

NOTES FROM THE MEETING

MICHAEL F. A'HEARN
University of Maryland
Department of Astronomy
College Park MD 20742-2421, USA
ma@astro.umd.edu

Abstract. The following notes have been put together by the author in his capacity as Chairman of the Publications Board of the American Astronomical Society (AAS).

1. General

Having all the key parties related to publishing (authors, editors, societies, publishers, etc.) together in one room was quite beneficial and kept us from going down roads that would be unacceptable to some segment or other of the whole community.

2. Open Access Issues

Michael Kurtz (CfA) argued on the basis of his statistics that Open Access (OA) does not lead to higher citation rates – the correlation of ApJ citation rates with **astro-ph** availability appears to be more a matter of the early access than the cost.

Currently the biggest pressure for Open Access is from the Wellcome Trust (a UK trust), which requires Open Access for all of its grantees and which says explicitly that it doesn't matter where you publish – only the content matters.

There was discussion of a new OA journal on Astronomical Communication, mainly for public communication issues. To me, the issue was *déjà vu*, since it was an almost exact duplicate of the discussion we had in the AAS council about taking on the Astronomy Education Review (AER) – it has to be OA to get readership, the authors can't afford to cover all the costs, and we don't know how to pay for it. We have more or less solved

the issue for AER and Kevin Marvel¹ is working out a self-support business model. It remains to be seen whether this new journal can also figure out a suitable business model.

Terry Mahoney (IAC) noted that 41% of OA journals are revenue positive one way or another, 24% break even, and 35% are revenue negative.

3. Other Business Model Issues

There are many different business models out there, and most groups were not about to change their own business model. The three journal sets owned by learned societies (AAS, Royal Astronomical Society/RAS, and EDP Sciences, which is owned by three French societies) all have quite different business models for their journals and, to some extent, this is driven by the local environment where the society is based, but there are also philosophical differences not dependent on the local context. EDP Sciences has partial government sponsorship, RAS has a subscriber-pays model and revenue sharing with the publisher, AAS has authors and subscribers both paying a fee for service to the publisher. Neither *Nature* nor *Science* was represented, but Terry Mahoney (IAC) pointed out that an author-pays model can not work for them because of their very high rejection rate, which implies that each successful author has to also pay for the editorial handling of 10 other rejected authors. Their model differs also from the model for commercial publishers of other journals read by astronomers, partly in relying on advertising and other sources of revenue in addition to subscriptions.

A representative from high-energy physics presented the approach that they are trying to develop, which adds a central office (SCOAP³) that coordinates all the publishers and all the institutional subscribers and all the authors' institutions to collect money in bulk from both authors (actually from their institutions) and subscribers (again mostly institutional subscribers) to make the journals totally Open Access. Their model ended up suggesting that the US should pay 24%, although the US wasn't represented on their board. Our general sense was that this might work only because there is a relatively small number of very large institutions involved in high-energy physics, but we do need to watch this carefully to see how it plays out.

In terms of new aspects of the business model, an interesting result from Harry Blom (Springer) was that Google now has complete scans of 25,000 Springer Books. On average every title gets about one click per month to buy this book, equally spread among 10-year old books and more modern

¹AAS Executive Officer

books. They view this as a success that does increase their business (Google did the scanning – not Springer).

The Astrophysics Data System (ADS) is also now getting a lot of hits via Google, but the ADS reads generated by Google are almost flat over the age of the article and are not correlated with citations, unlike the reads that come directly to ADS, i.e. the Google readers are not primarily the scientists who cite astronomical papers.

There was some discussion about remuneration for referees. The general idea now is that voluntary referees work well mainly because the referees and the authors are the same people and most (but not all!) willingly participate. However, the growth in the number of authors outside North America and Europe has not been matched at all by a growth in suitable referees or editors. There are various reasons for this but it is leading the system to be more out of balance, i.e. referees and editors are now dealing with even more manuscripts each, and out of proportion to the number of manuscripts that they write. (The AAS editors have previously pointed this out for the AAS journals. There has always been some imbalance because some scientists/authors won't referee, others are bad referees, and people like graduate students usually aren't asked to be referees.)

There was widespread agreement, after much discussion, that the biggest “cost” of publishing is in the time of the scientists who write the papers and the time of the scientists who referee the papers. For a variety of reasons, these “costs” are never accounted for in the “cost of publishing” (as you all certainly know). Some but not all publishers did in fact emphasize that their goal was to minimize the “voluntary time” required from both authors and referees. (Comments that forcing the use of \LaTeX reduces costs were rebutted by many people saying that it does not reduce costs but rather transfers the costs to the authors, but that there are other reasons for using the \LaTeX macros.)

4. Electronic vs. Print

There was widespread agreement that, on a time scale of 5-10 years, we will probably be producing a large fraction of journals as e-only with print-on-demand (i.e. not a real typeset run and thus not quite as high quality as normal printing). One current test of this model is MNRAS' letters section, which has been e-only for about a year and a half. There has been only one subscriber for the optional print-on-demand version, which suggests that there is not a lot of demand for print copies as such, despite many people who say that we have to have print.

There was an agreement to work together across all the relevant parties to devise a uniform, scientifically useful (i.e. human memorable) method

for citing e-only references in the age when pages, issues, and even volumes may become obsolete concept. The Digital Object Identifier (DOI) is great for electronically linking to e-only articles, but almost useless as a citation for the average reader, so the DOI is here to stay but won't become the preferred citation method except as a link, which might or might not appear in a printed-out version of the reference list from a paper. Having everyone work together to get a reasonably uniform system should benefit us all.

A big issue in all electronic is still in deciding who is ultimately responsible for the long-term archive. For MNRAS letters, the RAS is undertaking the responsibility and presumably the AAS would do so if/when its journals move to e-only. There did not seem to be a lot of support for libraries taking on their traditional role of being a dispersed, long-term archive of material, in part because libraries are among the easiest things to cut at many institutions (including my own university), although my personal view is that they should since they have fulfilled that role very well historically. There is an amusing story told at CfA about an early Estonian publication, for which the only known copies of several volumes are in the CfA library. The commercial publishers found it in their own business interests to maintain the permanent archive for titles that they own. However, preservation against companies or societies going out of business, geographic dispersal to guard against natural disasters, and other similar issues still leave many people concerned.

5. Editorial Issues

Butler Burton (NRAO) presented the statistics that had been previously circulated within the AAS Publications Board regarding authorship and countries of origin.

Helmut Abt (KPNO) presented some statistics on the changing patterns in citations. He argued that a large part of the changes he sees is due to the fact that people now have a tendency to cite only the things that are available on line.

Rudolf Albrecht (ST-ECF) presented some interesting ideas on the far-distant future of publication and argued that we need a new paradigm for searching². He proposed a pilot project involving some small, relatively new subfield (he suggested TNOs as an example) for which we would put all full-text letter-length papers into a database for full-text searching and pattern finding by computers.

Paul Murdin (RAS) noted the RAS emphasis on ethics in publishing (including authoring and refereeing) and pointed out two web sites³. David

²See his web site at <http://www.stecf.org/~ralbrech/papers/aheck/kmap3.html>

³<http://www.cst.gov.uk/> and <http://www.publicationethics.org.uk/>

Nicholson (Blackwell) pointed out that, at last week's meeting of young astronomers in the UK, he learned that most of them get their initial information and ideas from **astro-ph** and from conferences, but that they generally don't cite either of these, citing only the refereed literature.

Jean-Marc Quilbé (EDP Sciences) pointed out that, in a reader survey, only 30% of authors like the new A&A structured abstracts – this was an experiment that showed it was probably the wrong way to go.

6. Summary

Overall the meeting was quite valuable in helping all participants to understand the issues that the other players in the publishing game are facing. The key goal is for all participants to see the “difficulties” as opportunities to improve our publishing practices for future scientists.