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The devil you don't know: The unexpected future of Open Access publishing

by Joseph J. Esposito

Abstract

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With the advent of the Internet and online publishing, the notion has arisen that access to the world's research publications could be made available to one and all for free, presumably by shifting the costs to other places in the value chain and disintermediating publishers, a circumstance called Open Access (OA) publishing. While there are many hopes embedded in this view (lower costs, wider access, etc.), it appears more likely that Open Access will come about not through a revolution in the world of legacy publishing, but through upstart media built with the innate characteristics of the Internet in mind. An unanticipated outcome of this situation will be that the overall cost of research publications will rise, though the costs will be borne by different players, primarily authors and their proxies.

That there is a crisis in scholarly publishing, few would disagree. But what exactly is the nature of the crisis? For academic librarians it is, among other things, the skyrocketing costs and growing number of many of the must–have journals; or perhaps it is the so–called serial breakdown, which describes a practice by which students turn to Google and the open Web for all their research, neglecting the high–value (and often expensive) publications, mostly serials, that libraries have licensed. For scholars the problems are twofold, in reverse order: getting access to the research of other scholars and getting their own work published in journals that receive widespread attention and will advance their careers. Publishers have their own set of problems on top of the usual ones of having to raise capital, identify meaningful projects for investment, putting together an editorial team, and sales and marketing. To these traditional concerns publishers must now add the investment needed to migrate to electronic dissemination of content from a hardcopy legacy, downward pressure on library budgets, government reviews of pricing policies, a Wall Street that is beginning to think that maybe this business has peaked, and the clamor for the liberation of scholarly publications from the oppressive tyranny of copyright.

Into this crisis steps Open Access publishing, though whether as cause or effect it is hard to say. OA promises to be all things to all people — except publishers, who are threatened with the destruction of their business model and potentially of their businesses, to the detriment of their shareholders, including many, presumably, who are academics themselves. But for everyone else OA is a boon. It will make all research available to anyone who wants to look at it, even scholars at impecunious institutions or working within the constraints of a Third World economy, not to mention the man on the street, whose democratic desire to read, say, the *Journal of Molecular Podiatry* has been subverted for the past century by the mercenary interests and narrow–mindedness of publishers. OA will reduce costs to zero or some modest mark–up above zero, freeing library resources for other things, assuming universities will still find a reason to fund libraries in a world where (paraphrasing Stewart Brand) "information wants to be free." OA will further the progress of research itself, add to the well–being of the world’s citizens, and perhaps help us all stick to a low–carb diet. It has been granted a unique dispensation from the Law of Unintended Consequences.

While OA has a future (OA *is* the future), the debate over OA does not. The terms of the debate, while not fixed, are mired in an underappreciation of what innovation is, what makes it happen, and perhaps most importantly, where innovation happens. Many of the proponents of OA seem to believe that the imminent OA regime will look very much like the current proprietary paradigm; senior academics chairing editorial boards, peers reviewing articles, established "brand names" (that is, publications that are highly prestigious) defining their fields, and tenure based in large part on research publications. Everything will be the same as the current proprietary model, that is, except for one thing: access to information will be free. This is the Change One Thing worldview. We see this notion everywhere, not just in the world of OA, but also in, Singapore is a great place — too bad it’s not a democracy! Or, Company X is going gangbusters — but we really should cap the CEO’s salary! That a company or a society or the process of academic publishing is a system gets overlooked. Instead, we think we can Change One Thing: out with the One Bad Thing, but let’s keep everything else. Unfortunately, many OA advocates have as limited an understanding of the systemic dimension of information creation and delivery as Shylock pretended to have of biology: take one pound of flesh, please, but not one drop of blood.

We should perhaps step back for a moment and say what it is that OA means or is supposed to mean. Access is said to be open when anyone anywhere on the planet can get to information simply by establishing an Internet connection, opening a Web browser and typing in an appropriate URL. It could be said that this is already true today for just about all Web–enabled information, but the catch is that the information must not only be Web–based but also free to the user or reader. Hardcopy publications cannot be OA, simply because the difficulties of getting to the physical repository make them seem less than open. So, it’s the Web and it’s free: OA in a nutshell.

There are, of course, many refinements and modifications of this definition. Some groups have come up with lists of qualifications for "true" OA, and other organizations have proposed different levels of openness, identified by different colors or other category tags, not unlike institutions of higher learning that are designated as "very selective" or merely "selective." Some proponents of OA argue for very specific and limited changes from the proprietary publishing paradigm, as is the case with the OA activist Stevan Harnad, who has fought hard and ingeniously for "author self–archiving"; such an archive would be Web–based and free to the user, but Harnad is careful not to drag non–research publications (like novels or biographies) into the OA fray. There is indeed an entire literature springing up on what constitutes OA, but it is, I believe, somewhat beside the point, as it resembles nothing so much as a taxonomy of magical creatures from the Harry Potter novels, when in the end the creatures are fictional. No, it's enough to say: Open your browser and it won't cost you a dime. That's OA. As for whether such publications constitute OA research literature (with the implications of professional standards and originality), that is another matter entirely. Something can be OA and merely a pack of lies, as is much of what is available on the Web today.

The taxonomy I prefer to use for research publications is one based on the sustaining economics of the system; in such a taxonomy, publications are broken into two groups: author–pays vs. user–pays (aka "proprietary publishing," the traditional means). For "user" you can substitute the word "reader," if you like. For both of these categories there may be proxies or sponsors for payment. Thus, for example, most of the actual transfer of money in the user–pays category is paid out not by the user but typically by an institutional library, though individual subscriptions, especially in the humanities, remain an important subset of the sales of journals. The purchasing libraries are mostly connected to colleges and universities, but corporate purchases for some journals can be very significant — and for some titles public and school libraries may make a contribution.

The author–pays side of the equation is a bit harder to define precisely, as it is somewhat amorphous and is now changing rapidly. In the world of book publishing, author–pays is generally classified as vanity publishing, which perhaps it is, though there are spirited self–publishers who have done very nicely for themselves without joining the lists of a Random House or HarperCollins. Indeed, an entire subindustry has cropped up to serve authors who either can't or won't work with traditional publishers (see, for examples, authorhouse.com and iuniverse.com). It is also noteworthy that in the journals world some authors have long had to pay part of the cost of publication, especially in scientific and technical literature, where the costs of complex composition have been onerous (though less so now with the advent of desktop typographical software). Author–pays has become an important component of the OA debate as such prominent organizations as the Public Library of Science and BioMed Central propose to have authors or their proxies shoulder the costs of OA publication. One such plan, for example, requires that research institutions pay a per–article or per–page (per–screen? per–byte?) fee on behalf of its researchers and authors — which would have the practical effect of having two dozen large research universities (Harvard, Cambridge, Stanford, etc., all of which are "net exporters" of published research) bear the lion's share of the cost of the entire global academic publishing industry. Underlying all these author–pays schemes is the idea that when the author or his or her proxy makes something available on the Web, researchers everywhere and the world in general will benefit.

There is a lot more to author–pays than such high–profile operations as the Public Library of Science, which is building a complete publishing infrastructure, replete with peer review and all the checks and balances that ensure the quality of the publications. Stevan Harnad, as mentioned above, advocates having each author simply self–archive everything; if that author then chooses to publish that very same article in a proprietary journal, whether in hardcopy or electronically, so be it, as the original self–archived copy will always be accessible to anyone with a browser. This is both ingenious and insidious. Many proprietary publishers now allow authors to self–archive. It's not clear why. Do they not understand that a self–archived article is a public (aka OA) article? Are they that confident about their relationships with their paying customers that they are willing to risk having such articles Google them into irrelevance? Are they feeling the pressure from the OA movement and regard self–archiving as a small concession? Or perhaps they believe that there is a wide gap between simply making something available on the Web in a self–archive and actually creating demand for it, whether that demand is paying demand or OA. It's hard to say. For purposes of this essay, the importance of Harnadian self–archiving is that it belongs to the author–pays OA universe: the author or his or her proxy pays by providing disk space and bandwidth and by yielding to Google and other search engines the economic value of advertising–supported online searching.

The future of online publishing: publishing that is personal and not professional.

While the debate rages, OA is alive and kicking, though most of the truly robust instances of OA publishing never even dream of using the OA terminology. Among the many classes of OA publishing (by my definition: accessible with only a browser and free to the user) are postings to mailgroups, threaded messaging, online chat (perhaps), and the Weblog or blog, which is a form of online diary. The Pew Research Center recently reported that 44 percent of American online users said that they had created content for online presentation and two percent said that they had created blogs. While much, perhaps most, of this user–generated content (which is also directly or indirectly author–pays) is of little value to anyone but the writer, the exceptions are very promising and point, in my opinion, to the future of online publishing: publishing that is personal and not professional. By "personal publishing" I do not mean content that is about oneself, though, heaven knows, the world of blogging is replete with embarrassingly confessional writings. Rather, this new breed of personal publishing emanates from an individual, who then uses the inherent network capabilities of the Internet to find a readership. In some cases personal publishing begins to approximate "formal" publishing, as in the blogs of such prominent journalists as Andrew Sullivan and Virginia Postrel or the preprint (or "eprint") servers such as arXiv. My personal favorite blog is that of Clay Shirky (shirky.com), which covers the world of social software in a series of longish essays that could easily be collected, distributed, and maybe even sold in a printed book.

What is noteworthy about all these relatively informal instances of author–pays publishing is that they did not start out to topple the proprietary regime but to address new needs in the marketplace ignored by proprietary publishers. The academic preprint servers, for example, began in part as simple acknowledgments that many scholarly articles get passed around on the Internet informally before they appear in an established journal — and by implication raise the question of why the formal journals are necessary any longer. Blogging in many instances is like a wide–open "Letter to the Editor" page on the Internet, though there is no editor — not for content, spelling, grammar, fact–checking, or common decency. Someone who has tried vainly to get the *New York Times* to print a screed on, say, the war in Iraq or the smarmy columns of David Brooks may turn to blogging in exasperation as a last resort, though increasingly they will be a first, and perhaps only, resort as blogs reach universal status.

To predict that blogs will someday become universal warrants amplification, as today's blogs are anything but universal, unless solipsism and narcissism constitute universality. I wish to argue this point by first drawing an analogy with the wireless telephony industry.

Wireless mobile phones have been with us for close to two decades, but it is only in the last 8–10 years that they have become almost ubiquitous, at least in the United States (market penetration is far greater in Europe and Japan). Early users of wireless were willing to put up with the limitations in range and reliability because of the benefit of mobility. So, for example, while seated in an office, there is no question that a landline phone is superior, but what of commuters stuck in California's endless traffic? Wireless mobile phones found, or invented, a market not by displacing landline phones but by opening up entirely new uses for telephony. This is a key point: wireless phones could never have replaced landlines on landline phones' own terms. Wireless mobile phones were at first more expensive than landlines, calls were frequently dropped, the coverage areas were full of holes, and many services (call–waiting, voice mail, etc.), were simply not available. But mobility trumps all: by addressing an entirely different market need, wireless mobile phones established a beachhead in the telephone business.

Some of the early criticisms of wireless mobile phones are still with us, something that was summed up neatly in a *New Yorker* magazine cartoon: A businessman stands on a sidewalk in New York City, a wireless phone in one hand, while with the other he is holding the receiver of a landline phone booth, and he shouts into the landline: "Can you hear me now?" Wireless mobile phones are still not as reliable as landline phones, but in many respects they have begun to catch up. Wireless phones are cheaper every day, the coverage area continues to improve, reliability is going up, and many new services are now available *(e.g.,* voice mail, text messaging, Web browsing, and digital imaging). Of course, landlines have not stood still (prices continue to drop and the number of services grows), but the gap between wireless and landline phones is narrowing so much so that many households (about three percent in the U.S., a higher percentage in Europe) have dropped their landlines entirely in favor of a monogamous wireless relationship. The (now not so) inferior wireless technology has begun to nibble away at the landlines' franchise from the bottom. In time landline phones will disappear, though the current generation of wireless phones may itself be shoved aside in due course by the emerging technology of voice–over–Internet protocol (VOIP). Interestingly, the major criticism of VOIP is that it does not provide all the benefits of wireless mobile phones, which is like a replay of the landline–wireless debate.

The proprietary user–pays journals of organizations like John Wiley, the American Chemical Society, and Reed Elsevier are the equivalent of landline phones. Despite the severe verbal assaults (some justified) made on these journals by OA advocates, these journals continue to represent the standard for academic research publishing. Papers appearing in such journals tap into the considerable reputation of the journals themselves, to the benefit of the authors. Tenure committees look favorably upon publication in these journals, and faculty press libraries to purchase them. Ten years ago OA was not a threat to the user–pays system; but today the threat may be seen on the horizon. Certainly the publishers of user–pays journals are beginning to pay more attention to OA; indeed, in the U.K. they have no choice, as a governmental inquiry into scholarly publishing required the testimony of senior executives from the user–pays world — and that, in turn, has resulted in the investment community beginning to question the growth prospects for such commercial firms. The heat is on.

The current crop of OA publications, however — or, I should say, the current crop of reputable OA publications — is not likely to topple Reed Elsevier, for the simple reason that Reed is very good at what it does and the marketplace, howl though it will, recognizes this. (Interestingly, Reed recently announced that it will support Harnadian author self–archiving.) Librarians are likely to continue to pay for user–pays journals that their constituencies (faculty and students) want, and authors are likely to continue to submit papers to user–pays journals if such journals will advance them professionally. Indeed, it is hard to see why an up–and–coming researcher would take the risk of publishing in an author–pays OA publication when a user–pays publication gets him or her so much more, and at less personal expense.

I wonder about the awkward possibility that our representative author in Palo Alto or New Haven . . . may not regard the Third World researcher as a member of the same community.

This is despite the fact that OA would provide an author with something that user–pays journals theoretically would not, a wider readership. I say "theoretically" because I am skeptical of whether this would be true in practice, or if it is true, how large the increase would be and whether authors would be willing to sacrifice very much in order to reach those incremental readers. Authors of research papers write for their community of researchers, who are by and large affiliated with research institutions, institutions that by and large subscribe to the leading journals in their respective fields. Precisely what readership would be added for a paper on, say, a highly technical discussion of an aspect of particle physics? We hear about researchers at impecunious institutions in the Third World. Fair enough, but I wonder about the awkward possibility that our representative author in Palo Alto or New Haven, globalization notwithstanding, may not regard the Third World researcher as a member of the same community. Or there is the Man in the Street, who perhaps would personally benefit by being "empowered" by access to the world's medical research publications. I don't see how. Research papers are written by professionals whose stock in trade is the enormous gap between their knowledge and that of untrained individuals. By definition, if someone without sophisticated training (that is, our Man in the Street) could even understand a research paper, then it can't be a research paper. It appears that the wider readership that OA promises may be mostly illusory. Academic research papers, after all, are not like pop music, which was designed for a mass market and can be spread around the globe to hundreds of millions of eager listeners via the underground file–sharing networks. Universal access to information sounds great in the abstract (like universal health care, who really could be opposed to it?), but few people see themselves as citizens of the universe. Rather, one's orientation is typically tribal, and not even research scientists, with exceptions happily acknowledged, are above the self–interested, parochial fray.

OA will happen (it is happening), but it will happen not primarily in the intellectually respectable and reasonably well–funded (so far) alternatives to proprietary publishing, but on the fringe, among the blogs and mailgroups, where for the most part the trappings of formal user–pays publications are not even dreamt of. (For example, Harnad's self–archiving strategy does not mandate peer review.) The long–term OA threat to the hegemony of Reed Elsevier comes not from the highly reputable Public Library of Science and other serious endeavors in the OA arena, but from the lowly blog and its many unwashed kin, that are creating new media forms to address new market needs. Although I am inclined to think of blogs as shorthand for the entire spectrum of innovative, "raw" OA forms, blogs are but one of many, not counting all those that have not yet even been invented yet; over time these forms will begin to take on new characteristics for the different groups and needs they address. Like wireless mobile phones, they will get better, adding features and growing in reliability. Their economics have been anchored in OA from the start; OA was in fact the very reason they came into being; and therefore they will suffer no economic disruptions, as they don't have proprietary content or subscriptions systems whose profits they would be cannibalizing.

The organizers of this class of OA publications are still working with a hardcopy mindset.

Extending the analogy to wireless mobile phones a bit further, we can think of organizations like the Public Library of Science (a not–for–profit) and BioMed Central (a commercial enterprise and more likely to succeed precisely for that reason), as the equivalent of cordless phones. Like cell phones, cordless phones are wireless and portable, but a cordless phone has only limited mobility, as the handset has to communicate via radio to a base station located close by in one's home. Cordless phones have gotten better over the years, of course: we no longer routinely hear our neighbors' conversations and the range from the base station has increased. Overall, however, they are basically a refinement of the old landline world, whereas true wireless or cellular phones enable many more changes in a user's behavior. Similarly, the Public Library of Science and BioMed Central are very close in their form to user–pays journals. For example, they both support peer review and are organized around editorial boards, costly infrastructure that we have come to expect from the world of proprietary journals. The problem with this strategy is that it is not radical enough. It wants to have everything that the user–pays journals have with the single exception that the user will not pay. At bottom the organizers of this class of OA publications are still working with a hardcopy mindset; they have not embraced the destabilizing aspects of the Internet (the role of network effects, the economics of increasing returns, the use of real–time feedback, and the introduction of computer processes where formerly we might have expected human judgment). They have ensnared a killer whale and brought it to the circus, where they expect it to behave like a trained seal.

An example of the hardcopy or legacy paradigm is peer review. Peer review is said to be at the center of the scholarly communications process. Without it, publications with questionable merits would appear. Thus, scholarly writings, whether for books or journal articles, are routinely sent to other scholars, who assess the work and may suggest editorial changes. Work that does not pass the muster of peers is rejected. Readers of a journal are therefore assured of a publication's value before they read it themselves.

> They have taken a killer whale and brought it to the circus, where they expect it to behave like a trained seal.

This is all well and good in a hardcopy world where the cost of publication is expensive and correcting a published work can be difficult and take a great deal of time. An error in such a publication literally could be disastrous if, for example, a mistaken medical procedure were promoted to the detriment of a patient. On the expense side, then, the economics of hardcopy publication require peer review. It is costly to set an article into type, to have it printed, to ship it to the customers, and so forth. A significant error in such a publication is even costlier, not to mention embarrassing, as it could involve a special mailing. In a world of electronic networks, however, peer review can and should take place after publication. Such review can take place virtually in real time, so our patient remains safe; and the marginal cost of such publication (which essentially amounts to uploading the text to a Web server) approaches zero. Post–publication peer review does not require expensive and slow–moving infrastructure. It therefore assists authors in their goal of getting published quickly and potentially provides wider feedback from the broad community of scholars. Quackery that gets published will be recognized as such and dismissed rapidly.

What I have been calling the "unwashed" media forms for discourse are not going to take over the world of academic research any time soon. Indeed, a perfectly natural response to this paper would be to go to Google.com, type in "blogs," and see what results. Enquiring minds will be horrified. The "blogosphere," the world of personal publishing, is filled with an incredible amount of trash. What isn't whining is often air–headed. Extreme political views vie for attention among a forest of pornographers; the personal diaries of adolescent girls are broadcast to the world; and that poetry you were ashamed to have written in high school has been unearthed and unabashedly mounted on a Web server somewhere. If this is an expression of the democratic character of the Internet, it's enough to make you lose faith in the Jeffersonian vision. If personal publishing is going to morph into an important vehicle for academic discourse, it is going to have to come up with a very compelling value proposition just to get started.

What would that value proposition be? There are, I believe, three primary reasons that people are advocating OA, which I will summarize:

- *Cost.* The price of academic journals has been increasing at a rate far in excess of the Consumer Price Index. Libraries and individuals are struggling to come up with the money to pay for information that is essential for scholarly investigation. The electronic forms of OA promise to strip huge costs from the publishing system, and by embedding the new OA regime primarily in the not–for–profit sector, OA can return extortionate profits back to the research community.
- *Access.* Cost is related to access, as rising costs force librarians to cancel some subscriptions. This raises the specter (for example) of a cardiologist not being able to keep up with the latest developments in his or her field. The electronic dimension of OA also permits published research to be accessed in remote parts of the world.
- *New services.* There are some things that a user may want to be able to do with published materials that may be impossible in the absence of OA, whether the proprietary publications are in hardcopy or online. For example, a user may want to search the texts of dozens of journals simultaneously or develop an index of findings from multiple publications (perhaps from multiple publishers) or use an abstract of the texts of published materials as inputs for search algorithms. Behind many potential OA services is the belief that a published document has one value in and of itself but a different (and greater) one in the context of aggregation with other research documents.

Let's look at each of these points in turn.

In a user–pays world, anything that could drive the cost down would be welcome. But the peculiar thing about academic research publishing is that these are mostly institutional, not personal, purchases. Librarians spend money on behalf of their constituents, students and faculty. If Professor Jones of the department of history does not assert himself to the purchasing librarians, the library's budget may be allocated to another department. So Jones has an incentive to fight for higher history expenditures. Seeing this, Jones's counterpart in the philosophy department fights the same fight for his or her discipline. Neither member of the faculty has an incentive to have the library spend less; it is, in the end, other people's money.

> If hardcopy versions of all the STM publications from Reed Elsevier were piled up on the corner of 57th Street and Madison Avenue in New York City, free for all takers, at the end of the day the pile would still be standing there.

It is for this reason that I believe it is unlikely that OA will prevail on the grounds of reducing institutional expenditures. The faculty, who must continue to read in their disciplines and want access to the publications they publish in themselves — and whose professional advancement is tied to these very same journals — will continue to press libraries to spend, spend, spend. There is indeed a war in academia about the great and rising cost of journals, but it is a battle between the faculty and the library. In this scenario, publishers are arms dealers, not combatants.

For reasons already noted above, I believe that the access issue for journals may be overstated — overstated, not nonexistent. Research publications simply don't have an elastic market. If hardcopy versions of all the STM publications from Reed Elsevier were piled up on the corner of 57th Street and Madison Avenue in New York City, free for all takers, at the end of the day the pile would still be standing there. Research publications are not for everybody. If the price of journals dropped by half, librarians would use that money to purchase other materials, thereby improving access to the new publications; but, we should expect to see the demand by users for the new materials to be less than for the original components of the collection, for the simple reason that librarians know their constituencies and collect the most in–demand items first. Every penny of a materials budget will get spent regardless of how large that budget is because that is what librarians do — collect. But as the collections grow, demand will not keep pace; access, like uranium, has a half–life. It is difficult to identify the interested constituency that will fight for and fund enhanced access as demand drops for the periphery of the collection.

> Samuel Johnson was simply wrong when he famously said that no one but a blockhead ever wrote except for money. The truth is that recognition is the greater motivator.

New services may be another matter, however, as they can be tailored for constituencies who have an incentive to press for OA. A great deal of the pressure for the new OA media comes from authors, who want to publish, who seek a readership, and who want to do it quickly. I am myself a life–long publisher and can attest from long experience that authors have a greater interest in getting published than readers have in reading an author's work. On this point Samuel Johnson was simply wrong when he famously said that no one but a blockhead ever wrote except for money. The truth is that recognition is the greater motivator. An entrepreneur making these observations would likely conclude that authors would make good customers for services that lead to recognition. This appears to have been the origin of what was probably the first piece of blogging software, Blogger, now a service of Google. Authors were invited to pay a fee for the use of Blogger's easy–to–use tools (which are now free since Google took them over). Authors had to provide their own Web sites to host their blogs and pay for their bandwidth. Once the blog appeared, it would be indexed by search engines, which in turn pointed Internet traffic to it. Then other bloggers would create links to the original blog, which in turn generated even more traffic, via a cross–referencing mesh of links tying together an informal network of blogs and other Web sites.

If authors are the prospective customers, our entrepreneur might conclude that there are many more services than are provided by Blogger and its competitors. Our entrepreneur (whom we will henceforth call a publisher) might decide to add Web hosting to the services provided and perhaps Internet access, domain name registration, and a number of e–mail accounts as well — in other words, the publisher's function begins to converge with the functions of today's traditional Internet service provider. A publisher interested in scholarly materials, however, would soon recognize that this is not enough. Such a publisher would be thinking of how to bring the author/blogger to the attention of people in the scholarly community.

One way to do this would be to provide automated services that make it more likely that other scholars will find their way to the blog. The publisher, for example, may automate the metatagging process (which not all bloggers employ), which would increase the likelihood of a search engine indexing the site. Or the publisher might create an abstract of the text of the blog and use it to search other Web sites, which would then be linked to the first blog, creating an expanding network of related sites. Or the publisher might create a database by discipline of scholars and e–mail them whenever a posting in their areas appeared, inviting them to comment on the blog (an early iteration of peer review). Or the publisher might provide annotation software, such that commentary could be built on top of the original blog, creating as it were an extension of the blog in time; and over time it is likely that the commentary would outstrip in importance the original blog itself. Or (taking a page from slashdot.org) a voting mechanism could be introduced, by which readers of the blog rate the importance of the posting. The list of different ways that new value, mostly automated, could be added to the author's blog is endless. Over time these new services will begin to approximate much of what we now expect from the proprietary journals of the user–pays world. I am writing this as I sit in my office, having just completed a call on my wireless phone, despite the fact that two landline phones (one cordless) are within arm's reach.

> The big winner will be the publisher that can deliver the widest and most influential readership - the publisher who provides recognition to the author.

An author in this brave new world of untraditional publishing is likely to be presented with a number of choices, as multiple publishers vie for the author's business. The publisher that provides blogging software but nothing more is not likely to get the job. The publisher that provides limited text–automating services will lose out to the publisher who goes beyond this and fully realizes the capability of the computer. The big winner will be the publisher that can deliver the widest and most influential readership — the publisher who provides recognition to the author.

In the earliest stages of the evolving OA publishing paradigm, authors are likely to be willing to pay for very little: blogging software, Web hosting, bandwidth, and a few other things. Over time, however, an author's needs are likely to grow. If my rival is using software that increases traffic to his or her blog, I will want that software, too. When I sign up (for an additional fee) for annotation software, everyone in my field is likely to follow suit. Once upon a time, a dot–matrix black–and–white printer was considered to be an astonishing tool. Now we take for granted that we can print in four colors, and at a fraction of the price of the old dot–matrix. Needs grow with the availability of new tools. It will be many, many years before OA publishers satisfy all the wishes of their customers, the authors. So, this is a growth business of the first order. After all, how much recognition is enough?

Unleashing academic publishers from the user–pays paradigm is about the most remunerative activity I can think of. Currently publishers can make money only when purchasers (mainly librarians) apportion a certain amount of their budgets to them. Such purchasers don’t really have much skin in the game. It’s not their own money, of course, but they are careful about how they expend their institutions’ resources. Nor must they address the matter of professional recognition because they are not the authors.

Authors, on the other hand, are acting out of personal impulse. No holds are barred. First they will pay for domain names and blogging software, then for metatagging tools, then for linking networks, then for annotation capability, and so on, *ad infinitum.* As the number of services rises, the expenditures per publication will rise. The total cost of research publications will grow enormously, driven by the author side of the equation.

OA is the Botox of scholarly communications.

It is important to emphasize this point: OA, through the range of new services it will provide, will increase the overall cost of scholarly communications. This may be counterintuitive, especially to all those individuals who are building new cost models for the coming OA paradise, models that are quick to point out that electronics requires no inventory costs and the elimination of user fees means that there are no circulation departments or a need for user–authentication software. OA is a paradise — for publishers. Expenditures will rise and fleet–footed publishers will profit from this. The question for the current generation of user–pays publishers is whether they are swift of foot or not.

To return to our analogy in the telephony business, it is interesting to recall that not so many years ago, the cost of a long distance phone call was considered expensive, if not prohibitive. The household I grew up in had one phone line and two black dial phones. A long–distance phone call was something of an event. We were careful not to run up expenses with long calls. We still received first–class hardcopy mail, which was cheaper.

I find the notion that "information wants to be free" to be, well, quaint.

My current household has seen the benefit of plunging costs in telephony. We pay a flat rate for local and long–distance calls and use the phone constantly. We have two landlines and three cell numbers (a fourth to come next year when our youngest enters middle school), not to mention the broadband Internet connection, the dial–up Internet connection for when I travel, or, for that matter, the cable television access, which inevitably will converge with some or all of the other lines coming into the house. There are phones in every room in the house and phones strapped to our waists. All this because telephony has become cheaper and more varied, but in the aggregate we spend far more on telephony than my parents ever dreamed of, perhaps ten times more in constant dollars.

It is for this reason that I find the notion that "information wants to be free" to be, well, quaint. This is not because the hard–charging executives at McGraw–Hill or the Thomson Corporation or Sage Publications have a unique insight and grasp of the fundamental structure and economics of publishing, but because they don’t. It is proprietary user–pays publishing that is keeping down the costs of scholarly communications by keeping those costs within the confines of a strained library's budget, costs that will rise with Open Access as authors are stimulated to spend whatever they can to advance their careers, their professional reputations, and their sense of themselves. OA is the Botox of scholarly communications, a cleverly applied poison destined to keep a permanent smile on a publisher's face.

About the author

Joseph J. Esposito is an independent management consultant (the "portable CEO"), specializing in interim management and strategy work at the intersection of content and digital technology. He has a long history in publishing, having served as an executive at Simon & Schuster and Random House and as President of Merriam–Webster and CEO of Encyclopaedia Britannica. Most recently he was CEO of SRI Consulting and effected a sale of the company to a private investment group. His clients range from legacy publishers to technology companies to venture capitalists. He can be reached at espositoj@att.net or (831) 425–1143.

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