

# Unintended Consequences

By Glenn Collins 

Origin Editorial  
San Diego, CA

“The law of unintended consequences, often cited but rarely defined, is that actions of people—and especially of government—always have effects that are unanticipated or unintended. Economists and other social scientists have heeded its power for centuries; for just as long, politicians and popular opinion have largely ignored it.”

—Rob Norton

The world probably doesn't need another opinion piece on the movement to open access (OA) but here we are. Unlike many of the pieces that focus on giant publishers, academic freedom, government funding, fairness to taxpayers, and the overall advancement of science, I want to focus this piece on an often overlooked aspect of all of this—if all scientific journals move to OA, thousands and thousands of people will lose their jobs. If thousands and thousands of people lose their jobs there will be a significant decline in:

- Customer service for journal offices
- Quality of published articles (*i.e.*, more typos, mistakes, corrections required, *etc.*)
- Number of journals/publishing venues
- Number of scholarly publishers
- Number of scholarly societies

While there will be a significant increase in:

- Society membership fees
- Society conference costs for attendees
- Article processing charges (APCs) to cover the revenue losses

Let me use a journal as a model and walk everyone through it. And as I write this out, I cannot help but think of that timeless Tom and Jerry cartoon where Tom goes up and down the stairs while Jerry flicks the light switch until finally he tricks Tom into going down the stairs in the dark.

A medical journal receives 1,700 submissions per year, publishes about 320 of them, and publishes 12 issues per year in print and online. Circulation is about 12,500. The journal receives more than half of its income from electronic distribution through its publisher's various subscription products. The rest comes from advertising, mostly in print, and various other things. Fewer than 10 articles publish OA

each year, so APCs are a minimal contributor to the bottom line. Indeed, in a recent look at three issues worth of material (roughly 70 papers) while 21 had some type of US government funding, only 2 were published OA. The journal is owned by a society and contracts with a major publisher. The publisher provides a stipend and a guaranteed royalty. Then at the end of each year, it calculates and pays out the balance.

Everything else in the society—membership, conference, training, task forces, webinars, *etc.*, ranges anywhere from a loss (due to overhead of staff, *etc.*) to a small profit. The journal puts the society over the top, year in and year out, creating a very valuable cushion for the society's yearly budget. The society contracts more than 50 people and has numerous costs assisting members, funding awards, *etc.* For easy math, let's say the stipend and royalty gives the society 1 million dollars each year.

So now we take this same situation, and we turn the journal to OA while nothing else changes.

If the journal publishes 320 papers and charges \$3,000 per article and collects \$3,000 for every article, it will generate \$960,000. So its total revenue is already less than it was receiving from the publisher. So if the publisher takes half, then the society gets \$480,000.

The society is now in the red by several hundred thousand dollars on a yearly basis. So now what happens? We have two options.

## Option One

First, the journal has a staff of four but is given a tough choice—cut two of them and keep the pay the same for two or cut the pay in half for all four people.

The EICs and deputy editor receive a yearly honorarium—that will have to be cut. The editors may need to take a hard look: Can they justify the workload, in comparison to their many other obligations, at this reduced cost?

The editorial board is given funds to support their travel to come to the annual conference, a perk for being on the board. That will have to be cut. So now if they do come, they or their institutions need to pick up that cost.

Say the journal keeps two full-time people now doing the work of four. What are some of the consequences? The two editorial office staff members will check in papers, handle the massive inbox as best they can (but expect delays now),

check in revisions, probably give up on quality control of proofs, and perhaps skip some of the special issues and such that require time for planning. This will slowly turn the journal into just publishing the next 20 papers that are ready with no thought on grouping, themes, *etc.*

If authors and reviewers have issues with the submission site or questions on the status of their papers, they can expect it to take longer to receive an answer. They may give up. This will in turn lead to longer turnaround times and papers not being processed as quickly as before.

The society itself needs to make up the revenue and plug that hole. It has an annual conference, so it has to raise the cost to attend. It offers continuing medical education (CME) credits, so it has to raise that price. It offers training and certification courses, so it has to raise those prices. Members pay dues, so the society has to raise those prices as well.

This will probably turn people away, resulting in declining membership and conference attendance, putting even more financial pressure on the society and sending it into a downward spiral.

If option one were to be chosen globally, many societies would become desperate and think how can we survive? Let's merge! Large societies will gobble up smaller ones. Different societies addressing the needs of the same audience and space may link up. There will be economies of scale. This could lead to merging of conferences and merging of training, which then leads to fewer and less-diverse opportunities for members to get their professional needs addressed. They go from a medium fish in a large pond to a small fish in a very large pond.

If conferences drop away, this impacts hotels and conference centers, vendors that offer CME, and on and on and on.

How can you generate the same revenue as before? The society/journal may turn to option two—accept more papers!

### Option Two

So this journal receives 1,700 papers and publishes 320. However, if it were to publish 1,000 papers (about 60% accept rate), then it would receive \$3,200,000 in OA fees. That is assuming everyone pays, and everyone pays \$3,000. The publisher takes half (\$1,600,000), and now the journal is generating more than before, but there are several major issues.

Right off the bat, OA means online only, as there is no longer the revenue and the means to print the journal, so we can say goodbye to 90% or so of the advertising revenue.

That's maybe \$200,000. The journal also gives up the house ads and the self-promotion/marketing and tangible benefit that comes with a printed journal.

More importantly—will there be 1,000 papers to accept? Currently the journal receives many papers that no doubt were first submitted elsewhere and rejected. Rejected papers from this journal, in turn, are sent to many other journals. For journals that rely on receiving previously rejected manuscripts, the well would possibly run dry as the rejecting journals begin to reject fewer papers in an effort to increase their profits, potentially leading to the collapse of those other journals downstream. It is difficult to know what would happen first—whether the high-ranking journals, upstream, might begin to accept so many papers that they reduce submissions for this journal, or that this journal accepts so many that it reduces submissions to the journals further downstream, or both. How much of a reduction could individual journals take before they collapse?

In order to publish 1,000 papers, this journal, which currently rejects without review a high percentage of papers, would have to send virtually all papers out for review, relying on the reviewers to reject the truly bad science but allowing papers to be accepted that the editors would have previously rejected as out of scope, not novel enough, *etc.* If the editors wish to maintain the same high peer-review standards for the journal that they currently employ, namely every article published in the journal has received two or more peer reviews and very often a statistical review, then roughly 1,400 more peer reviews need to be performed each year compared to the current model. This would greatly increase the burden on the peer reviewers and require more statistical review resources as well. In fact for this example journal, the stats reviewers are paid a modest honorarium for their work, so if you need to triple the number of papers accepted you need to triple that budget as well.

Taken all together these pressures may lead to the decline of traditional peer review as we know it. To meet their financial quotas, the journals will need quick turnaround times and will not be able to wait 20-30-40 days for the reviewers to get their reviews in. Time will truly mean money in the effort to publish more and reap the APC rewards. Journals simply may not be able to get two peer reviews per paper for all of the papers, and they may need to skip statistical reviews on some papers because they simply cannot afford it. So will the bar of acceptable quality be lowered? Will reviewers' more negative comments be ignored by the editors? Will statistical mistakes, which could call into question the entire paper, be missed? Who will have time to investigate ethical issues?

Would the Impact Factor finally lose its impact in this environment? The consequences of that on tenure and promotion processes and how authors decide where to publish are difficult to foresee. Critics of the Impact Factor would call this a win, but would authors begin to choose which journal to publish in based on the APC? Would academic authors become active participants in the capitalism business model of academic publishing? Who would benefit/suffer the most—the for-profit or not-for-profit entities?

So in this scenario, journals and publishers are consolidating their hold on the content. Small journals fold, leaving fewer choices for authors. Readers will be presented with a menu of mega-journals whose business models can survive the change.

As editorial offices, ancillary vendors, small publishers, and societies close, staff are laid off; as revenue is transformed and likely decreases, larger publishing houses will reduce staff and fewer people will be asked to cover more work. This will lead to a downturn in quality in peer-review management and production processes as journals simply process, review,

accept, and post articles and then collect their APCs and move on to the next.

Less revenue means publishers and other vendors have fewer resources to develop new features, new bells and whistles, some of which become second nature, and we wonder what we did before so-and-so invented this. Innovation will be stifled, new and better systems delayed or seen as too costly. Improvements in processes and technology will be significantly slowed.

Advocates for OA may read the above and think “but that’s not what I had in mind at all.” But this is what can happen. Maybe not all of it, but some of it. There will be significant unintended consequences that should be considered before the switch is flipped and we are Tom trying to go down the stairs in the dark.

## Acknowledgements

The author thanks Kristen Overstreet for her edits and sage advice in the development of this manuscript.

## Ira Salkin Service Award

This year, reflective of the passionate commitment of our ISMTE membership, the Ira Salkin Award transitions from a Scholarship Award to a Service Award.

The goal of this transition is to capture the dynamic nature of ISMTE and to recognize its members for outstanding service to the Society. The ISMTE Board selects members who have exhibited enthusiasm for and commitment to the Society and its mission to connect, educate, and provide resources for professionals who are passionate about the operations of peer-reviewed publications. Ira Salkin Awardees should have a history of dedicated service to ISMTE demonstrated by active participation such as involvement at the committee level, serving as a committee chair, writing for *Editorial Office News*, or presenting at conferences, workshops, or webinars. Criteria for the award are found [here](#).

*This award is named in honor of Ira Salkin, who was one of the founding members of ISMTE and sadly passed away in 2016. His goal was to ensure editorial office professionals are educated and vigilant in matters of publishing ethics.*

## Awards Open for Nomination

**Achievement and Innovation • Early Career • Jason Roberts Founder's Award**

We are now accepting nominations for the **2020 International Society of Managing and Technical Editors Awards**.

Celebrating success and editorial achievements, these annual awards provide an opportunity for businesses, organizations, and individuals to be recognized. This year, nominations are invited for three categories and may be submitted by members or nonmembers of ISMTE. The range of awards is designed to be accessible to all members.

**Nominations are easy. Learn more about each award and nominate a current member [here](#).**

**The deadline for Awards Nominations is June 1, 2020.**

## “Innovation Session” Call for Proposals

Does your company provide an innovative product, service, or idea that you want to showcase? Then we want to hear from you!

The ISMTE 2020 North American Conference Planning Committee is seeking proposals for the “Innovation Session” to be held during the conference on August 6-7, 2020, in Chicago. Back by popular demand from the 2019 meeting, the Innovation Session features selected vendors who present on innovative products/services/ideas that they offer.

To apply to present at this exciting session, send a one-page description of your product/service/idea and how it relates to what managing and technical editors do. This is a great opportunity to get in front of the people who use publishing products and services every day!

Submissions and questions can be sent to Kimberly Retzlaff, Committee Chair, at [kretzlaff@awwa.org](mailto:kretzlaff@awwa.org). Submissions are due by March 15, 2020. Vendors will be selected by committee vote and notified by April 1, 2020.

The session itself will be one hour in duration, and each speaker will have 10-12 minutes to present, followed by a Q&A with the audience. At the session, we'll have a “people's choice” award for the most innovative presentation. The winning speaker will walk away with bragging rights and a certificate that declares their innovativeness.

### Writing Your Proposal

Proposals should be brief—no more than one page—and should focus on how the product/service/idea affects the work of ISMTE attendees (managing and technical editors and others that work in editorial offices). Proposals should be clear about how the idea is innovative. Presentations should not be a sales pitch.