EDITORIAL

IMPACTS OF ELECTRONIC PUBLICATION

It has been a while since I wrote about publication. Since then, times have changed, and the publication environment has changed. When I first got involved with publishing beyond authorship, I reviewed papers for various journals. Back then, the manuscript came in a big envelope on real paper. I would procrastinate, then finally read the manuscript carefully and write my thoughts down tediously on the manuscript by hand. I had to make sure that they were legible. When I had to make lengthy comments, I typed them up. Initially, I used a manual typewriter, then an electrical one, followed by an electronic one, then I used a computer terminal, and finally I typed my comments on a personal computer hooked up to the Internet. It took many days to get the package from the editor by mail and a similar number of days to send it back.

As an author, I waited patiently for the journal to acknowledge receipt of my manuscript, then I waited for the lengthy review, the decision, and the typesetting. I was given a limited amount of time to proofread, and I waited again for its printed publication in the journal and 100 reprints. After fulfilling the reprint requests, I usually kept the undistributed copies for a few years and then ultimately thinned them down due to limited storage, often regretting the thinning a few years afterwards. The submission and publication process took many months. It was not surprising to have it last more than a year.

The computer and Internet age changed all of this. The communication lags between the editor, the reviewers, and the author are gone, along with the paper manuscripts that pile up on the desk. A typical publication cycle takes 150 days now instead of 250 days, if you consider appearance on the digital library equivalent to the arrival of a printed journal on your desk. The papers not only appear instantly, but they also can be recalled or updated instantly. The former capability can be used to remove duplicate or unethical publications, and the latter can be used to incorporate errata. The digital library also facilitates low-cost color publication, and even audio and video multimedia.

So, how do we take better advantage of these progresses?

As an editor, I would like to see high-quality proceedings articles properly reviewed, improved, and archived in a journal. As an author, I would like my proceedings article perfected, widely published, and archived for future reference. However, there is always the issue of double publication. The digital library can change that. Once a proceedings article is accepted for journal publication, it can be removed from the proceedings volume on the digital

library and replaced with a pointer to the newly published journal article. To do this, we need the author to identify the proceedings article when it is submitted to JM³. As with any regular submission, we will review the manuscript rigorously, and if the submitted article is not journal material, it will be rejected right away. Our experience is that even though we accept submissions that are identical to the proceedings article, the final accepted version is always improved after going through the peer-review process and thus is a different and much better article. Then why not improve the manuscript before submission? The author definitely has the liberty to do that. However, there are many advantages to submitting the article to both a proceedings and a journal simultaneously if the proceedings and the journal are published by the same organization: (1) If the author has journal submission in mind, he would prepare the manuscript much more rigorously, resulting in a better proceedings paper. (2) The journal receives the manuscript earlier. (3) The author does not have to go through publication approval at his organization two times. Of course, the printed proceedings cannot be changed. We ask the author to change his/her own reference from the proceedings article to the journal article once it is accepted for publication in JM³.

Although electronic review and publishing eliminate much dead time, the 150-day review cycle can still be improved. The burden lies on the editor, the reviewer, and the author. In my early reviewer days, I procrastinated. Later on, however, I realized that time was not saved by procrastinating, only that I carried a guilty feeling that subtly affected my work efficiency. I began to take care of reviews as soon as possible, making for a less cluttered desk and nowadays a shorter electronic job list. As for editors, we can reduce the time needed to assign the reviewers and make a consolidated decision. For the author, the paper is your baby. Eventually your revision time will become the dominating part of the review cycle with nobody else to blame.

Finally, does electronic publishing reduce the cost of publication? If so, why do journals still ask for a publication charge? Indeed, electronic publishing is supposed to reduce the time and cost of publication. Despite the time saving and enhanced features, however, it is costly to purchase, develop, and maintain digital equipment and electronic tools for peer review and publication. Therefore page charges are still necessary. Authors receive the benefits of getting an electronic copy of the published paper, free online color, and multimedia, as well as the shortened publication cycle. Unless the author is an individual with

low economic means, such as a student without the backing of a funded project, it is an act of responsibility to pay the page charge to make the society's publication business sustainable. My understanding is that most society journals, including JM³, are service publications that do not make a profit. They need the income from publication charges to sustain the operation, particularly in these tough economic times.

Happy submitting! Happy reading!

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