"Wild West" OF Academic Publishing

The troubled present and promising future of scholarly communication

by CRAIG LAMBERT

LAST SUMMER, Harvard University Press (HUP) asked a book designer to create a T-shirt for its softball squad's intramural season. The front of the shirt bore the expression r > g, signifying that the rate of return on capital (r) is greater than the rate of growth in income (g)—the central thesis of Capital in the Twenty-First Century by French economist Thomas Piketty, which HUP's Belknap Press had published in April. Capital had leapt to the top of The New York Times bestseller list for hardcover nonfiction and stayed on the list for 22 weeks. It continues to sell robustly worldwide in 30 languages, and in English alone there are nearly 500,000 copies in print—the

fastest-selling book in the press's nearly 102-year history.

The success of *Capital* is astonishingly unlikely. Acquired by London-based HUP editor Ian Malcolm, the book made French bestseller lists in 2013, but there were only about 40,000 to 50,000 copies in print there. "We knew it was an important subject and an important book, and he had data no one else had," says William Sisler, HUP's director. "But it was 700 pages by a French economist, so we had relatively modest expectations of it doing especially well in the United States." Still, the press made *Capital* its lead book for spring 2014, and commissioned a translation by Art Goldhammer, an associate of Harvard's Center for European Studies.

Capital's watershed moment came when Paul Krugman—Nobel laureate in economics and op-ed columnist for *The New York Times*—analyzed it for *The New York Review of Books* and began his March 23, 2014, *Times* column by declaring it "the most important economics book of the year—and maybe of the decade." Print and television coverage of Piketty and his book spread rapidly. "It captured the zeitgeist," says Sisler, referencing broad public interest in inequality, "one percenters," and the Occupy Wall Street movement. At one point, HUP had to print in England and India, as well as domestically, to keep pace with demand.

Capital is a smash hit even by trade-book standards. But the

book would have looked and felt different had it come from a trade publisher. "An academic press will keep the 90 pages of charts and graphs, and the 100 pages of endnotes," says Lisa LaPoint, HUP's senior publicist, who organized Capital's spectacularly successful publicity campaign. "It's great to have a book like this. But we all know that for every Piketty that sells half a million copies, we have tons of other books that deserve the same indepth analysis."

The Presses, Squeezed

And there's the rub: *Capital* is an outlier. Holding the odd bestseller aside, the digital disruption of the print world that is transforming commercial publishing also affects

publishers of scholarly books and journals—and is changing structures for teaching, research, and hiring and promoting professors. Time-honored traditions appear vulnerable to overhaul or even extinction. Sarah Thomas, vice president for the Harvard Library and Larsen librarian for the Faculty of Arts and Sciences, says, "We are still in the Wild West of sorting out how we will communicate our academic developments effectively."

Consider the situation of academic presses. "It is very difficult to predict when an academic book will hit the jackpot," says Robert Darnton, Pforzheimer University Professor and University Librarian. Darnton draws on plenty of experience: he has been on the boards of Princeton University Press and Oxford University Press, and is currently on HUP's board of directors. "It used to be, when I was at Princeton in the early to mid 1980s, we would estimate that university libraries would buy 800 copies of a new book—you could count on that. Now that number is down to about 300, and in certain niches, like colonial Latin American history, maybe half that. Usually, very few copies sell beyond the library market. When you are selling 300 books, you can't cover costs." The consequence, according to Sisler, is that, "From an economic perspective, most books fail. Most do not break even. You need the occasional monster success to keep you going."

In North America, there are 105 university- and college-based



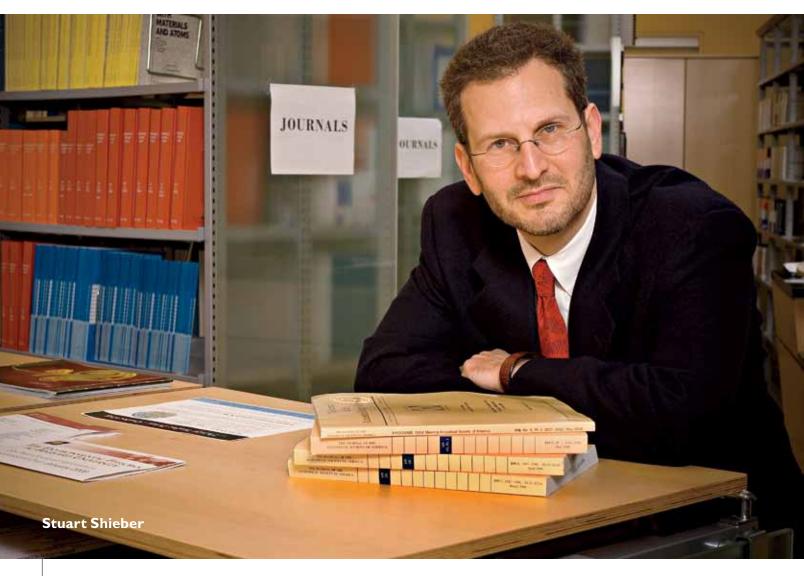
members of the Association of American University Presses; only nine have annual sales of more than \$6 million. Most have revenues of under \$1.5 million, based on reports from 70 of the member presses. "Those smaller presses couldn't possibly stay alive without help from their university, or the state governments," Sisler says. "But as long as the institutions are willing to support them, just as they support the football team, they will continue. I keep thinking that these presses can't survive, but very few have shut down. They fill an important niche in their area of the country." (In 2012, when the University of Missouri decided to withdraw its \$400,000 of support and shut down its press, there was such an outcry that the university reversed its decision and brought back the press in a reinvented form.)

Electronic publishing can definitely reduce costs and extend market reach: HUP is expanding its electronic offerings, most recently with such major projects as the digital version of the Loeb Classical Library (see "Loeb Classical Library 1.0," September-October 2014, page 22) and the Emily Dickinson Archive, published in 2013 in collaboration with Houghton Library and the Harvard Libraries.

But 90 percent of HUP's revenue still comes from selling physical books. "It's not going to be all digital, all the time," Sisler says. "Physical books are here to stay, and for a good reason." Darnton even suggests that, "Far from being enemies, the online and printed versions of a book are allies." Readers who own a digital edition, he says, may also buy the printed book "to annotate it and put it on a shelf beside related books." And many simply prefer the experience of reading pages rather than screens.

"The bottom line for us, and for most, is quality," Sisler explains. "You can make a lot of money, maybe, by ignoring this. But if you are publishing junk, you are not doing your job." Each scholarly book assumes its place in a larger quest for knowledge. "Most books," he adds, "are pieces of a mosaic you'll never see finished."

Hence, the reshaping of academic publishing matters—not just for the book publishers, but for the progress of scholarship. The current reduction in library purchases of specialized titles, for example, is squeezing monographs out of the market, and in this way affecting the academic job market. A monograph has



typically been a young scholar's first book, often developed from a doctoral dissertation. Although uncommon in academia prior to the 1920s, monographs served as a staple of tenure reviews in American universities in the second half of the twentieth century, especially in the humanities. Academic presses now publish many fewer of them, and their disappearance creates a dilemma for junior scholars already worried about the scarcity of jobs: if there is no monograph, what evidence do you adduce to support your case for tenure?

"The monograph has been at risk for a long time," Sisler notes. "Journals, in science in particular, have eaten up library budgets that were formerly spent on humanities and social-science monographs. As the number of units in print goes down, the price per book goes up, and you sell fewer; it becomes a vicious cycle.

"Universities determine who is to be promoted and tenured, and how," he continues. "Can you publish three articles instead of a book? Why crank up this expensive mechanism to sell 250 copies of a book that no one except libraries will buy, and which no one checks out of the library for 30 years? Deciding somebody's tenure review is not why we publish these things. Our mission is to advance knowledge and scholarship."

Sisler spins a hypothetical story that illustrates the tensions

and paradoxes between publishing and academic appointments. "You've written a dissertation on James Joyce, and I'm an acquiring editor," he says. "But there have been three recent books on Joyce and there is no room in the market for another, so I pass. Yet, all that your tenure committee hears is, 'They rejected your book on Joyce.' This could happen at several publishers; maybe your dissertation adviser steered you into an area that is overpublished. Whose fault is that? Maybe a more sophisticated adviser would have guided you toward a better choice of subject. This is a very real thing, and it has a lot to do with getting a job." The tenuring process will likely need to adapt to these contractions in monograph publishing, and quite likely move to embrace digital media.

Exorbitant Journals, and Free Ones

Why are university libraries now buying less than half as many academic books as they did in the 1980s? One big reason is the runaway cost of academic journals: their subscription prices have risen at triple the rate of inflation for the past three decades, says Stuart Shieber, Welch professor of computer science and faculty director of the Office for Scholarly Communication (OSC), created within the Harvard Library in 2008. Annual costs of \$4,000

per title are not unusual, and subscriptions for some scientific periodicals are many times that—even though most now appear solely online, sparing their publishers the costs of printing and distribution. The rates charged institutions—at these prices, usually the only buyers—are generally much higher than those charged individual subscribers, a nearly extinct species.

Even Harvard has curtailed subscriptions. (In 2014, the most expensive journals Harvard libraries subscribed to were the monthly *Journal of Comparative Neurology*, at \$28,787, published by John Wiley, and the weekly *Science*, at \$26,675, published by the American Association for the Advancement of Science.) "The American Chemical Society and many professional societies publish journals sold by publishers, who make a great deal of money," says Sarah Thomas. "A small disciplinary society might have a budget of \$6 million, with \$3 million coming from journal sales. Whether the publisher is Elsevier or Wiley [two major journal publishers known for high subscription rates], the economic model of many professional societies is to use sales income from journals to subsidize other valuable activities. You cannot just say, 'That publisher in the Netherlands [Elsevier] is wearing the black hat.' Faculty have a choice as to where they publish."

Yet, "We have to try to limit the predatory activities of big publishers like Elsevier and Wiley," Darnton asserts. "It is a crazy situation of monopolistic abuse, and is costing libraries huge amounts of money." (In early November, a consortium of Dutch universities and Elsevier broke off negotiations; the universities may cancel their subscriptions to Elsevier journals, which were slated for 7 percent annual price increases for the next two years.)

That price pressure from commercial journal publishers highlights the core conundrum of academic publishing: the conflict between the scholarly ideal of universal, open sharing of information, and the economic model of business: to make money by selling things. Selling goods at a market price requires proprietary control of what is sold, and charging a high price confines access to scholarly knowledge to those who can pay. Given the problem this poses for scholarship, Darnton declares, "Commercial interests have taken over the communication of knowledge, and we academics have to fight back."

Open Access (OA) is a major weapon in that fight. Peter Suber, who in 2013 succeeded Shieber, who was founding director of the OSC, literally "wrote the book" on open access. Suber arrived at Harvard in 2009 as a fellow at the Berkman Center for Internet & Society, and has led its Harvard Open Access Project since 2011 (see Harvard Portrait, page TK). His 2012 book *Open Access* (MIT) offers a comprehensive guide to the global movement to let scholarly findings (and other documents and media) circulate freely to anyone connected to the Web. "Open Access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions," he writes. It is also a way to combat the costs of many scholarly journals.

"The prices are scandalous and are harming scholarship," Suber asserts. "Until recently, the assumption has been that an article that appears in a scholarly journal is reaching everyone who needs it....In fact, the article is only available to those lucky enough to work at an institution rich enough to afford a subscription—a subset, in fact a small one, of those who need to read it. Now, with open access, we can close those access gaps. Some authors have pledged to publish only in OA journals. Non-OA publishers

might say, 'What about us?' I say, 'That's your problem.' Our goal isn't to put publishers out of business. Our goal as research institutions is to make scholarship accessible to everyone."

The first scholarly journals appeared in 1665, and since then, they have not paid authors, peer reviewers, or editors. "All the key players have been giving away their work for 350 years," says Suber. "Scholars write journal articles for impact, not for money. They are freed to do this because they have salaries from their institutions." Yet the physical aspects of print technology, still cutting-edge in the seventeenth century, today limit scholars' ability to circulate their ideas and findings. Now, Suber says, "the Internet allows them to give it away to the whole world."

Some peer-reviewed research may involve a microscopically small topic that interests only a handful of people worldwide. "There is no market value in that," Suber notes. "If academics had to focus on what might *sell*, rather than what might be *true*, they would find themselves writing more on popular subjects and less on their research specializations. Tenure protects you from being fired for voicing unpopular ideas. Open access protects you from the *market*. You can write what you think is true, even on a very small topic or on something, like evolution, that angers people."

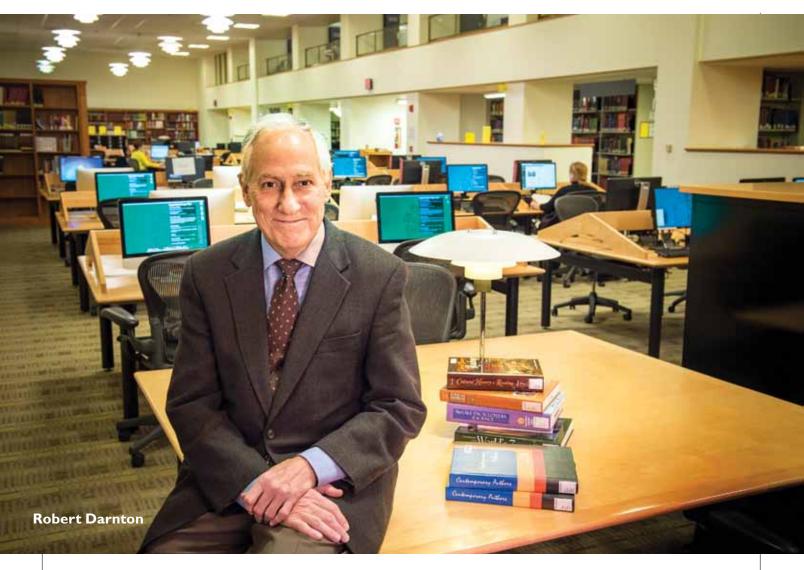
In 2008, Harvard created its own OA repository to ensure access to the findings of the University's faculty: Digital Access to Scholarship at Harvard (DASH), a service of the OSC (see "Open Access," May-June 2008, page 61). "We created a repository where all professors are required to deposit their scholarly articles," says Darnton. "They are accessible to anyone, and it's a huge success all over the world." Indeed, more than 100 universities worldwide now have OA policies, at least 60 of them based on or inspired by Harvard's (which apply only to articles, not books, and so pose no threat to academic presses like the HUP).

Each of Harvard's faculties individually adopted an open-access policy of requiring every professor to deposit an accepted author manuscript of any scholarly article. In 2008, the Faculty of Arts and Sciences (FAS) was the first to adopt an OA policy, after lengthy debate in which some professors insisted, in effect, "You can't tell us what to do with our work," according to Darnton. Nonetheless, the ultimate vote for approval was unanimous. The FAS resolution allows anyone to opt out, although, he says, a "moral mandate" for solidarity with one's colleagues discourages that.

Some prestigious journals with large circulations like *Science* and *Cell* refuse to publish articles that have been deposited in an OA repository. Naturally, Harvard has no wish to stop its faculty members' work from appearing in such important outlets, so the Harvard OA policies allow faculty to waive the license they grant to Harvard for any particular article.

The DASH program enabled a pilot study on one question raised by open access. "Right now, the only people who can read most scholarly articles are those within the umbrella of library subscriptions," says Shieber. "They are going to be scholars, faculty, researchers, and so on. Is there a demand for these articles *outside* of that group? Some people say 'No'—it's a kind of refrain you hear from publishers, who say that everyone who wants and needs to read these articles has access to them.

"Well, that's a testable hypothesis," he continues. "There are 20,000 articles in DASH, most of which are freely distributed. Those 20,000 articles—and almost all of them have been pub-



lished in journals—have been downloaded more than 4 million times. This shows a huge latent demand for these articles that is not being met by journal subscriptions. If these were published in open-access journals, you wouldn't have to satisfy that demand in this way, via DASH."

The Economics of Free Scholarship

Consider for a moment the business model of traditional subscription journals. Scholars contribute their articles to the journals for free; they receive no royalties or other revenue. Scholars also act as peer reviewers and provide other editorial services to the journals on a pro bono basis. In general, authors pay nothing to submit or publish articles in subscription journals. Both commercial and nonprofit publishers participate in the journal market. Most commercial publishers tend to be more aggressive than their nonprofit counterparts in maximizing revenue, though there is variation among both types of publishers.

As noted above, nearly all journals now appear online. Aside from medical journals and a few high-profile publications with wide circulation like *Science* and *Nature*, advertising is not a big revenue source for academic journals in general. Even those that take in significant ad revenue make most of their money from sub-

scriptions. A research university subscription to the *New England Journal of Medicine* for 2015, for example, is \$5,040, up more than 6 percent from 2014 prices.

In contrast, OA journals are free for readers, so their contents aren't restricted to those who can pay the subscription price. That kind of unfettered access to information "is a basic tenet of scholarship," Shieber asserts. But simply giving a product away online is not a viable business model: "How well are newspapers doing these days?" he asks. "Not very."

Yet the scholarly journals of the world are doing fine: they remain a multibillion-dollar industry. "Their publishers are doing what they are supposed to do," he explains. "The big ones are large, publicly traded companies with a fiduciary responsibility to maximize profits. They happen to be operating in a market that is dysfunctional in a way that publishers can take advantage of, to the detriment of the social good—and that's a problem. Access to journal articles takes place in a monopolistic market.

"Economically, markets are supposed to generate efficiency in the allocation of goods," he continues. "I'm a big fan of markets—I'm a capitalist at heart." But "If you want to read something in *Cell*, for example, you have to pay Elsevier, which owns *Cell*—and if you don't like their price, you're out of luck."

(please turn to page 83)

THE "WILD WEST" OF ACADEMIC PUBLISHING

(continued from page 60)

A second source of market dysfunction arises from within academia. Scholars naturally want their work disseminated in the most prestigious journals. They also want their research available to the widest possible audience. But the most prestigious journals are not available to those without the financial means to access them, and the scholar-authors currently have little incentive to publish their work in universally available, low-cost OA alternatives (and might even have to pay to appear there—see below).

How to overcome these problems in the market for publishing scholarly ideas?

Subscription journals charge their fees on the *reader*'s side; the vast majority of them charge nothing on the *writer*'s side. Only a few "glamour" subscription periodicals like *Nature* and *Science*—maybe a dozen of the 25,000 scholarly journals—take in revenue on the writer's side.

The long-run budgetary solution for OA sources, Shieber believes, is for them to charge fees on the *writer*'s side of the transaction, instead of the reader's side. Quite a few OA journals already exist, and some have published for many years. Many, though not the majority, create a revenue stream by charging writers a fee—known as an "article processing charge" (APC)—to cover the costs of what the publisher is doing. Other than that, the process of article submission, peer review, acceptance, and publication parallels that of subscription journals. (The APC is a one-time fee for writers, unrelated to reader downloads from the journal.) Currently, APCs average about \$1,000 per article. Shieber suggests that the right way to cover APCs is "for the funders of the research to pay the fee on behalf of their author," though this practice has not yet been widely established. In any case, he says, "collecting that cost on the author's side enables readers to get access to it at no cost."

With this model, he adds, "Those two problems of the subscription market...go away on the author's side. The buyers are authors, buying the production services of the journal, as well as its imprimatur and the prestige of being published there, which is of great importance to scholars. But you can buy those services from *any* journal—it's not a monopoly. Some publications are more prestigious, have better production services, better peer review, or can get your paper out faster. Some charge higher APCs, some less. Authors will trade off and make decisions on quality and price. And publishers will compete with each other in an efficient competitive market that keeps costs down and quality up. This is exactly what we see in openaccess journals."

(One concern about the APC model is that scholars could "buy their way in" to good journals by writing checks—but this argument ignores the filtering process of peer review and editorial oversight of material accepted for publication. That suspicion also suggests that higher APCs should correlate with lower standards for scholarly content—but a few years ago, Shieber ran a study that found the opposite. He calculated an extremely high positive correlation between the quality of a journal and its APC—logical, because scholars are likely willing to pay more to publish in a prestigious journal.)

Open-access journals have existed since the 1990s, and Shieber says that in contrast to the hyperinflationary rates charged by subscription journals, "we are seeing *reductions* in prices for OA out-

lets." That can take the form of lower APCs, or new arrangements like that of *PeerJ*, a journal that charges a one-time "membership fee" of \$100. Overall, the publisher's revenue (overwhelmingly from annual subscription fees) per article in a subscription journal averages \$5,000, which makes even the highest APCs (in the \$3,000 range) look like a bargain; OA journals typically charge APCs of about \$1,000 per article, as in the example above. The international, peer-reviewed OA journal *PLoS ONE* publishes primary research in any scientific discipline—tens of thousands of articles per year—and is so successful that it alone is publishing about 3 percent of all papers in the life sciences; its APC is \$1,350 and it costs nothing to read. It attracts that high volume, Shieber says, by providing excellent publishing services to its authors at reasonable cost.

An Experimental, Hybrid Future

"PUBLISHING IS EVOLVING very rapidly," says the Harvard Library's Sarah Thomas. "We're having a kind of shift away from formal publications that are relatively static. In the old days, a published book would be bound between covers and sit on the shelf for centuries, maybe with some marginalia added. Now publishing has become dynamic: not individual authors, but multiple authors acting to create across geographical regions and across time. Think about scientific publication. For centuries, the journal article has been the form in which scientists communicated. Now, it's more likely to be an idea put out online by multiple labs, and it may change from day to day. You get alerts; there will be new information added; you'll get corrections." And academic careers may assume new forms. A few years ago, art historian Shearer West, now head of the humanities division at the University of Oxford, observed that in the future, scholars will publish one great book, and one great digital project.

"Experimentation is what we need now," says Jeffrey Schnapp, professor of Romance languages and literatures and an affiliated professor to the Design School's department of architecture. Schnapp is founder and faculty director of metaLAB (see "The Humanities, Digitized," May-June 2012, pages 43 and 74), a research and teaching unit that explores "networked culture" in the arts and humanities. In mid 2014, it launched an experimental, design-driven book series with Harvard University Press entitled "metaLABprojects." Among the first set of books is *The Library Beyond the Book*, by Schnapp and Matthew Battles, a research fellow at the Berkman Center: an essay on the past, present, and future of libraries that exists as a print book, a digital book, and a deck of cards that captures its "provocations." A related documentary on the Harvard Library's book depository is on the way.

"The reality is that we are printing more books today than ever before in the history of civilization—and digital books are in *addition* to that," Schnapp says. "Books are thriving now in different ways than they were 30 years ago. We need to think about how to revitalize our communications, rather than defend models that belong to the past. Print culture has undergone *many* such crises over its history. It's time for rethinking and for growing. The scholarly book was overdue for redesign."

Craig A. Lambert '69, Ph.D. '78, has just retired as deputy editor of this magazine (see page 27).