Open Access and beyond...

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European Research Council

Established by the European Commission

Strongly-correlated systems

Momentum frankler O_g (s.Lu. 1951 – 1.6 – 1.25 10 3.5 5 $(b) \in -1.4 \text{ meV}$ £K(They 0,35 0.34 0.92 a b q = 0.45 Model × res. 12 Model 0.5Resolution 8 0.1 Momentum transfer (2:::/a) b o o o o o 4 0.35 0.3 n a = 0.1312 Intensity (a.u.) 0.2 0.2 8 0.1 4 q = -0.27intum Transfer Q_{chain} (2 π/b) 12 -0.28 4 -0.3 -0.20 0.2 0.4 0.6 0.8 -0.20 0.2 0.4 0.6 0.8 Energy transfer (eV) Energy transfer (eV)

Quantum magnetism

Ultracold atoms



Out-of-Equilibrium Dynamics from Integrability

The simple pendulum on its head



Kapitza pendulum, 1951

Pyotr L. Kapitza (8/7/1894-8/4/1984)

The Kapitza pendulum



Points of concern for scientists

- accessibility of published material
- Quality of final product
- usefulness of refereeing process
- Ireedom to author science honestly (no smoke & mirrors)
- form of impact assessment (the impact of the impact factor)

Annoyances

- paywalls; financial dealings
- In the second second
 - Iack of editorial and referee expertise
 - use of non-scientific criteria
- journal title more important than paper's content when assessing quality and importance

Open Access policy Budapest Open Access Initiative (2002) Bethesda Statement (2003) Berlin Declaration (2003) Amsterdam Call for Action (2016) Appel de Jussieu (2017) My personal perspective: <u>extremely good</u> too little, too slow The implementation What's missing? Integrated view Incentives

What is it?

A complete scientific publishing portal (it's a fully-featured publishing entity)

Who runs it?

Professional scientists (it is and will remain entirely grassroots)

What does it offer?

- Journals
- Commentaries
- Theses links

Two-word summary?

Openness

Quality

What does it aim to achieve?

Implement true-to-spirit Open Access

two-way: free for readers, free for authors

Decouple scientific & financial issues

- isolate scientists from the latter
- remove publish-to-cash-in flaw of current APCs

Modernize the refereeing procedure

- Give more credit to referees
- Streamline post-publication feedback
- Reform impact assessment

Organisational structure:

Stichting SciPost

non-profit foundation, ANBI

Advisory Board

a dozen preeminent scientists

Editorial College

professionally active senior scientists (numbers scaled with operations, currently 50+)

Executive

Admin + teams of officers running operations

- Development
- Production
- Support

Supporting Partners

Financial backbone

Editorial flowchart: *peer-witnessed refereeing* Inspirations: *F1000; ACP, PLOS...*



What you should know:

- Fully professional publishing (not "overlay")
- \gtrsim Indexed in Google Scholar, Web of Science ESCI
- 👷 DOAJ Seal
- No APCs
- Open refereeing == top quality required
- Authors preserve copyright
- Cited-by linking (Crossref)

Full FundRef/Crossmark integration
Check the website <u>scipost.org</u>

Publishing markets and

business models

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A Modest Proposal for Markets in Scientific Publishing

Posted on 2017-12-11 Publishing

To start with the simplest and most obvious point, I'd expect to be paid at least my professional hourly rate to perform refereeing duties.

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A Modest Proposal for Markets in Scientific Publishing

Posted on 2017-12-11 Publishing

Pushing marketization further, if I actually feel that the quality of my refereeing work is above that of the "competition" from my colleagues, I would feel entirely justified to do what every other business person would do with a better, more desirable product, namely: charge more.

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A Modest Proposal for Markets in Scientific Publishing

Posted on 2017-12-11 Publishing

As a science author, I'd expect to be approached by top journals and offered realistic payments in order for me to consider sending my work to their venue (not the rather ironic "discounts" on APCs). When selling my publication preprint, I could consider competing offers and perhaps systematically go for the highest bidder.

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A Modest Proposal for Markets in Scientific Publishing

Posted on 2017-12-11 Publishing

Coming to think of it, I would never actually agree to "sell" my work to a publisher. Thinking of my own interest and of proper marketization of my qualities as a scientist, I'd implement a leasing system where a publisher would pay me yearly fees for me to agree that my publication be (temporarily, I'm no fool) hosted on their platform.

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A Modest Proposal for Markets in Scientific Publishing

Posted on 2017-12-11 Publishing

At the end of each term, this agreement could be revised; for a particularly well-cited paper, I would unashamedly and without any moral qualms inflate the rental price up to that set (in an unquestionably correct way, at least according to some thinkers) by the "rental" market.

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A Modest Proposal for Markets in Scientific Publishing

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For my very best publications, I'd unhesitantly place all rights to them in a numbered company registered in a tax haven, so that my inheritors can continue reaping the well-deserved benefit of my hard-earned rewards as a researcher even when I'm gone. Then, and only then, could I feel I have my well-deserved place among my corporate publishing buddies.

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A Modest Proposal for Markets in Scientific Publishing

Posted on 2017-12-11 Publishing

Sure, markets work well... except when they don't.

Classifying publishing business models

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jscaux.org/blog

Noble metals for a noble cause

Posted on 2017-09-20 Publishing

| Gold [Au] | APC-based financing | |
|----------------|---|--|
| Platinum [Pt] | publisher does not apply any charges to authors (APCs, submission charges or any other), and is funded through a consortial scheme or equivalent | |
| Palladium [Pd] | publisher runs a purely not-for-profit public enterprise: none of its activities generate any profit, and all financial statements are publicly disclosed | |
| Iron [Fe] | subscription-based financing, or pay-to-read | |
| Lead [Pb] | editorial and financial aspects are not hermetically decoupled | |

Gradations of openness

| Grade | Principle | Characteristics |
|----------|---|--|
| 10-karat | generosity to readers: open access | make full text of publications freely available to readers (Creative Commons license) |
| 14-karat | generosity to authors: copyright, embargo | copyright is given to the authors without restrictions publishing occurs without any embargo period |
| 18-karat | generosity to users: reuse, remix, crawl, citations | publication license allows reuse and remixing of content (CC BY, BY-SA or BY-NC licenses) publisher allows text mining (software/spiders can automatically crawl journal content) publisher makes its citation data publicly available (ideally via participation in I4OC) |
| 22-karat | generosity to reviewers: open reports | refereeing reports are openly visible and citable |
| 24-karat | generosity to community: academic control | the entire responsibility for publication decisions is in the hands of active professional scientists |

Financial matters

Doubts on APCs

- Publish-to-cash-in incentive
 - editorial & financial get entangled
- Multiple authors: who pays?
- Publication' is an ill-defined unit
 - page is better, but still...
 - incompatible with future forms of publishing

The risk with just 'opening up the market'

- Top publications are 'luxury goods'
 - people will pay insane amounts for luxury watches, diamonds and sports cars, or publications if their jobs, grants (and thus livelihoods) depend on it

Funders: you have been warned...

Financing model

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Much smarter: cooperative models

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Inspirations:



andv.org

High Energy Physics - Theory (hep-th new, recent, find)
 Mathematical Physics (math-ph new, recent,

Financing model

Supporting Partners Board

- Inter)national funding agencies
- Universities & libraries
- Government
- Foundations
- Benefactors

Our needs:

- Running costs depend on success level.
- Partnership: ~ €1K per univ per year/domain
- Current estimate: about €300/paper average

Our first Supporting Partners:







UNIVERSITY OF AMSTERDAM







technische universität dortmund

More underway!



Important recent developments:

Collaboration Agreement with CERN







Alternative funding mechanisms: non-APC



Sk€ Donation from VSNU



Our immediate challenges:

Increase awareness/acceptance from scientists

- this is going well: colleagues (seniors/juniors) thirsty for change
- immobility of existing metrics is the limiting factor
- Gather concrete support from stakeholders to ensure viability (Supporting Partners)
 - Cooperative model == cheapest integrated solution
 - General Structure of the second structure of the se
 - slow commitment from libraries/funders is the limiting factor
- open Journals in other fields

Follow-up battle (actually, it's just one big battle):

metrics and evaluation systems/methods I40C

Europhysics News 48/5-6, 2017, p. 25-28, doi:10.1051/epn/2017503



REDRESSING THE INVERTED PYRAMID OF SCIENTIFIC PUBLISHING

Jean-Sébastien Caux - Institute of Physics, University of Amsterdam - DOI: https://doi.org/10.1051/epn/2017503

Scientific publishing is currently undergoing a progressively rapid transformation away from the traditional subscription model. With the Open Access movement in full swing, existing business practices and future plans are coming under increasing scrutiny, while new "big deals" are being made at breakneck speed. Scientists can rightfully ask themselves if all these changes are going the right way, and if not, what can be done about it.

ortunately, in this day and age, some spheres of human activity remain anchored in rational thinking, evidence-based debate and error-corrected progress. Scientific research undoubtedly fits in this category: few scientists doubt that reason should prevail over nonsense. Yet, when it comes to publishing, the scientific world seems to be bathed in a maelstrom of irrational hogwash. What is going on? What can we do about it?

A business unlike any other

Scientific publishing, as a business, has become a truly unique inverted pyramid construction in which the "customers" pay dearly for accessing the product after actually performing themselves all the irreplaceable, not-doable-by-others steps in the manufacturing process. Historically, this tour-de-force of business abracadabra has been achieved in no small part by exploiting the other dubiously-implemented aspect of publishing,

▲ © iStockPhoto

From the conclusion:

The driver for change

Although we are far from done (we haven't even begun discussing impact assessment!), let us end here by performing a simple thought experiment. From next January, for a period of 3 years, imagine that all scientists agreed to exclusively submit their manuscripts to new emerging not-for-profit publishers fulfilling Platinum/Palladium 18-karat and above open access criteria (simultaneously, they would exclusively perform refereeing and editorial work for such publishers). What would happen then? By simply voting with their feet, scientists could exert overwhelming influence and drive the necessary transition to open access through all currently existing or perceived obstacles. Ultimately, the power to enforce change resides in the hands of us scientists: it is up to us to decide the future we want to see in publishing, and to make it happen in the way we want; namely, in the interests of what we love the most and is only too often forgotten in Open Access discussions: science itself.

Conclusions: what should one do?

- Scientists:
 - don't just stand actively shift to
 - are you working stop, offer your



Gianfranco Bertone @gfbertone

I stepped down as editor-in-chief of Elsevier's "Physics of the Dark Universe" and planning to support open-access not-for-profit publishers like @scipost_dot_org. See e.g. this article recently published by SciPost founder @jscaux

Following

europhysicsnews.org/articles/epn/p...



Conclusions: what should one do?

- Institutions & Funders:
 - update your mandates and evaluation criteria;
 the old measures and metrics are suffocating the transition to Open Science
 - <u>harden your negotiating stance, you are being</u>
 <u>outsmarted by publishers (business still good!);</u>
 superior alternatives to for-profit publishers
 1) exist (leverage them!) and 2) need your support
- Politicians/Governments: protect Open Science, don't pass dumb & nasty laws; Don't let the Directive on Copyright in the Digital Single Market kill Open Science

Thanks!