Why we need a large-scale transformation of the current subscription system

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Open Access and Open Science

Open Access is the prerequisite for Open Science

– It is the key that will open many doors of opportunity
– Reversely, opportunities cannot be exploited without OA

Almost 15 years after the seminal OA declarations of Budapest and Berlin, we have to ask ourselves

– Why is OA still not the default?
– Why have we accomplished only marginal gains?
1. The OA dilemma
The distinctive OA dilemma

*Open Access is (exceptionally) strong as a *principle*
  - cf. the many resolutions, policies, guidelines etc.

…but still fairly weak as a *practice*
  - only about 14% OA without delay
  - subscription system as prosperous as ever

*(Lehman Brothers did more damage to publisher revenues than OA so far)*
Standard OA indicators

a) Directory of Open Access Repositories

http://www.opendoar.org
Standard OA indicators

b) Directory of Open Access Journals

http://www.doaj.org

cf. “Dramatic Growth of Open Access 2015 first quarter” by Heather Morrison,
http://poeticeconomics.blogspot.de/2015/04/dramatic-growth-of-open-access-2015.html
c) Registry of Open Access Repository Mandates and Policies

http://roarmap.eprints.org/

Policies Adopted by Quarter

- Research organisation
- Funder
- Sub-unit of research organisation
- Funder and research organisation
- Multiple research organisations
OA effects on the paywall system

- University Presses/OJS
- Biomed Central
- SCOAP³
- arXiv
- OA mandates
- PLOS
- Repositories
- Cooperative models
- PubMed Central
- Community journal initiatives (e.g. LINGOA)
OA effects on the paywall system
OA effects on the paywall system
OA effects on the paywall system

After more than a decade of global effort, paywall access and the subscription system are as prosperous as ever.

14% of content is immediately OA
4% of revenues go to OA (96% subscriptions)
2. Thinking about a new activation energy
OA has been a story of trying to activate researchers

Through a variety of measures such as advocacy, mandates and support efforts the researchers should be moved to OA.
How about a new activation energy?

OA shall be brought to the researchers by means of switching the business model of the existing corpus of journals
Bringing OA to the natural habitat of researchers

Not the researchers shall change but the publishing system, and in particular the underlying business model
3. Moving beyond the dilemma
Getting out of the dilemma

Open Access on a large scale can only be accomplished if and as soon as we change the business model of the dominant subscription system.
4. The transformation that we need
The programmatic goal of our transformation initiative

“The time is ripe for the global research community to accelerate the transition to

**open access**.

We have the crucial opportunity to transform the underlying business model of journal
publishing while protecting the financial viability and core functionalities of the publishing
system at large. Ultimately, all subscription spending must be stopped: this is the simple
culmination of the incremental steps of the past decade.
The significant savings can then be reinvested for the co-creation of a range of publishing
services that will truly serve the scholarly endeavors of the 21st century.”

taken from: Max Planck Digital Library Open Access Policy White Paper: “Disrupting the subscription journals’ business model for the necessary large-scale transformation to open access”. [http://dx.doi.org/10.17617/1.3](http://dx.doi.org/10.17617/1.3) (28 April 2015)

accompanying data publication: “Number of scholarly articles per country. Data on Web of Science listed articles and reviews 2004-2013”. [http://dx.doi.org/10.17617/1.2](http://dx.doi.org/10.17617/1.2) (28 April 2015)
Global level view

The global scholarly journal market and its financial dimensions

Scenario of transformation based on current global operating numbers per year

Market today (subscription)
- Total budget: 7.6 bn €
- 1.5 M scholarly articles in WoS; up to ~2 M overall
- 5,000 €/article WoS; 3,800 €/article overall

Market transformed (Open Access)
- Base budget: 4 bn € plus ~45% buffer
- 2 M scholarly articles
- 2,000 €/article¹)

Based on realistic APC expectations¹)
available for new & improved services, remaining subscriptions etc.

An OA transformation seems to be possible without financial risks

¹) The empirical values of SCOAP3 are ~1,100 €/article; for MPG and for DFG funded universities in Germany they are ~1,370 €/article
Cost stratification in the publishing system

- Enhanced marketing
- Enhanced branding
- Digests (press releases)
- Presentation in social media
- State-of-the-art indexing, keywording, formatting
- Image editing
- Basic marketing
- Organization of proper review
- Technical platform
- Archiving

Rare high budget publications
- PLOS Biology, Medicine
- eLife
- Wiley Cancer Medicine
- APS, Phys. Review X
- PLOS Genetics
- ACS Omega
- BMC, Psychiatry
- New Journal of Physics
- PLOS ONE
- MDPI Energies
- Springer, JHEP via SCOAP³
- Hindawi, Archaea
- SCOAP³ average effective cost per article
- PEER J

Frequent low cost publications
- E.g., MDPI Mathematics, Informatics; Hindawi, Advances in High Energy Physics
New grip on data needed

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**Publishing data**
- including corresponding author shares
- publisher distribution
- on institutional or country level

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**APC data**
- continuously growing evidence available
Germany

Publication volumes and corresponding author shares

Articles and reviews in Web of Science

OA Transformation, 2014 calculation span

70,673 papers x 1,300 € = ~ 91.9m €
70,673 papers x 2,000 € = ~ 141.3m €

Number of articles p.a.

Data according to Palzenberger, M. (2015). Number of Scholarly Articles per Country. http://dx.doi.org/10.17617/1.2
Lithuania

Publication volumes and corresponding author shares
Articles and reviews in Web of Science

OA Transformation, 2014 calculation span

1,647 papers x 1,300 € = ~ 2.1m €
1,647 papers x 2,000 € = ~ 3.3m €

Number of articles p.a.

Data according to Palzenberger, M. (2015). Number of Scholarly Articles per Country. http://dx.doi.org/10.17617/1.2
More and more APC evidence available

Universities and research institutions globally are invited to contribute their APC expenditure data to Open APC in order to build up a comprehensive data set that allows for extensive analyses and fosters transparency on the evolving APC market.

Open APC

http://treemaps.intact-project.org/apcdata/openapc/

Open APC Offsetting data set

http://treemaps.intact-project.org/apcdata/offsetting/
Global level view

Transformation means re-allocation of budgets and conversion of journals and processes

Global subscription journal budget
7.6 bn EUR p.a.
(≥3,800 EUR/article)

Assuming 90% conversion

2.8 bn EUR buffer for new & improved services etc. (without remaining subscriptions)

Global open access journal base budget
4 bn EUR p.a. (2,000 €/article)
Expression of Interest (the political expression)
   – Published with list of initial signatories on 21 March 2016
   – Seeking further institutional signatories (total of 71 as of today)

- **Transform** a majority of today’s scholarly journals from subscription to OA publishing
  - in accordance with community-specific publication preferences

- **Convert resources** currently spent on journal subscriptions into funds to support sustainable OA business models
  - re-organize the underlying cash flows

- Establish **transparency** with regard to costs and potential savings

- Adopt mechanisms to **avoid undue publication barriers**
OA2020 initiative (outcome of Berlin 12 Conference)

2 Roadmap (the practical expression)
   – Establishing a network of National Contact Points (concept & network borrowed from SCOAP3)
   – Taking practical steps at the local institutional level, e.g.:
     • Data analysis (publication & financial data)
     • Consolidate subscription and OA responsibilities under one management & budget
     • Take publisher relations to a new level (e.g. engage in combined model, i.e offsetting)
OA2020 – The Initiative

Open Access 2020 is an international initiative that aims to induce the swift, smooth and scholarly-oriented transformation of today’s scholarly journals from subscription to open access publishing.

The principles of this initiative were discussed and agreed upon at the Berlin 12 Conference on 8-9 December 2015 and are embodied in an Expression of Interest, which has already been endorsed by numerous international scholarly organizations.

The practical steps that can be taken towards the envisaged transformation are outlined in a Roadmap.

All parties involved in scholarly publishing – particularly universities, research institutions, funders, libraries, and publishers – are invited to collaborate through OA2020 for a swift and efficient transition of scholarly publishing to open access.

This important initiative is open to further institutional signatories. Please consider offering your support.
5. Read the signs of the times
The landscape is in the process of being restructured

- SciHub shock & its de-legitimation of current system
- Rationale and plan for the large-scale transformation
- Evidence that enough money is already in the system
- Data analyses available for cost modelling
- APC evidence collected and documented
- Political initiatives, e.g. oa2020.org (Eol), EU, LERU…
- Roadmap with practical steps (mainly offsetting)
- Emerging standards in handling APCs (e.g. ESAC)
6. Offering an orderly transition
Orderly transition

The days of the current business as usual will come to an end. OA2020 is not only building a bridge into the future but also providing a shield against a more massive disruption that could very easily happen.
It is time to re-plug the system

We need to discontinue the subscription system and to find new ways to finance the publishing services that are wanted and needed in the 21st century.