

# Open access: what does it mean for STI distribution?

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## Disclosures, caveats and disclaimers

-  On working for Elsevier (again): whose bread one eats .....
-  On being a (non)believer: hypersensitivity to ideologists, seers & believers, etc.
-  On being a physicist: cool, objective, detached (???)
-  On being a (superannuated?) science publisher: déjà vu all over again?

## Elsevier and all that ..

-  Highly successful: 30% or so
-  Highly visible, despised, feared ...(love to hate them: politics of envy (JV)?)
-  Appears arrogant on occasion, Dutch (“often wrong but never in doubt”), but adapted to the times (Science Direct)
-  Would embrace a better business model if there were one (so is following OA movement with great interest)

## Elsevier's commitments, vision, and assessment

-  Commitment to make a profit (my children and your pension funds..:)
-  Commitment to provide the best service possible
-  The scientific literature is an interconnected jigsaw and should be openly accessible to all scholars. All journals and books should be interoperable, browseable and searchable for the user. It should not make a difference who publishes the material (s)he is interested in. As a result, Elsevier retrodigitizes all its previous material and actively supports efforts such as CrossRef.
-  The current state is one of transition between electronic and paper, with still glaring paper technology related inefficiencies: a good licensing scheme minimizes the necessity for wasteful practices in library
-  Question is: is OA approach (as currently defined) better than “enlightened licensing” practice by traditional publishers?

## Principal OA strategies

 Start new OA journals

 'Convert' (12-20K) existing PA (Paid Access) journals into OA ones

 It is clear that, somehow, both strategies need to offer attractions and incentives for major players in the scientific communications 'game' (authors, readers, librarians, publishers, administrators etc.)

## Major OA assumptions and requirements

-  **“Author (- institution) pays” business model. This can be for- or not-for-profit**
-  **Major cost-cutting and downsizing to the essentials required**
-  **Peer Review is the (only?) service rendered by journal (publisher)**
-  **Archiving provided by author-institution (institutional or self-archiving)**
-  **Library funds (partly) re-channeled to author funding**
-  **Upfront payment model superior to subscription model in virtually every way: more equitable as there are no access restrictions**
-  **If PA journal does not convert, it will be ‘competed out’ by OA journal**

## Early adopters (adapters?)

 Optics Express (1997) (OSA, member of AIP)

 New Journal of Physics (1998) (IOP)

 Both journals editorially successful after 'normal' period (3-4 years)  
OE published 200 papers in 2002, NJP 100 papers

OE charges \$325 for up to 6 pages, \$750 for 7-15

NJP \$450 IOP/DPG - , \$500 for associate members, \$560 for others

Both journals still lose money, in spite of maximal synergies with large publishing organizations. OE does contribute to overheads (which suggests that expansion will lead to savings)

## Later adopters

### BioMedCentral (several journals)

For-profit publisher (in principle)

\$500 per published article (assuming 50% rejection) should eventually break even [implied processing cost / article: \$250]

### PLoS (2 journals, for time being)

Not-for-profit (as principle) Obtained \$9M funding for 5 years

\$1500 per published article (if cost as BMC, implied rej. rate 83.3%)

## Some thoughts ...

-  Nature and Science have rejection rates of 96% or so: article fee would have to be \$10,000 if same system is followed ..
-  Both BMC and PLoS go for superior quality (high rejection rates): what happens to the 'other papers'? Condemned to PA journals? Conversely, lowering rejection rate may add some cash when needed ....
-  Experience with page charges teaches us that authors are sensitive to charges and that their choice of journal depends on it (which is why JHEP is NOT a free journal, even though it started that way)
-  *'In the long run an economic system tends to favor those who pay...If authors pay, the system will lean towards the author's goal (getting published), ..if readers pay, the system will lean towards the readers' goal (effective filtering)'*  
Varian (in internet 'debate' with Harnad)

## Some further thoughts

-  **Is free access as powerful a motivator to switch as is assumed? How do you know? If the choice is between another postdoc or grad. student or paying article fees ....Isn't the journal choice mainly motivated by being read by 'relevant people'? (Again: JHEP)**
-  **Is it not elitist to relegate 'the other articles' to a subscription or low fee journal? The higher the 'quality', the more to pay, or, the more you can pay, the better your chance to get in?**
-  **Doesn't the 'author pays' model in the long run favour the rich authors, with the quality of their work relegated to second place?**
-  **Apart from all this, it is a terribly slow process! The more elitist you become, the slower the process (total output: 1-2M articles/year)**

## OA strategy 2: convert 12-20k PA journals to OA

-  Early adopter examples show that it is not an attractive way to go for (not-for-profit) publishers
-  Would librarians like to see a considerable cut in their funding to pay for author charges (remembering that 65-75% of their budgets is for salaries and sundry services)?
-  Readers have never paid for articles. Why should they care, especially as new licensing and linking schemes have given them more and better access than ever before?
-  As there is no proof of sustainability (far from it!), would it be prudent and wise to risk the current (ever improving) system?

## Preliminary general conclusions and personal assessment

-  Author pays model has flaws
-  Early adopter examples not necessarily encouraging for starting new OA journals: will \$9M be enough?
-  Conversion of 12-20K journals not very likely, very slow, if at all
  
-  OE and NJP seem more meritorious experiments: done by experienced publishers with maximal synergies from parent PLoS too ideologically driven with ‘touch of amateur’? (Although: Cell editor hired)  
BMC: will it last? Sold eventually? (seems to be its normal business model)

## Other OA assumptions: 'journal is service provider' and self-archiving

-  Article is *not* an advertisement. Article = 'sworn statement' or affidavit (Lederberg, Ziman).
-  Journal is custodian (official record) of these statements ('minutes of science')
-  Once article is published, it should be outside control of author or his institution. No changes, withdrawals etc. are allowed. Hence (copy)right transfer. [Librarians rightly scolded Elsevier for letting some articles vanish, for whatever good reason]
-  Although role of publisher and librarian as regards digital archiving needs a great deal of further thought, it is clear that a few trusted, neutral (not government controlled) parties need to be involved, possibly on national levels

## Archiving, linking, presentation, etc.

-  For now, the ‘official record’ resides with the publisher, who is responsible for maintaining, (retro)digitizing, reference linking etc. of the ‘live’ e-archive. Arrangements for the ‘dark archive’ need to be made (e.g. Elsevier’s contract with KB) and further discussed with librarians
-  Archiving, linking, consistent presentation of material, technological updating, etc. needs to be done by the publisher, costs money and needs to be paid for by the joint libraries in the world

## Overall conclusions as regards OA

-  As the function of the journal is much broader than just ‘peer review’, costs associated with sustainable publishing is likely to be significantly higher than those allocated to early examples
-  E-publishing is still in state of maximum change: plan for profit or surplus until steady state is reached. The record of science is too important for risky experiments
-  Self-archiving of unofficial versions OK (as long as it does not undermine economics of ‘canonical’ publishing) but is NOT the answer to archiving
-  Jury is still out, but chances of success are doubtful

## references

 0202005 [The Faustian Grip of Academic Publishing](http://econwpa.wustl.edu:8089/eps/mic/papers/0202/0202005.pdf)  
by Robert P. Parks **[Downloadable!]**

<http://econwpa.wustl.edu:8089/eps/mic/papers/0202/0202005.pdf>