



Unintended Consequences: The Rise of Predatory Publishers and the Future of Scholarly Publishing

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Predatory publishers—those that abuse the gold (author-pays) model of scholarly Open Access publishing—have been quickly increasing in number since 2009. I publish a list of predatory publishers on my blog *Scholarly Open Access* (<http://scholarlyoa.com>), and I've documented a steady increase in the number of questionable publishers and journals. For example, my 2014 list of predatory publishers contains 477 entries, compared to 225 in 2013. A second list, of questionable stand-alone journals, now includes 303 publications; last year's list had 126. Never before has scholarly communication been faced with such a high proportion of low-quality, counterfeit, and corrupt publishers.

The Damage They Do

Predatory publishers damage scholarly communication in many ways. First, they often perform a cursory peer review, or they don't perform one at all, pretending that they do. This practice means that a lot of methodologically, statistically, and scientifically unsound papers are being published. And because these papers are published in what appear to be scholarly journals, they bear the imprimatur of science. This can lead to their being cited in later studies, and, through the cumulative nature of research, poisoning future work.

Second, predatory publishers target those most unfamiliar with the scholarly communication ecosystem—junior faculty, postdocs, and graduate students. Famous for their incessant spam emails, predatory publishers and stand-alone predatory journals target young researchers with personalized messages praising an earlier work and requesting another. These publishers are very good at appearing legitimate. They expertly mimic es-

tablished publishers' websites, choose journal names that encourage confusion with legitimate publications, and list the names of respected scientists on their editorial boards (often without their knowledge or permission).

Also, predatory publishers are contributing to what appears to be a marked increase in the occurrence of research misconduct. This includes plagiarism and self-plagiarism, image and data manipulation, and ghost and gift authorship. Finally, I find that most predatory publishers lack an understanding of the need for digital preservation. They seem to think that hosting all their content on a single server without any backups is sufficient. I have already seen lots of predatory Open Access content disappear, and I expect to see a lot more vanish after this first wave of predatory publishers runs its course.

These weaknesses of predatory publishers stand in stark contrast with the substantial value that professional publishers add to research. A video posted on the Society for Scholarly Publishing's YouTube™ page in 2013¹ asks several publishing executives the questions, "What value do scholarly publishers add to society? What are they good for?" A very good answer came from Jennifer Pesanelli, Director of Publications, Federation of American Societies for Experimental Biology, who said, "...we let the researchers, the scholars, the scientists do their work while we take care of the business of disseminating the information." Another fine, summative answer came from David Smith, Head of Product Solutions, The Institu-

1 Society for Scholarly Publishing. What value do scholarly publishers add to society? What are they good for? 2013. Retrieved from: <http://www.youtube.com/watch?v=oBpzoFjyNig>

tion of Engineering and Technology, who stated, “We aggregate, we validate, we curate, we disseminate. We’re in the business of making information actionable.”

While there are some Open Access publishers that follow industry standards and are not predatory, the increasing number of predatory publishers is staining the Open Access movement overall. The movement has facilitated and enabled the creation of thousands of low-quality scholarly journals, many of which are corrupt and actively aim to scam honest researchers.

Technological Transitions

In recent decades in my field, library science, we have lived through a giant technological and social change that greatly affected the operations of almost every library in the world: the transition from card catalogs to online catalogs. In this case, the change didn’t have a social movement behind it; it was organic. There was no one shouting “Card catalogs must go,” or “Online catalogs now!” The change occurred naturally, with everyone seeing the advantages of online catalogs, implementing them as soon as they could. Card catalogs were gradually phased out, the newer technology and practices replacing the old.

The Open Access movement hasn’t progressed this way. The movement first gained prominence in 2002 with the signing of the Budapest Open Access Initiative, making it about 13 years old, which is long for a social movement in the Internet age. Currently much disagreement exists among the stakeholders in scholarly communication regarding the future of scholarly publishing. Those who closely follow the conversation are accustomed to the combative and factious conversations that occur on email lists and blogs covering Open Access and traditional publishing.

Open Access advocates would argue that the reasons why open access hasn’t been universally embraced lie in the vested interests of the traditional publishers in maintaining the status quo, but perhaps the resistance indicates that the simple arguments used to promote Open Access don’t tell the whole story, or that the new technology and practices aren’t really better than the old. It’s still unclear whether scholarly Open Access publishing

is actually more cost-effective and sustainable than subscription-based publishing. Some Open Access publishers have lowered peer-review standards, implementing a “light peer review” that merely judges whether an article is correct scientifically but does not evaluate novelty or importance, and publishing vast numbers of these minimally reviewed and unrelated papers in generic megajournals. The emergence of predatory publishers has marred scholarly communication, leaving many researchers unsure whether they should submit to Open Access journals at all. The movement’s motto seems to have been, “open access at any cost.” Unfortunately, the costs to the scholarly community brought about by predatory and other low-quality publishers have been high.

A shift from subscription journals, which are reader centric, to journals using the gold (author pays) model is a major one with broad implications. Subscription journals have strong incentive to keep the readers pleased, or they will lose their subscriptions. Subscription journals that do not serve their readers well typically face the eventual shutdown of the journal. This is a community-driven quality control mechanism that is lost in the Open Access world. Gold Open Access journals are author centric and need to appeal to authors (and the income they provide) to sustain themselves. In scholarly publishing there are far more readers than there are authors. The predatory journals represent the extreme case of author centricity—they exist solely to fulfill the authors’ need to get articles published, without any concern for the consumers of scholarly research, the readers. There are hundreds of predatory journals publishing research of meager quality that no one, apart from web crawlers, will likely ever read.

Modern civilization depends on sound science to progress effectively. Policy makers rely on research to create and implement sound public policy. Lawyers use research findings in litigating cases. Health care providers translate recent medical research into clinical practice. All these occupations, and many more, rely on high-quality research to perform effectively. The advent of predatory publishers has polluted the body of research with many articles and findings that have not passed through an adequate peer review. It is now easier than ever

for someone with nonscientific ideas about global warming, the etiology of autism, and the nature of dark matter and dark energy to get their ideas published in a scholarly journal.

The future of scholarly publishing will likely include a variety of distribution models, including both Open Access and subscription journals. But I think journal quality will emerge as the singular criterion for evaluating journals. Whether a journal is open or toll access won't matter as much as whether the journal adds value to the research it publishes. The Open Access movement

seems to mistakenly equate scholarly publishing with merely posting scholarly manuscripts online, largely overlooking the crucial role that publishers play in making research discoverable, and ignoring the value that publishers add to research information through curation, copyediting, ethics management, and the like. In fact, the high-quality work that Editors-in-Chief, Managing Editors, and Technical Editors provide has never been so important. It is their work that will attract the best papers and distinguish the quality journals from the predatory ones.

