanac 4.0

I reviewed two versions of the *Time Multimedia Almanac*—the 1996 version (3) and the 1997 version (4). Both received Excellent ratings, with the second one doing better. It included more than 24,000 selected *Time* articles dating back to 1923—and all of the articles for a rolling eight-year period (in this case, January 1989 through December 1996). There were also “hot topic” features, a few dozen video clips, some slide shows and hundreds of maps and photos—and an almanac section based on the *Statistical Abstract* and *CIA World Factbook*. On the bad side, the interface wouldn’t scale beyond 640x480 and it didn’t have Autoplay set up. At \$29.95 (or less—it was frequently bundled with other products) it seemed like a bargain.

## Installation

Yep. No problem.

## Operation

Here’s the surprising one: Yep. No problem. When I ran Setup, it left a Time Magazine Almanac item on the Start menu—and double-clicking brought up a movable (but fixed-size 640x480) window with an opening video, leading to the home window. Figure 1 shows that window.

Except for some videos that require a compression routine the program couldn’t find, everything worked as expected (including other videos, slide shows, narration and searching). Full-text searching worked just fine (and the search window will float outside the fixed-size window).



Figure 1. Time Multimedia Almanac home window

Of course, it's now 16 years later: This is as much a time capsule as a *Time Almanac*. That said, it's a pretty interesting time capsule. Figure 2 shows part of an article retrieved by searching "library."

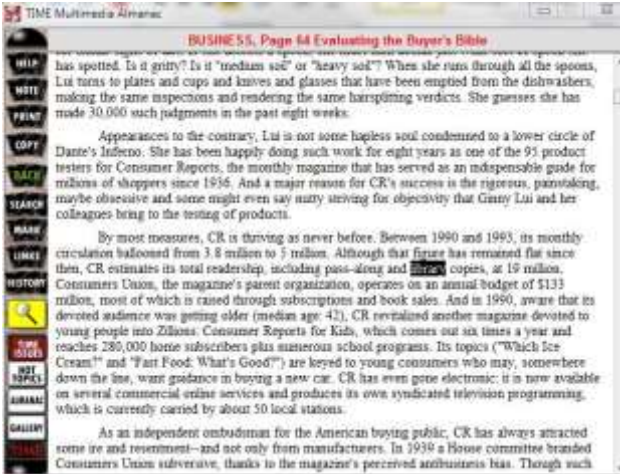


Figure 2. Portion of an article retrieved by full-text search

### Contemporary Alternatives

If you're a *Time* subscriber, there's no question: The *Time* website has full-text searching for the complete archive, from 1923 to the present—and even limiting a search to the same eight years as the CD-ROM (except that the CD-ROM also includes some earlier issues) I find more results online for what appears to be the same search: 441 in the eight-year period compared to 357 on the entire disc.

You can *find* the results for free. Viewing them? Then you need to subscribe—which isn't that expensive. There's also a complete cover archive. My general take: If you care about *Time* you probably subscribe—in which case the Web archive is far more complete and faster than this CD-ROM. Still, it was neat that it actually worked as well as it did, 16 years after the fact.

### A Trio of Atlases and Globes

The *Time* CD-ROM includes quite a few maps, but it can't compare to a full-scale atlas—or, in one case, a "virtual globe." I reviewed several of them in the late 1990s, and three are still in my possession: *Compton's Interactive World Atlas 1997*, *Interactive World Atlas* (not dated but with 1997 and 1999 copyrights) and *Microsoft Encarta Virtual Globe 1998*.

I'd given the 1998 version of the Compton's atlas—a "3D" version—a Very Good review, despite its nonscaling 640x480 screen devoting too much space to interface and too little to content. The Encarta rated an Excellent and was a significant upgrade from the 1997 version. It was by

far the best atlas I'd reviewed. (Remarkably, it was even much better than a Dorling-Kindersley atlas, and I usually loved DK products.)

How do they look more than a decade later? (I never reviewed the *Interactive World Atlas* as such—it and the *Compton's* are both from Learning Company/Softkey. Indeed, it was still sealed when I started this review.) Let's try them in alphabetical order, then compare as or if appropriate.

### *Compton's: Installation and Operation*

Installation uses Autoplay to run an InstallShield setup, which ran just fine. As usual, it left an item on the Start menu—and apparently was compatible with Windows 7 despite dating from 1996.

Starting it up was a little surprising and a lot disappointing. First, it triggered Windows' protection scheme because it needed to make changes to the disk *to operate*. Second...well, suddenly my primary screen (secondary in Windows terms), running Word, turned coarse and ugly, while the *real* primary screen (the notebook) was taken up with a big map over which was a little opening window, then an unsizable (but movable) operational window, probably 640x480. Apparently the program reset both displays to lower resolution and, I'm guessing, lower color depth.

It worked, but it's sort of a mess by contemporary standards. (Yes, *all* of it worked, even the videos.) Zooming in on the world map just made it larger and larger: You couldn't click on an area and change to a national map, for example. It was clunky—which is how I felt about it 15 years ago. The remarkable part: Despite probably being designed for Windows 95, it works “properly” in Windows 7. The unremarkable part: It's unremarkable.

### *Interactive World Atlas*

Installation failed when attempting to open a file. I didn't bother trying to get further. The nature of the installation was such that I didn't expect much: It didn't look to Windows for location conventions (it wanted to put the program in a new folder at the drive level), it said my hard disk had 99999KB (I think) of space, meaning that it couldn't *identify* a contemporary hard disk...anyway, it's old and was a cheapo even at the time.

### *Microsoft Encarta Virtual Globe*

This was the classiest product in the late 1990s; I was hoping it would still show some smarts. Unfortunately, after an extended installation process (it spent several minutes looking for installed components), the installation failed: For whatever reasons, this one just wasn't going to install on a contemporary machine.

Too bad. It was a slick product for its time.

### *Contemporary Alternatives*

On one hand, *any* 14-year-old atlas is useless in some ways except as history: The statistics (other than size, for older nations) are all wildly out of date, as are quite a few geopolitical boundaries.

You can get reasonably good atlas-style maps online for free with loads of ads. As for profiles of nations and other entities, including statistics and the like, *Wikipedia* will do just fine.

What I don't see—and what I miss from *Encarta Virtual Globe*—is the combination of maps drawn to scale (the program used MapPoint to create maps on the fly) and multimedia cultural profiles that made me feel as though I understood more about a nation and its people. Culturgrams? You can get them—for a price.

When I search for Encarta Globe or Encarta Atlas, I see lots of sites that will offer me free downloads—of versions that *never existed*. I'm not paranoid, but the names of those sites and the offering of free versions of nonexistent commercial software do not, shall we say, inspire me to try them out. If the sites didn't drop malware on my system, I'd be surprised.

### *General Comment*

In general, CD-ROM titles represent a category of software that no longer makes much sense. That may be even truer for reference software. Microsoft was losing too much money on Encarta to keep it going. The slick and effective integration of multimedia (in the encyclopedia and the virtual globe) was great for its time, but that time has gone. A bit sad, but the way things work.

## Funk & Wagnalls

This one and the next are DVD-ROMs, not CD-ROMs—a format with an even briefer lifespan, but one that made sense for publications like these: To wit, encyclopedias.

I gave this a Very Good rating back in 2000 and was reviewing an OEM version that came bundled with some DVD-ROM drives and PCs. As it happens, I have two copies, differing only in that the OEM version has a more colorful disc label and says it's for Windows 95, while the other copy says Windows 95/98.

At the time, I noted that it followed proper Windows standards (scalable, movable screens, etc.) and added enough multimedia to make it interesting, including some 640x480 DVD video clips with Dolby Digital sound that actually take up 3.2GB of the disc's 4.1GB.

The text, of course, was ubiquitous: *Encarta* began with F&W text and *InfoPedia* also used it. What made this different were the interface and the multimedia. So how does it do 15 years later?



### *Installation and operation*

I tried what appears to be the newer version first. It *seemed* to load just fine, with a newer and more sophisticated InstallShield—and a process that, amazingly, actually *recognized newer DLL versions* and let me opt not to overwrite them.

It did require a restart, and it did insert a desktop icon (in the upper-left position, just a *leetle* bit arrogant), but that's OK.

Then I started it. Flashy video-only full-screen intro on the primary screen. Goes to a normal screen...and can't open a "preferences" file. And that's it. I can't find a way to fix it (the supposed troubleshooting file doesn't exist). Too bad. I can view the 18-minute space-travel movie in Windows Movie Maker (the audio is out of synch, but the movie's fine), but otherwise, it's a dead duck. Of course, at this point only the media are of interest in any case.

## Grolier Multimedia Encyclopedia

In the same article in which I gave F&W a Very Good rating, this DVD got an Excellent. It had a scaling interface, it devoted more space to articles than to overhead, it offered unusual (for the time) online links to other Grolier products—but the typeface was crude. It also didn't integrate media quite as well.

### *Installation and Operation*

It seemed to be a polite install.

When I start it up, it changes the color scheme to Windows Basic and tries to start a special movie. That doesn't work, but an overall startup screen does show up. And clicking on that yields a (gasp) movable, scalable screen.

It works—sort of. Videos didn't seem to do anything. Guided tours didn't. Panoramas were blank screens with text underneath. But sound clips (either MIDI or recorded) were fine, pictures were fine, text searching and display was—while still crude—fine. When I attempted to play .mov files directly from the DVD-ROM, I got the narration, but no video.

Relevant in 2013? Probably not, especially since—other than the variety of world music and other sounds—there's nothing to distinguish it.

## Compton's Encyclopedia 2000 Deluxe

Were it not for an absurd sense of completeness, I wouldn't even try this one: It's a two-CD set that I gave a Good review back in 2000, and "Good" was a fairly mediocre rating. While the install was polite and the interface scaled, the segments of the interface *didn't* resize or move and text was in a

dull sans serif type on “a dreary yellow-green background.” I found the interface in general depressing...and the pictures and videos weren’t very good. But what the hell...

### *Installation and operation*

In 2000, it still made sense to ask whether you wanted a 17M or 29M install (both stated in kilobytes without commas). The install works. The product? Same as before: While the main window is movable and scalable, other things—the search window, the *separate window* that opens when you view a photo, the *nonworking* video window (another codec issue)—aren’t as scalable and seem to pop up in surprising places. And the text is depressing to look at and hard to read.

All in all, I was only too happy to exit this one. Even in 2000, I think it was past its prime.

## InfoPedia 2.0

This one’s a *little* different—it integrated seven other reference works with Funk & Wagnall. But it’s also older than the others. Given the age and the Windows 3.1 or Windows 95 requirements I’m not expecting too much, but let’s see...

### *Installation and operation*

Amazingly enough, it did install (oddly: after verifying that there was enough disk space, it sat for a couple of minutes—then rapidly copied the files it needed).

It also ran—sort of, as with most of the above. It couldn’t find the codec it needed for video, some of the control methods didn’t work, but audio was fine and pictures were, if small and slow to load, certainly visible.

Overall? Well, for 1995, it wasn’t bad. For 2012: Not so much.

## Alternatives for All of These

For text, photos and links, there’s this thing called Wiki-something-or-other. It may not be authoritative, but it’s a great starting point, far more complete than any of these. And for the items I checked, it was so much more current, comprehensive and even engaging than any of these that there’s no comparison.

I’ll probably never be a 100% True Believer in Wikipedia as the final encyclopedia—but it sure beats the DVD and CD flavors, especially since it makes it easy to investigate further.

## World Book Discoveries

This DVD-ROM, which I originally reviewed in 2000, isn't an encyclopedia—and it doesn't originate from *World Book*. It's based on the Gallimard-Larousse Encyclopedia; it was developed by Havas Interactive; it was distributed by IBM. (An earlier version was distributed by Hamas.) It's mostly a "fat CD"—there are no DVD videos and at some point the product was available as a five-CD set. It was a little hard to describe, although I gave it the lowest possible Excellent score. It's sort of an exploration of various eras, with a lot of text and images, and some animations, narration and music. The text is poor-quality sans and the product is clearly designed for exploration rather than research.

### *Installation and operation*

Interesting. The install analyzed my system and said I have a 1684MHz Pentium Pro (it's a Core 2 Duo) with 2097151 KB of RAM (there are three gigabytes of RAM), Windows NT as an operating system (Windows 7) and "16777216" colors (that and the notebook screen's resolution are both right). Oh, and the DVD-ROM has 19ms access time and 33056KB/s transfer rate.

Then...it installs ActiveX (a later version should already be on the drive, goes to "Install Active Movie" and...sits. And sits... Hmm. Task Manager shows "amremove.exe," ActiveMovie Uninstaller, using 49-50% of CPU. For quite a few minutes. Without apparently actually doing anything. This is not promising. After 15 minutes, I canceled the setup (through Task Manager), hoping that nothing on the system was actually damaged.

Too bad. I think the *idea* here was interesting, but it's clearly not going to install to let me test it out.

## Future Trends 5

Another odd one—but this time not a commercial multimedia extravaganza. It's from the OECD, the Organisation for Economic Co-operation and Development; it cost \$510 (\$408 for most libraries) in 1999, when it was issued; and it's described as "an information base for scanning the future."

When I reviewed it in 2000, the Windows-only CD-ROM appeared to be text-only, using normal Windows methodology and offering three databases—primarily Future Studies, 8,500 abstracts (with metadata) for future-oriented references. In other words, it's a reference database on CD-ROM, the other two pieces are Highlights (a handful of topical essays) and Forum (reports prepared for OECD's Forums for the Future).

I gave it a Very Good back then, despite some qualms about the apparent claim that everything here is OECD-vetted so you don't need to check other references. I called that suggestion (in the sales material that accompanied my review copy) "false and a little dangerous," especially since the disc is rife with things like near-term projections that the written word will become redundant, without critical commentary. (Remember: This is a 1999 disc; "near-term" should have kicked in by now. Some futurists continue to make what I regard as an absurd claim that the written word is on its way out.)

The product is designed to run on almost any Windows system. It lacks Autoplay and requires a (supplied) username and password. The system requirements were modest even for 1999, but do make you wonder about the solidity of this *fifth edition* of the user's guide. It requires an "IBM compatible PC" with "30386 processor or higher," which is interesting since (to the best of my knowledge) there was never a CPU called "30386" (as opposed to, say, the Intel 80383). It also wants 4MB of hard disk space and 2MB RAM, MS-DOS 3.1 and "MS-Windows 3.1 or higher," an EGA, VGA or SVGA display, a CD-ROM drive and "Microsoft CD-ROM extension MSCDEX 2.1 or higher." I'd forgotten that there was a time when CD-ROM support wasn't native to every Windows system.

Of course, technically my system doesn't comply with those requirements: MS-DOS is long gone, since Windows 7 is based on the integrated Windows NT. I'd guess MSCDEX disappeared somewhere along the way, and I surely don't have an EGA, VGA or SVGA display. But what the hell...

### *Installation and operation*

Installation (no Autoplay) went fine: Double-click on Setup.exe, add the user name, location and code provided, note the claim that you have 999965 (or something) Kb of disk space—and it installs, quickly and (as the manual assures you) entirely in its own directory without affecting other directories.

Then I double-click on the "Future Trends" item on the Start menu, the disc whirs a bit, and I get what apparently is all I'm going to get from this product:



Figure 3. Future Trends

Well, *that* was fun. A little exploring shows that the primary database is a 117 megabyte .doc file—but an encrypted one that reads as garbage. One huge Word file? I don't know what, if anything, replaces this database. There's certainly no lack of futurism around. This particular future is defunct.

## Infocom Masterpieces

While I still have a double handful of CD-ROMs (actually four big boxes and a bunch of little boxes) that might be worth looking at, as far as I can tell this is the last one that I reviewed (except for one Spanish language learning system that, as a confirmed monolingual, I'm not going to even try). It's also an odd one—one that I'm afraid shows just how little time I've spent on computer gaming.

What it is, is most of the classic text adventures published by Infocom mostly between 1981 and 1986. "You are standing in a forest..."

Zork: The Underground Empire to Leather Goddesses of Phobos... After six good years, Activision swallowed up Infocom and, years later, bundled the 30-odd Infocom games (and half a dozen text adventures developed in a contest and never published) on one modestly-priced CD-ROM. Three or four have graphics. The printed manuals, maps and hints are there too—as PDF files on the CD-ROM (101 pages of maps and the like, 433 pages of manuals and 481 pages of hints).

It all installs onto 13MB of hard disk space (except for the PDF files—those you read from the CD-ROM), installed as a folder with 39 icons. What I said at the time: "Click on a game, and off you go...into a DOS window!" Which could be problematic now that DOS is long-gone. But we shall see. Infocom's text parser was legendary for its time, and this CD-ROM promised "a lot of good old-fashioned entertainment" according to my "Good" review. Although, oddly enough, I never spent more than five minutes actually *enjoying* that entertainment—just as I'd never really explored Zork or any of the others.

## Installation and operation

The booklet says what to do (there's no Autoplay; you double-click on Winsetup on the CD). It works. A remarkably old and garish version of Adobe's installer wanted me to agree to licenses; since I have a *much* newer version of Reader, I declined.

So then comes the key question: What does a DOS-based program actually *do* in Windows 7?

The methodology is, shall we say, primitive (and well-explained, albeit in older terms): You use Windows Explorer (it says "Browse") and select the folder of the game you want to play, then double-click on that and then the file within it.

Does it work?

Sort of. Sometimes. Depending on the game.

Some games want a full-screen DOS window. Windows 7 doesn't support that. It tells you so politely.

Some games seem to have mysterious stuff embedded in them, resulting in garbage on the DOS window (actually a DOS emulator).

And some games run—with little oddities, namely extra stuff that probably made sense in a DOS environment. Here's an example (with black-and-white reversed so you don't go blind):

```
In the Wings
The big top can be entered to the north and exited to the south. To the
northeast, the grandstand begins its precipitous rise.
←[37;7m←[01;01H In the Wings                               Score: 0
  Moves: 0          ←[0m←[25;01H>look east
In the Wings
The big top can be entered to the north and exited to the south. To the
northeast, the grandstand begins its precipitous rise.
←[37;7m←[01;01H In the Wings                               Score: 0
  Moves: 1          ←[0m←[25;01H>go northeast
Climbing up into the deserted and littered grandstands produces a disorienting
sense of deja vu. You make a headachy descent down the steps.
←[37;7m←[01;01H In the Wings                               Score: 0
  Moves: 2          ←[0m←[25;01H>
```

Figure 4. Infocom text adventure (Ballyhoo)

For some fraction of the games, if you can ignore the short chunk of garbage after each move, it does work. (In one other game I tried, there seemed to be less garbage and I was getting some pretty snappy dialog from the program.)

Will I actually play a text adventure? Probably not, but for 30-year-old code designed for a DOS environment to work even this well when DOS no longer exists is fairly remarkable.

## Alternatives?

I haven't investigated to any extent. Activision abandoned the Infocom trademark. Two Infocom adventures weren't on this CD-ROM for licensing reasons. It was a long, long time ago...

## The End. For Now.

If I'm counting right, that's eleven discs—of which five didn't work at all, four sort-of maybe worked but so what?, and two were pretty much OK: The first and the last.

That's a pathetic but not surprising track record. Looking at previous installments (in 2010 I thought this was a six-month project!), it looks as though 24 earlier discs and sets didn't work at all, six "sort of worked" but were wholly unsatisfactory, and a dozen worked almost as well now as they did back in the day.

Including these we have 29 total failures, ten "why bother?" and 14—roughly one-quarter—that still work more-or-less properly and *might* still have some interesting aspects. Maybe that's not bad.

Are there any of these I'd recommend (assuming availability, a good price, etc.?) Maybe *Red Shift*; possibly *The Complete National Geographic* (but in its current DVD-ROM form, which I haven't tried), maybe *Totally Mad* (another, much newer product, *Absolutely Mad*, is on two DVD-ROMs and covers through 2006—but it's entirely PDF files and would be less amusing to use). Beyond that...probably not.

There's still that stack of boxes and sleeves over on a bookshelf, ones I apparently never got around to reviewing (or can't find the reviews for). Does all that deserve one more installment? We shall see. For now, the CD-ROM Project either is on indefinite hiatus or closed. It's been...strange.

## Media

# 50 Movie Comedy Kings, Part 2

### Disc 7

*The Lady Says No*, 1951, b&w. Frank Ross (dir.), Joan Caulfield, David Niven, James Robertson Justice, Lenore Lonergan, Frances Bavier. 1:20 [1:22]

The setup: An unmarried photographer for *Life* (Niven) is driving to Carmel to photograph a young woman who's written a bestseller opposing romance—*The Lady Says No*. He's towing a trailer containing his photo equipment. He stops for a comely young hitchhiker—who, as it happens, is married and brings along her soldier husband. She insists that they stop a little farther down the road, packing the car with another five or six soldiers and girlfriends. They all want to go to Monterey (where the action is)—but first, he has to make his Carmel stop.

When he does, he assumes the aunt is actually the author, not the beautiful young woman. After various nonsense, he tells her to show up the next day at the beach, and goes off to Monterey. Then, the aunt's wandering husband shows up and...oh, well, there's just too much plot to summarize. As you might expect, the photographer convinces the woman that romance isn't such a terrible thing. It's all light, including an interesting dream sequence. Not great, but amusing. I found it more than a little sexist, which reduces the overall score to \$1.25.

*Life With Father*, 1947, color, Michael Curtiz (dir.), William Powell, Irene Dunne, Elizabeth Taylor, Zasu Pitts. 1:58.

Previously reviewed in *Family Classics 50 Movie Pack: See Cites & Insights 5:4*. What I said then, with price modified for changing expectations:

Charming period family comedy based on Clarence Day's own writing about his father, wife, four sons, and complex household. Taylor—two years older than in *National Velvet*, and already a beauty—has a secondary but important part. Well acted. Good print with occasional flecks and, near the end, a vertical streak. \$1.50, reduced for damage.

I haven't watched this version at all. With less damage, I'd give it a full \$2: It's a fine comedy.

*Lonely Wives*, 1931, b&w. Russell Mack (dir.), Edward Everett Horton, Esther Ralston, Laura La Plante, Patsy Ruth Miller, Spencer Charters, Maude Eburne. 1:25.

This one's a knockabout farce with a lawyer prone to "blooming" (infidelity) after 8 p.m., his wife gone to the mountains (but returning by surprise), his mother-in-law trying to keep him from blooming, a new secretary with quite a walk...and a vaudeville impersonator who wants to add the (famous) lawyer to his act. Oh, and a nervous butler and French maid. And the impersonator's wife...who's brought into it by her friend, the secretary, on the basis that she can get the lawyer to get her a divorce, cheap, if she plays along on a date.

Put them all together, mix with the lawyer's bet that if the impersonator can fool the mother-in-law (and give the lawyer an out to spend the night, um, blooming), he can add the lawyer to his act...and it's supposed to be hilarious (and risqué!), especially the last 20-25 minutes. Maybe it is. Edward Everett Horton certainly gives it his best shot. But, well, I found myself nodding off in early parts and regarding the last part as more action than comedy. Maybe that's just me. Not just me: The print's a little soft, and the sound's pretty bad, with dialog getting softer and louder for no apparent reason. All considered, I can't possibly give this more than \$1.



*Peck's Bad Boy With the Circus*, 1938, b&w. Edward F. Cline (dir.), Tommy Kelly, Ann Gillis, Edgar Kennedy, Benita Hume, Billy Gilbert, Grant Mitchell, Nana Bryant, George 'Spanky' McFarland, William Demarest. 1:18 [1:06]

I find this movie almost impossible to review entirely out of context—except to note that it's a good example of how to pad a 20-minute plot out to feature-film (albeit short feature) length, in this case by including whole gobs of circus acts, some of them twice.

The basic plot: our hero, a “bad boy” in the prankster sense of “he’s a caution!” rather than one of the future thugs in a “cute” Boys or Kids series that will go unnamed, is *such* a caution (finding a frog and putting it in his soup bowl at lunch) that his parents tell him he can’t go to camp as they’re going on their fishing vacation—and he’s planning to win the obstacle race the third year in a row, which would mean he could keep the cup that he shines incessantly.

Just as they’re leaving, the husband and wife, separately, each relents and gives him \$5 to cover the train ride to the camp and his expenses. (Hmm. \$5 in 1938 would be \$76 in 2010. Still a pretty cheap train ride and camp expenses.) But he goes out to hang with his buds and discovers that a circus is coming to town, that day, one night only. In ensuing plot twists, he loses his \$10, he winds up in a girl’s dress, he...well, of *course* there’s a happy ending.

It’s padded all to pieces but it is good fun, probably the more so if you’re a fan of the series (of which this is apparently the third and last). Good cast, including one of Spanky McFarland’s few appearances as somebody other than Spanky. It’s also missing 12 minutes, apparently. I come up with \$1.25.

## Disc 8

*The Milky Way*, 1936, b&w. Leo McCarey (dir.), Harold Lloyd, Adolphe Menjou, Verree Teasdale, Helen Mack, William Gargan, George Barbier, Dorothy Wilson, Lionel Stander, Charles Lane, Marjorie Gateson. 1:29 [1:27]

Burleigh Sullivan (Harold Lloyd) is a milkman with glasses, a timid sort who gets practical jokes played on him during dairy meetings and isn’t much liked by his boss, the dairy owner. His sister is a hatcheck girl. When he comes to pick her up at the club, she’s being harassed by two sizable and drunk buffoons, one of them far more buffoonish than the other. He comes to her defense and, in the ensuing melee, seems to have knocked out one of the buffoons—who turns out to be the middleweight boxing champion.

That’s the setup. From there, it’s a fast-moving joyride with Adolphe Menjou doing a great job as a boxing manager/promoter with the

ethics you'd expect, just enough physical comedy, some great ways to duck-and-dance, love interest, the meek becoming the arrogant—and redeeming himself, and lots more. I found it thoroughly entertaining in an ageless way, well played by everyone concerned, well written and just flat-out funny to boot. A key plot point involves a thuggish boxing assistant whose literacy is minimal at best and the fact that “some ammonia” and “insomnia” have some similarities. Pretty good print, but it seems to be missing a minute or two (though there's no obvious gap). Supposedly, this movie almost disappeared because Samuel Goldwyn purchased both the rights (for a Danny Kaye remake) and the negative, and destroyed that—but Lloyd had retained a quality print. I'll give it \$1.75.

*Money Means Nothing*, 1934, b&w. Christy Cabanne (dir.), Wallace Ford, Gloria Shea, Edgar Kennedy, Vivien Oakland, Maidel Turner, Betty Blythe, Eddie Tamblyn. 1:10 [1:04]

This is a Depression romantic comedy in the worst way: I found the whole thing pretty depressing, and it being filmed in 1934 was part of that. The plot's also a little strange, possibly due to a few missing minutes in this print. To wit: A young socialite's at a sleazy roadhouse with her drunk-to-the-point-of-unconsciousness date. She spots four men conferring at a nearby table and thinks they look interesting/suspicious. A waiter tells her she should mind her own business. But of course, she trails them outside and, stuffing her comatose date in her fancy roadster, follows their car...which is on its way to hijack two trucks full of tires, an effort she aids by stalling her car in a manner that blocks the trucks.

In the ensuing brouhaha, one driver gets shot and the handsome young man who was in the same truck admonishes her. They wind up at her father's (or sister's?) mansion, with the driver bleeding all over the expensive sofa, cops, doctors, bemused father, angry sister... Anyway: She (the socialite) essentially stalks the young man (who's a manager at an auto accessories store), loading the roadster down with a dozen or more horns in the process, until she finally gets him to marry her. (The incongruity: He never seems to show more than the most casual interest in her.) Naturally, her sister sees to it that she's cut off without a cent—and shortly thereafter, he loses his job (which apparently has something to do with the gossipy, loud woman in an apartment near the one they move to, whose husband is a higher-up at the parts place). He's looking for work. She's pawning stuff to keep them going—and at one point, a pawnbroker's wife informs her that she's pregnant (based on her near-fainting spell?). Anyway, somehow, the husband winds up being part of a tire hijacking ring but heroically saving the day and getting his old job back. Or something like that.

Occasionally amusing, but mostly not, and really pretty depressing as well as being wildly illogical even by romantic comedy standards. (Full confession: I love good romantic comedies.) At best, I'd give this \$0.75.

*Never Wave at a WAC*, 1953, b&w. Norman Z. McLeod (dir.), Rosalind Russell, Paul Douglas, Marie Wilson, William Ching, Arleen Whelan, Leif Erickson, Hillary Brooke, Charles Dingle, Lurene Tuttle, Regis Toomey, Gen. Omar Bradley (playing himself). 1:27.

This one's also a romantic comedy, as well as a comedy about growing up and the military—and it's an absolute charmer. Russell plays a Washington, DC socialite, daughter of a senator and divorced from a fabric manufacturer and researcher (who works with the Pentagon on specialized uniform needs)—and whose boyfriend, a Colonel, is suddenly on his way to Paris to work with NATO.

While she first makes a flight reservation for Paris, a discussion with her father leads to a belief that she can get the government to pay for her flight by joining the WACs with an assured officer commission and billeting in Paris. So off she drives to Fort Lee, where she'll deal with the formalities before rejoining her boyfriend. Basic training? Surely she doesn't have to...

Things don't go quite as planned, and in the process we get a movie that's enjoyable on several levels. There's some pure physical comedy, a lot of relationship comedy (among women as well as between women and men), a lot of heart and an odd but presumably happy ending. Even though there are a few missing syllables (but apparently less than a minute overall missing) due to print issues, it's still worth \$2.

*Nothing Sacred*, 1937, color. William A. Wellman (dir.), Carole Lombard, Fredric March, Charles Winninger, Walter Connolly, Sig Ruman. 1:17 [1:14]

The plot's not that unusual, but this 1937 romantic comedy is in well-preserved Technicolor and stars Carole Lombard, and it's a flat-out winner. A newspaper reporter who's done very well for his New York paper gets taken in by a fake Asian potentate (actually a shoeshine artiste) and relegated to the world's worst obituary desk. Pleading his case with the editor, he spots an underplayed story about a young woman in a Vermont town who's dying of radium poisoning.

He goes off to interview her and to show her New York as a great story and publicity stunt. The interactions with small-town Yup/Nope Vermont, specifically a factory town wholly owned by a watch company, and the lush doctor who (mistakenly) diagnosed radium poisoning (a mistake that the patient and doctor, ahem, choose not to reveal when the reporter offers the New York trip) starts out a fast-moving, charming tale. Yes, it's a bit cynical, but it's also funny and

entertaining. Fairly big budget for its time, well made, a good print, and easily worth \$2.

### Disc 9

*The Nut Farm*, 1935, b&w. Melville W. Brown (dir.), Wallace Ford, Betty Alden, Florence Roberts, Spencer Charters, Oscar Apfel, Bradley Page. 1:05 [1:07]

A small businessman's wife gets a postcard from her mother and brother, living in sunny California—and he's just been offered \$40,000 for his store (from a chain), a lot of money in 1935. Maybe they should move to California and buy a nut farm...

Next thing we know, they've arrived, first meeting the mother and brother's half-deaf landlord (whose daughter is the brother's girlfriend). The brother's a wisecracking "producer"—or, rather, assistant director who hasn't actually had a job call in six weeks. And the wife has been reading an ad about Hollywood's need for new faces and a great acting studio.

So we get the plot. She falls into the hands of a slick "producer"/drama coach, while her husband's out looking for nut farms. He finds one—but she says she can star in a movie for an investment of \$40,000, guaranteed to triple the money. And the smooth operator manages to con the husband as well—and even the brother, who he chooses on the spot to direct.

Caution: Spoilers ahead, but not the final round. Since the "producer" has already, um, spent all the money, filming will shut down early—but the kid's going to shoot those final scenes somehow. When it all comes together and gets its premiere showing, it gets laughed off the screen. As a drama, it's a pretty good comed...oh, wait... Anyway, after a few more twists, all winds up happily. And it's funny: fast, well played, funny. Not a major motion picture, but a nice little flick. I'll give it \$1.25.

*Palooka*, 1934, b&w, [Previously reviewed in C&I 7.5](#).

*The Perils of Pauline*, 1947, color. George Marshall (dir.), Betty Hutton, John Lund, Billy De Wolfe, William Demarest, Constance Collier, Frank Faylen, William Parnum, Chester Conklin, Snub Pollard, Bert Roach. 1:36.

The good news here is that the film is in Technicolor—a little faded but still wholly enjoyable—and the print is about as good as these ever get: Still VHS quality but very good VHS quality. The better news is that this is a thoroughly enjoyable comedy about movie making, with Betty Hutton showing herself to be a great physical comedienne as well as a fine singer and accomplished deliberate scenery-chewer.

Hutton plays Pearl White—who did star in the actual serial *The Perils of Pauline*, but whose life had only certain points in common with this combined romance, musical comedy and satire of early silent churn-em-out movie making. The first introduction to the movie factory, in which Hutton winds up raging through a series of doors and, in the process, through four or five entirely different movies being made, is nothing short of classic. The supporting cast is also first-rate.

I could go on, but the plot itself is somewhat secondary. If you're looking for a pure biography of Pearl White, this ain't it—but I don't think it was ever intended to be. (Reading the negative reviews on IMDB, I can practically smell the grinding compound on the axes.) This movie is delightful and I couldn't possibly give it less than \$2.

*The Rage of Paris*, 1938, b&w. Henry Koster (dir.), Danielle Darrieux, Douglas Fairbanks Jr., Mischa Auer, Louis Hayward, Helen Broderick. 1:18.

The plot, such as it is: French girl in New York, trying to find work, bluffs her way into a modeling job but takes the wrong address slip—and soon finds herself half-stripped when a businessman walks in to his office. After she flees following an odd conversation, her friend in the apartment house convinces her she needs to marry a rich man, and engages a maître d' who's just about saved up enough to open his own restaurant to underwrite the girl so she looks uptown and can snare a millionaire.

Which she does—except that the millionaire's a good friend of the businessman, who knows she's up to no good. This leads to him kidnapping her, a variety of stuff happening, her realization that she loves him, his saying “and just when did you find out I'm wealthier than my friend?”—and, of course, it all works out in the end.

It's an early romantic comedy with some screwball elements, and Douglas Fairbanks, Jr. plays the businessman with flair. (Darrieux and Auer—the maître d'—are also first-rate, and the rest of the cast is more than adequate.) It's charming and in the best romcom tradition, years before the genre was solidified. The print's pretty good and I think it's easily worth \$1.50.

## Disc 10

*Riding On Air*, 1937, b&w. Edward Sedgwick (dir.), Joe E. Brown, Guy Kibbee, Florence Rise, Vinton Haworth, Anthony Nace. 1:10 [1:07]

Whether you find this amusing, hysterical or annoying will depend mostly on how you feel about Joe E. Brown, the rubber-faced comic who here plays the managing editor (and only staff) of a small-town daily newspaper, which he's saving up to buy for \$5,000. He has a thing for a young woman whose father owns a department store and

doesn't much care for him. There's a romantic rival, who has a job as a stringer for a Chicago paper and stands to inherit \$10,000...with which he plans to buy the small-town daily. Oh, and Brown's character wins a radio essay contest with a \$5,000 prize.

That's just the start. In all, it involves perfume smuggling, radium deliveries, radio-controlled airplanes (*not* model airplanes), swindlers and a whole bunch of physical humor. I'm somewhere in the middle where Brown is concerned: At the start of the movie I found his shtick tiresome, but by the end I was enjoying it. Incidentally, *both* plot summaries at IMDB are almost entirely wrong, as is the plot summary on the disc sleeve. \$1.00.

*Road to Bali* – Previously reviewed.

*St. Benny the Dip*, 1951, b&w. Edgar G. Ulmer (dir.), Dick Haymes, Nina Foch, Roland Young, Lionel Stander, Freddie Bartholomew. 1:20

I'm not entirely sure why, but this one's absolutely charming. Maybe it's the strong cast (consider: Topper—Roland Young; Max from *Hart to Hart*—Lionel Stander, who by the way was blacklisted during the HUAC years; this was his *last credited* film role until 1963; and there's no gainsaying any of the other players, surely not Nina Foch or Dick Haymes); maybe something else. The plot: A trio of con men are pulling a little sting, where they play poker with a guy, dope his drink, convince him—before he passes out—that four women are coming up for an evening of fun, and then take off; he'd be too embarrassed and worried about his wife's reaction to his obvious philandering to call the cops.

Except that the hotel switchboard operator who's calling him with the setup call has also notified the cops. And the three con men wind up on the lam, which takes them to a Catholic church, which somehow—with the indirect help of a priest who doesn't care for a cop's attitude—leads to them being back out on the street dressed as priests. And winding up in a derelict tabernacle or mission...where the police discover them and decide it's a miracle: They've been sent to resurrect the mission.

That's how it starts. How it ends? Oddly—but with a load of heart and good humor, despite few belly laughs and nearly zero credibility. It's even a romantic comedy of sorts. And Dick Haymes has one good musical number. The music on the soundtrack tends to distort, and that's the biggest strike against it. Still, \$1.50.

*Swing It, Sailor!*, 1938, b&w. Raymond Cannon (dir.), Wallace Ford, Ray Mayer, Isabel Jewell. 0:57 [1:02].

I'm guessing this movie might be good...if you're a Wallace Ford fan and think he's insanely funny. or if you think Navy comedies *must* be funny (quite a few of them are). Otherwise? Not so much. The plot is

based on a sailor who consistently gets his muscular, unable-to-swim buddy Husky to loan him money, do his work, take the blame, whatever. When they come back into port, Husky's planning to propose to a woman...and the moocher wants to make sure that doesn't happen, and that Husky reenlists. To that end, the moocher courts the woman (who's on the make in any case).

Real amusing stuff, right? Sure, there's some physical comedy, but it's mostly a little depressing. I'm being *extremely* generous in giving this one \$0.50.

### Disc 11

*Three Husbands*, 1951, b&w. Irving Reis (dir.), Eve Arden, Ruth Warrick, Vanessa Brown, Howard Da Silva, Shepperd Strudwick, Robert Karnes, Emlyn Williams, Billie Burke, Louise Erickson. 1:18.

Pan up to the heavens, to the Lower Gates Authority, where a couple of newly-dead souls (voices only) ask their wish, which is granted—and then an Englishman who's lived in California asks to be allowed to observe Earth for 24 hours. The reason: His lawyer is delivering three identical letters to three of his acquaintances on earth, each one confessing that he'd been intimate with the wife.

That's the setup. The movie's actually quite good (with, surprisingly, pretty much happy endings). The characters are interesting, it's a fairly broad range, and the women are—as they should be—more important characters than the men. Eve Arden is, as always, first-rate, but so are the others. Not quite great, but close: \$1.75.

*The Villain Still Pursued Her*, 1940, b&w. Edward F. Cline (dir.), Billy Gilbert, Anita Louise, Margaret Hamilton, Alan Mowbray, Richard Cromwell, Joyce Compton, Buster Keaton, Diane Fisher, Hugh Herbert. 1:06.

A send-up of melodramas, almost a little too much so. We get a silly disclaimer up front, a buffoon of a host telling us to applaud the good guys and hiss the bad guys, and then the show (occasionally interrupted by slides with messages). The tale itself involves a widow and her beautiful daughter, a banker who's just died (who didn't care if he was ever paid), his Evil Lawyer, the innocent son—and the curses of drink. No scenery goes unchewed, and the fourth wall is ever absent—except that sometimes a character has to wait for passersby to pass by before he can deliver his direct speech to the audience.

Some of it's very well done: a pie fight, for example, and a discussion between the Best Friend (Keaton in a late role) and the Villain where people keep walking between the two of them until, at one point, the pedestrians must back up because the BF is declaiming with his arms upraised. There's also a little scene in a barn where the hero, in his

drunken abandon, has awoken in the straw after collapsing the last night—and belches. A pig lying next to him rises, offended, and walks away.

It's an odd one, it is, with a fine cast. All in all, given the length and oddity, I'll give it \$1.00.

*A Bride for Henry*, 1937, b&w. William Nigh (dir.), Anne Nagel, Warren Hull, Henry Mollison, Claudia Dell, Betty Ross Clarke. 0:58.

A resplendently dressed bride is outraged because the groom hasn't showed, and all her high-society friends are waiting downstairs...so she sends for her lawyer. And marries him, to show her fiancé what's what...never quite realizing that her lawyer's loved her for years.

That's the highly plausible start for an odd sort of bedroom farce, one that never really gets into bedrooms: The three wind up on a curious honeymoon. The bride is somewhat of a self-centered bitch. The ex—whose excuse is that he got drunk at the bachelor party, woke up puzzled and went to a morning movie instead of the wedding—turns out to be somewhat of a priggish oaf. The lawyer's quite a charmer—charming all the ladies at the honeymoon hotel, off with his charming wealthy female friend (who may have a thing for him), charming when he sings a number at the friend's party. All ends well, of course.

The print's problematic in some ways—a few clips, some waviness at times—but watchable. The movie itself is light romantic farce and works pretty well. Given the length, I'll give it \$1.00.

*We're in the Legion Now*, 1936, “color” (but the print's b&w). Crane Wilbur (dir.), Reginald Denny, Esther Ralston, Vince Barnett, Eleanor Hurd. 0:56.

The sleeve says color. The opening credits include a “color by Magnacolor” line. Unfortunately, that's the only color you'll see (other than shades of gray)—it's another one of those “it should be color, but it's not” flicks. (Apparently Magnacolor was an early two-strip color process and TV prints—which this is probably sourced from—were b&w.) The story's colorful enough, I suppose: Two American gangsters (one of whom speaks with a British accent), in Paris on the run, join the French Foreign Legion and wind up in Morocco. One's a heavy drinker who always throws empty bottles over his shoulder; the other's a charmer and also a heavy drinker. They wind up in a labor camp—and, in the process, manage to redeem themselves.

I didn't find it particularly funny; you might feel otherwise. It's OK, but at best I'd give it \$0.75.



## Disc 12

*Meet the Mayor* (aka *A Fool's Advice*), 1932, b&w. Ralph Ceter (dir.), Frank Fay, Nat Pendleton, Edward J. Nugent, Ruth Hall, Berton Churchill, George Meeker, Hale Hamilton, Esther Howard, Franklin Pangborn. 1:03.

I'm guessing this is another case where if you know and love the main character, Frank Fay, you'll find it hilarious. I don't and don't, and I found it mostly sad. Fay plays a schlemiel—a sad little man whose only job has been elevator operator in the (apparently city-owned?) hotel in a seedy little town, who lives in the hotel, owns a bicycle and apparently not much more, but is sort of a Mr. Fix-It for all and sundry. Including helping out his best friend, who's inventing a new & better cylinder recording / playback device. And who has the same girlfriend Fay's character *thinks* he has.

The title refers to a mayoral election—where the 20-year-in-office mayor, again one who's only had the one job—is up against a wealthy person who actually wants to sell out the town to the railroad. Through a series of plot points, the new recorder winds up recording the big shot talking about his plans with the three thugs he's brought in (thugs who don't actually do much of anything). Fay's character blackmails him into quitting the race, and at about that time finds out that his “girlfriend” is engaged to his best friend.

All pretty sad, actually, unless you think the character is a hoot. Unfortunately, I just found him sad and a little depressing. Franklin Pangborn's always good, but he only has about three minutes on screen. The other (original) title is one of Fay's catchlines. Being generous, \$0.75.

*When the Girls Take Over*, 1962, color? (b&w). Russell Hayden (dir.), Robert Lowery, Marvin Miller, Jackie Coogan, James Ellison, Ingeborg Kjeldsen. 1:20.

A revolutionary comedy! Of sorts... Set in Hondo-Rica, a Caribbean nation trying to gain investors to produce all sorts of things out of sugar cane (since the sugar itself is a glut on the market), but with a threatened Cuban-style revolution. Of sorts... The revolutionary forces consist of Maximo Toro, the Big Bull, a mustachioed-and-bearded young revolutionary; his American writer/thinker/sidekick (who misses his girlfriend); maybe half a dozen reasonable well-trained and armed sidekicks; and perhaps four dozen lazy soldiers armed with wooden sticks (for the moment) and missing women.

This revolutionary force turns out to be no match for a Texan oilman (young and handsome) who's already been nationalized out of a bunch of countries and who doesn't want it to happen this time. He somehow manages to gather a *bunch* of women, buy a whole fleet of

jeeps on the spot, and let loose these women—armed primarily with bottles of rum—on the revolutionaries. That’s just part of the plot in what’s mostly a helter-skelter madcap comedy. Not terrible, but far from great.

IMDB says color, and given that it was filmed in “Virgin Isle” and Puerto Rico and has loads of scenery, it would be a whole lot better that way—but the sleeve says B&W and that’s what the picture actually is. (Since the uniformly negative reviews on IMDB also all say they saw it in B&W, I’m guessing any actual color prints are long gone.) I’ll give it \$1.00.

*Too Many Women*, 1942, b&w. Bernard B. Ray (dir.), Neil Hamilton, June Lang, Joyce Compton, Barbara Reed, Fred Sherman. 1:07.

A madcap comedy involving a young man, the woman he’s engaged to (but too poor to marry yet) and two former or would-be girlfriends. There’s also a probably crooked land promoter who wants him to sell land; to get rid of the pest, he claims to have just inherited a fortune. As that news spreads around town, he somehow winds up engaged to *three* people, on a drunken spree—and totally broke, except for a \$1,000 bet on a longshot horse. His grandmother, supposedly at death’s door, is part of this. There’s even a butler. The last 20 minutes is pure traditional farce.

I guess it was mildly amusing, if maybe a little incoherent. For fans of this genre, maybe \$1.00.

*Flying Wild*, 1941, b&w. William West (dir.), Leo Gorcey, Bobby Jordan et al. 1:04.

No. Sorry, but I couldn’t. I gave it 25 minutes, which is about 20 more minutes of Leo Gorcey and the East End Kids than I can normally stand. This time, there’s domestic espionage, “un-American activities” and a flying ambulance service involved, and the *rest* of the East End Kids are working (but Muggs don’t work, it ain’t his thing, he’s an overage JD and proud of it). And...I just couldn’t. No rating. What a sad way to finish up a 50-movie set.

### *Summing Up*

Three movies I gave a full \$2 for: *Never Wave at a WAC*, *Nothing Sacred* and *The Perils of Pauline*. Two almost-classic \$1.75 flicks: *The Milky Way* and *Three Husbands*. Three pretty good (\$1.50), three decent (\$1.25) and six mediocre (\$1) add up to \$23.75 for this half—and that doesn’t include two movies I’d already seen on other sets. If you’re *really* generous, you could count the three almost mediocre \$0.75 flicks and the single barely-watchable \$0.50—and, of course, if you *like* the East End Thugs, that would add a bit. Since the 50-pack currently goes for \$14.75 at Amazon, that’s not bad. Oh, and, of course, there’s the first

half, where the total of mediocre-or-better flicks came out to \$26, for a 50-pack total of \$49.75.

---

## The Back

More miscellaneous snarkiness and sometimes-pointed mini-essays inspired by magazine items and online stuff. In the process, I'm clearing out a bunch of old items *without* commenting on them—including a decision to add one omnipresent technology commentator to my list of sources not really worth poking fun at. The best bet for that sort of commentator is the same as for privateering “librarians” who issue annoying exegeses about “library empires”: even snarking at them provides more publicity than they deserve.

### Music? Or Sound?

Here's a strange one—the “As We See It” column in the February 2013 *Stereophile*, in this case by Jason Victor Serenius. Serenius recounts his experience doing a demo comparing fairly low-cost speaker cable with ultra-expensive speaker cable, demoing for knowledgeable audiophiles.

Serenius—who knew which cable was being used at any given time—had *no doubt at all* that the pricey cable was clearly superior. “Beyond the sound's being exceedingly airy and open with the expensive cable, with more refined highs, tighter bass, and exceptional transparency, it let me hear music more organically, in ways that touched me deeper.” But some of the audiophiles either didn't hear a difference...or preferred the low-priced cable.

Here's where it gets interesting. Serenius never for a *moment* considered that maybe he was imagining the differences—or that different people might *legitimately* prefer the cheaper cable. Nope: “I realized that they were having a major problem in perceiving unfamiliar, complex music that contained multiple ideas, piquant harmonies, and emotional shifts.” These poor plebes *couldn't appreciate refined music*. (I'm guessing “poor plebes” describes roughly 0% of the membership of the Bay Area Audiophile Society!) So he yammered at them about what to listen for and why it was important.

*It didn't help*. He was “dismayed to find some people preferring the lower-priced cable's brasher, less-refined presentation of the horns and strings...” (and, of course, chose to ignore those audiophiles who didn't hear a difference at all).

The rest of the column decries the tendency of equipment reviewers to focus on sound rather than music and how important it is to “communicate the entire musical gestalt.” He's sad that there may be a

“community of audiophiles who lack the ability to listen deeply.” Because, *if they don’t agree with him*, there must be something wrong with them. Got it.

### *Postscript*

I looked at the first three of seven pages of user comments (and staff responses) on this column. Unfortunately, much of it was taken up with people who insist on blind ABX testing before they’ll accept that there’s any audible difference between zipcord (or the cheapest speaker cable you can buy, which usually is electrical cable) and \$10,000 speaker cables.

That’s a different set of issues. I’m somewhere in the middle—maybe not for HDMI, but for analog audio connections. I suspect there *are* audible differences between some cables, for those who are sensitive to the differences and for some sets of equipment. I suspect most of the people at this demonstration also believe there are differences, or they wouldn’t be there. Could I ever hear the difference between a well-engineered \$50 speaker cable and a \$2,500 speaker cable, using well-manufactured solid-state electronics and well-engineered speakers that I was familiar with? I suspect not, but I could be wrong. Could anyone else? I have no idea: I’m not willing to assert that it’s impossible. (See essay next issue, maybe.)

What bothers me is the approach here: That if the people didn’t agree with Serenius’s own hearing and preferences, there was something wrong with them. That’s both arrogant and offensive.

## Like Magic

That’s the headline on a product writeup in the April 2013 *Home Theater*—and while this one could belong either here or in TECHNOLOGY, I couldn’t help myself.

It’s the Inca Fold-Down and Swivel TV Mount. What it is, is a way to hide your big-screen HDTV—well, not *that* big, since it can only handle up to 55"—in your ceiling. So, you know, you can pretend you don’t really watch TV.

You need to cut a hole in the ceiling, of course, 5" to 10" deep, and you attach the 300lb. device with eight bolts: “professional installation heartily recommended.” But once that’s taken care of, you can “invite your buddies over...so you can watch their faces while the TV descends from the ceiling and swivels quietly into the perfect position for viewing.”

The price? I found it noteworthy that the TV in the picture is an LG: a 55" LG almost certainly goes for less than \$2,000, probably a *lot* less. I dunno what professional installation would cost—let’s say \$500, although I’d bet that’s low. The unit itself: “Starting at \$10,200 plus installation.” That’s more than five times the price of the TV so you can hide it in the ceiling. But isn’t it worth it to watch your buddies’ faces?

## The Low and the High

In the March 2012 *Cites & Insights*, I assembled two hypothetical systems from *Stereophile* Recommended Components—or, rather, four: two that play CDs, two that also play LPs. I assembled the least expensive combination of *recommended* components and the most expensive. It was fun—but the data was also almost a year out of date, as it was from the April 2011 *Stereophile*. (For reference: The inexpensive systems weren't really *cheap*, at \$1,353 for CDs and \$1,851 including LPs—but they weren't particularly expensive either. The expensive versions were \$417,140 for CDs, \$685,925 to add LPs. That's a ratio of 308:1 for a CD-only system, 370:1 for LPs and CDs.) I noted then that hi-fi writers used to assume that music lovers would spend more on the music (CDs, LPs, whatever) than on the systems...easy enough to do at the \$1,353-\$1,851 level, but at \$685,925 that's a *lot* of CDs, LPs and downloads.

I'm going to do something similar, but this time more current—from the April 2013 *Stereophile*, just a month old as I write this. And I'm going to make it a little more sophisticated, including the low and high end of *A-rated* devices as well as the overall run. (*Stereophile's* Recommended lists have up to six grades, with A and A+ being the price-no-object-absolute-best grade.)

### Ratios

Just for fun, I also looked at the ratio of low-end to high-end among automobiles that *Consumer Reports* considers worth recommending (in the April 2013 issue, by coincidence).

Among their “top picks,” the cheapest is the Hyundai Elantra at \$18,446; the most expensive, the Audi A6 at \$56,295—just over a 3:1 ratio. But among models *CR* considers worth buying—“Recommended” options (*CR* deliberately sets a low bar for “Recommended”)—it's broader than that. At the low end, it's essentially a tie between the Scion xD, the Hyundai Accent GLS and the Honda Fit, all at somewhere between \$16,300 and \$16,900. At the high end, it looks like the Lexus LS460L at \$79,354—just *under* a 5:1 ratio.

Oh, you could go higher: Among models they include in the annual Car Issue but either haven't tested or don't recommend, I see prices as high as \$213,000 (the Mercedes-Benz CL or S-class) or the more modest Porsche Panera at up to \$175,000. The ratio between the Mercedes-Benz and the Honda/Hyundai/Scion trio is something like 13:1.

So let's say that going from bottom to top in the production automobile category, ignoring true exotica and cars that are pieces of junk, involves a ratio of anywhere from 3:1 to 13:1.

How does that compare to high-end audio—given that *Stereophile* explicitly calls everything in its Recommended list “best audio products”? (I'm ignoring cables because *Stereophile* no longer lists them

in the Recommended roundups, but you can spend almost as little or as much as you want on cables—anywhere from a few dollars to, literally, tens of thousands.)

*CD-only, A-class and A+-class only: Low price*

Start with the Oppo BDP-95 at \$999, noting that it's in the special A+ state-of-the-art category. Add an Exposure 2010 integrated amp (75Wpc) at \$1,499. Add the DeVore Fidelity Gibbon 3XL speakers at \$3,700. Total: \$6,188. That's not cheap—but remember, this is all equipment in *Stereophile's* highest rating category, price no object.

*CD-only, A and A+ class: High price*

This time, we start with the dCS Scarlatti at \$82,246. It plays SACDs and CDs; the Oppo also plays Blu-ray (including 3D), DVD and DVD-A, but never mind.

You *could* get an integrated receiver (say the Audio Note Jinro at \$27,250), but anybody spending serious money is going to go for a preamp and an amplifiers. The high end for a two-channel preamp that doesn't handle phono cartridges appears to be the Ypsilon PST-100 MK2 at \$37,000; of course it uses tubes. The power amp would be a pair of darTZeel NHB-458 monoblocks, \$154,931 at today's exchange rates.

Speakers? That's easy: Wilson Audio Specialties Alexandria XLF, \$200,000/pair.

That totals \$474,177: Roughly 76.5 times as much as for the low-priced system of *entirely A-rated components*.

Note that I'm trying to compare like to like—not only recommended components but also “best attainable sound for a component of its kind, almost without practical considerations.”

*CD-only, all classes: Low price*

The \$599 TEAC CR-H5000NT is a CD receiver, combining CD player and receiver. As I did last year, I'll ignore the \$199/pair Audioengine 2 (powered speakers, but really for desktop use. But here's the thing: The lowest-cost loudspeaker system *not* just for desktop use, is the Dayton-Audio B652 at (gulp) \$39.80 a pair. That totals \$638.80—and it's still all *Stereophile* Recommended Components.

Realistically, I wouldn't go for the \$40 speakers. I'd go a *leetle* higher—probably to the PSB Alpha B1s at \$299/pair; they've gotten enthusiastic reviews from almost everybody. You're now up to \$898—and, I'd guess, getting remarkably good sound for under \$900. (Figure just under a 6.9:1 ratio between Class-A and Everything Else at the low end.)

### *CD-only, classes below A: High price*

Naturally, the “all classes” system is still going to be the one already described, but now we’re up to a 528:1 ratio not including cables. That’s just absurd, so let’s look at what you get if you’re slumming at the high end—deliberately avoiding Class A.

Almost all high-end CD players are in Class A or Class A+; below that, you’re probably stuck with the \$1,999 Musical Fidelity M1CLiC. Similarly, most two-channel preamps seem to be in Class A, but you could buy an AudioValve Eclipse for \$5,699. Allnic A-5000 DHT monoblock amplifiers will set you back \$19,900/pair, and a pair of Wilson Audio Specialties Duettes go for \$13,900. So, without cables, you’re in for \$41,498, just over 46 times as much as for the low-priced spread. Or, to be sure, 6.7 times as much as for an all-Class-A system.

### *Adding LP: Low price, Class A and A+*

Adding LP involves anywhere from one to four items (not including disk cleaners and the like): turntable, arm, cartridge and phono preamp.

In Class A, you’re looking at the Linn Sondek LP12 turntable and power supply for \$5,010. Add \$1,675 for the Thomas Schick 12" Tonearm, \$1,950 for the EMT TSD 15 cartridge and \$2,175 for the Nagra BP5 preamp. Total: \$10,810—but that’s just to add LP. The system total would now be \$16,998.

### *Adding LP: High price, Class A and A+*

For a turntable, it’s a tossup between the Continuum Caliburn and the Onedof turntable, basically \$150,000 each. Add \$19,500 for the Durand Tonearms Telos tonearm, \$15,000 for the Clearaudio Goldfinger Statement cartridge—and \$60,000 (no, I’m not making this up) for the Vitus Audio MP-P201 Masterpiece. That’s for a phono preamp.

Total? \$244,500 to *add* LP (about 23 times as much as for the “low-cost” Class-A combo); \$718,677 for the whole system (42 times as much as for the Class-A system that costs as much as a low-end recommended car).

### *Adding LP: Low price, other classes*

The Music Hall USB-1 costs \$249. That includes turntable, tonearm, cartridge (a “serviceable” Audio-Technica AT3600L) and preamp. You’re done. So your modest but recommended system would total \$1,147 (plus very few cables—from the Music Hall to the CDiever and from that to the speakers).

### *Adding LP: High price, other classes*

The Artemis Labs SA-1 turntable didn’t merit class A and costs \$8,300 (which is admittedly a whole lot less than \$150,000!). Most tonearms are

Class A, but there is the \$1,899 Ortofon TA-210. Add the \$2,995 Lyra Kleos cartridge and Sutherland Engineering The Hubble phono preamp at \$3,800.

You've now spent \$16,994 adding phono—about one-fourteenth as much as for Class A—bringing the system price for non-class-a components up to \$58,492. That's more than *fifty times* as much as for the low end of non-Class-A, or 3.4 times as much as for the low end of all Class-A.

### *The significance?*

I could go on—there are lots of individual devices with remarkable price ranges—but that's the basics: The price range for roughly comparable systems is at least 40 to 1.

If I was buying a serious high-end system I wouldn't go anywhere near the low-priced spread—mostly because I'd want better speakers. Like, say, the GoldenEar Technology Triton Twos, enthusiastically reviewed full-range speakers that run \$3,000/pair. (Although, realistically, I'd get by just fine with PSB Image T6s at \$1,298/pair—again going for full-range speakers.)

If price was no object, I'd probably pick up the Oppo (it's gotten consistently rave reviews, and other companies charge several times as much to add their own cabinets and maybe some circuitry), a really good integrated amp like the Exposure, and something like the Triton Twos. And I'd spend about \$5,500 (not including cables).

*Caveat:* I am not *for a minute* saying that the \$718,677 system wouldn't sound a *lot* better than the \$898 system (\$1,147 with LPs). I'm sure it would. Would it sound a *lot* better than that \$16,998 all-Class-A system? Probably. Would it sound \$702,000 better? Probably not to my aged ears...

## Facts and Truth

John Scalzi's post "The Lifespan of a Silly Argument" has been around for a while—it was posted at *Whatever* [on February 26, 2012](#)—but it's still a good commentary on an example of something that comes up a little too often: The idea that facts don't really matter when you're in pursuit of, or aware of, The Truth.

On one hand, I'm among those who has been known to say that certain specific facts are either irrelevant in the larger picture or out of phase with the truth—but that usually has to do with cherry picking and anecdotal. On the other, I've been on the other side of this, with a true Bealliever telling me that my *facts* about academic library spending are irrelevant, because he knows The Truth (that "the serials crisis is over").

The example, this time, is [a review](#) of an unusual book, *The Lifespan of a Fact*. The review's in the *New York Times*, so whether you can see it



depends on the time of month and your relationship to *NYT* (noting that I think it's entirely reasonable for a newspaper to put its reviews and other original material behind a paywall, and don't find *NYT*'s "some free each month" either abhorrent nor even bad). The review is of a truly odd book: one in which an essay by John D'Agata for *The Believer* is fact-checked, bit by bit, by Jim Fingal—with D'Agata responding to Fingal.

The essay in question was already rejected by one magazine because its facts were wrong. Apparently D'Agata believed *The Believer* wasn't so scrupulous—and facts aren't as important as The Truth, flow and other aspects of an essay are more important than actual facts.

The discussion between Fingal and D'Agata took five years. Scalzi notes that, if he had been Fingal, after about a month he would have resigned, told the magazine that "the author was being a complete dick about the fact-checking process" and that *under no circumstances* should the essay be printed as nonfiction. If he was the magazine's editor, he would have paid a kill fee. And...well, here's Scalzi:

3. If I were D'Agata—well, I wouldn't be D'Agata, not to put too fine a point on it. If I have a contract for a non-fiction article or book, I do feel obliged to live up to the terms of the contract and write something that is not significantly fictitious, the facts of which can be verified by me or others. Call it professional courtesy. D'Agata may have been under the impression that *The Believer* was okay with his non-non-fiction, but that impression probably should have changed in the light of evidence to the contrary, namely, *The Believer* assigning a fact checker to the piece.

He doesn't understand how this could have gone on for five years. Neither do I. Going through the comments, it turns out that the book is how they got five years out of a six-month process: They turned it into performance art.

The key here is whether there's a third state—something *between* fiction and nonfiction. Faction? Clearly D'Agata believes there is. I don't think Scalzi does. Me? I'm not sure. As he says: There's nothing wrong with writing a fictional essay based on a true event. Ever seen *Law & Order*? They do fictional TV shows "ripped from the headlines" all the time, as do many other shows. Ever hear of True Crime Fiction? There's a bunch of it around.

What the producers and writers don't do is call them documentaries. And when somebody makes a documentary and clearly stacks the deck and falsifies materials, they usually get called on it.

## Dear Reviewers, a Word?

Somehow that leads into [this February 28, 2012](#) item by Brian C. Rathbun at *Inside Higher Ed*. It's a piece about reviewing and it's fair to say Rathbun's more than a little snarky about reviewing. ("Reviewing" in this

case does appear to mean peer review, although some of the points apply to book reviews as well.)

How snarky? Here's his first point:

First, and I can't stress this enough, READ THE PAPER. It is considered impolite by authors to reject a paper by falsely accusing it of doing THE EXACT OPPOSITE of what it does. Granted, some people have less of a way with words than others and are not exactly clear in their argumentation. But if you are illiterate, you owe it to the author to tell the editors when they solicit your review. It is O.K. – there are very successful remedial programs they can recommend. Don't be ashamed.

The second one is one I can't entirely agree with: "remember the stakes for an author." He's saying that one article in a really top journal (sigh) is probably worth about \$40,000 in terms of increased pay. Sorry, but that's no reason to soft-pedal a review.

On the other hand: "Third, the author gets to choose what he/she writes about... Do not reject papers because they should have been on a different topic, in your estimation..." Yes. So much yes! Also, don't dismiss books as pointless because they don't speak directly to you.

The fourth and fifth points have to do with tone. The sixth is another one I have trouble buying: "Sixth, remember that to say anything remotely interesting in 12,000 words is ALMOST IMPOSSIBLE..." Huh. Barbara Fister, Jon Carroll and hundreds of other writers and essayists might dispute that.

The seventh? That you have to *justify* a rejection recommendation—and I just don't know enough about the wonderful world of peer review to comment on that.

The readers were generally not thrilled with this column, maybe for good reason.

## The Tragedy of the 1%

The items are from February 2012, but they ring just as true today—or they would, except that bankers and Wall Street folk are apparently back to getting the multi-million dollar bonuses they expect. While those of us who are retired and tried to save during our working lives are getting royally screwed by the Fed's bank-friendly policies. But that's beside the point...

"Downsized Bonuses Have Bankers Whining About Clipping Coupons" [appeared February 29, 2012](#) at *Consumerist*, written by Chris Moran. Two money quotes:

"People who don't have money don't understand the stress," a partner at accounting firm Marks Paneth & Shron LLP in NYC explains to Bloomberg, presumably blotting his tears with a handkerchief made

out of plain old silk. “Could you imagine what it’s like to say I got three kids in private school, I have to think about pulling them out? How do you do that?”

Things have gotten so bad for one Wall Street headhunter that he not only has to shop at only slightly luxurious Brooklyn grocery stores, but he and his family also—prepare yourself to weep—occasionally look at coupons: “They have a circular that they leave in front of the buildings in our neighborhood... We sit there, and I look through all of them to find out where it’s worth going.”

The article references Max Abelson’s [article at Bloomberg](#), “Wall Street Bonus Withdrawal Means Trading Aspen for Coupons.” It’s full of tragic stories—starting with the 46-year-old broker who’s making a tawdry little \$350,000, which “doesn’t cover his family’s private-school tuition, a Kent, Connecticut, summer rental and the upgrade they would like from their 1,200-square-foot Brooklyn duplex.” He says “it’s very hard.” (He’s still going to rent the summer house, but for a mere month rather than the usual four.)

Not that Wall Street didn’t give out a few bucks here and there for 2011: the cash bonus pool “fell by 14 percent to \$19.7 billion, the lowest since 2008.” That’s billion with a b—19,700 million dollars, in other words. Most of these bonus babies don’t save, to be sure. (One guy who *does* save has modest expectations—he calls his Porsche 911 Carrera 45 Cabriolet “the Volkswagen of supercars.”)

I rarely link to *Cracked.com* for several reasons, but in this context “6 Things Rich People Need to Stop Saying” ([posted March 5, 2012](#) by David Wong) may be worth a link. It begins at #6, with an insane congresscritter complaining that he only has \$400,000 or so left over each year to keep his family out of the poorhouse. #5, “Hey, I worked *hard* to get what I have,” is also a charmer, as is #4, “If I can do it, so can you!” I’m omitting all of the extensive commentary, since you really should go read it there. (As for #4, I have mixed feelings. I continue to believe that, in the U.S., if you’re reasonably healthy, have at least a 95 IQ, and your *only aim in life* is to get money, you can probably manage to do so in most cases—although it may mean giving up all your ethics, friends, morals and anything else that makes life worth living.)

The other three are even more self-delusional than the first three, if that’s possible, and the commentary is strong throughout.

---

## Pay What You Wish

[Cites & Insights](#) 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 [Cites & Insights home page](#). Thanks.

---

# Masthead

*Cites & Insights: Crawford at Large*, Volume 13, Number 7, Whole # 163, ISSN 1534-0937, a journal of libraries, policy, technology and media, is written and produced irregularly by Walt Crawford.

Comments should be sent to [waltcrawford@gmail.com](mailto:waltcrawford@gmail.com). *Cites & Insights: Crawford at Large* is copyright © 2013 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/civ13i7on.pdf](http://citesandinsights.info/civ13i7on.pdf)