The Open Access Landscape – an overview

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UiT The Arctic University of Norway, Tromsø
An outline

• What is Open Access (OA)
• Open Science
• The forms of OA
• The structure of OA
• OA2020
• Plan S
• Societies
• The next important conference
• Q & A
What is OA

• Science has a long history of sharing
  • And a short one of profitable publishing
  • With the advent of the internet, came Open Access
    • The reality, if not the name

• OA as a term came in the early 2000’s
  • Defined in three declarations
    • Budapest Open Access Initiative (February 2002)
    • Bethesda Statement on Open Access Publishing (June 2003)
    • Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (October 2003)
    • Some differences in wording, not so much in principles.

• Scholarly content freely available to the world, for reading and some re-use
OA cont.

• The OA community looks to the declarations for an understanding of what is OA and what not

• Some publishers call whatever they offer, OA
  • That is not OK

• Must allow unrestricted reading
  • No payment, no registration

• Must allow some (non-commercial) re-use
  • E.g. self-archiving, reprinting, content re-use
Open Science

• OA is a part of a greater concept of Open Science, which includes – amongst other things –
  • Open Data
  • Open Educational Resources
  • Open Notebooks
  • Open Peer Review
  • Open Citations

• And one could add
  • Open Scholarly Misconduct
Forms of OA – “traditional colours”

- **Gold OA**
  - OA at the publishers’ side
  - Hybrid OA: Gold OA articles in subscription (Toll Access, TA) journals

- **Green OA**
  - OA at the authors’ side
  - Self-archiving
  - Pre-prints

- Gold does not imply payment!
  - An often overlooked fact in the debates
Forms of OA – further “colours”

• Bronze
  • Delayed OA, i.e. not OA from the date of publishing, but becomes available for use after some time ("moving wall")
  • Will often not have the licenses or re-use rights associated with OA

• Diamond or platinum
  • Gold OA journals that do not charge author side payments (APC)
    • Need financing from elsewhere, or based on in kind contributions from scholars and institutions
  • The majority of OA journals
    • But the majority of OA articles in APC-based journals

• Black: Sci-Hub and such projects
  • Violating copyright and contracts
The Structure of the Gold OA publishing

• Documented in DOAJ, Directory of Open Access Journals
  • 13,629 journals on August 12th 2019 that
    • Conform to the BOAI definition of OA
    • Have acceptable quality control standards
  • An unknown number of journals that are OA but are not in DOAJ
  • A small number of journals in DOAJ that do not deserve to be there

• A decline in the annual number of new journals since 2013
  • Peaking 2013-14 with more than 1000 new journals annually
The structure
(data from DOAJ December 2018)

The rough picture:
• A large number of journals published by single journal publishers
  • Some also by 2–3 journal publishers
• A large number of journals published by large publishers (>50 journals)
• “Not very much in between”
• 5 percent of publishers (>5 journals) publish 45 percent of journals

The OA journal publishing market
by publisher size measured in number of journals published

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### Geography

<table>
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<tr>
<th>Country of publisher</th>
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<td>United Kingdom</td>
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<td>Brazil</td>
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<td>Spain</td>
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<td>Poland</td>
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<td>Turkey</td>
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<td>Italy</td>
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<td>Russian Federation</td>
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<td>China</td>
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<td>Australia</td>
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### Subject

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<td>Social Sciences</td>
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<td>Education</td>
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<td>Education (General)</td>
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<td>Special aspects of education</td>
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<td>Technology</td>
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<td>Public aspects of medicine</td>
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<td>Law</td>
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<td>Economics as a science</td>
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<tr>
<td>Mathematics</td>
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<td>Communication, Mass media</td>
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### Language

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<td>Spanish, Castillian</td>
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<td>Portuguese</td>
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<td>Indonesian</td>
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<td>French</td>
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<td>Russian</td>
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<td>German</td>
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<td>Arabic</td>
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<td>Catalan, Valencian</td>
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<td>Serbian</td>
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<td>Croatian</td>
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<tr>
<td>Romanian; Moldavian; Moldovan</td>
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<td>Czech</td>
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<td>Chinese</td>
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<td>Slovak</td>
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Major actors

<table>
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<th>Publisher</th>
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<tr>
<td>SpringerNature (incl. BMC, SpringerOpen)</td>
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<tr>
<td>DeGruyter (incl. Sciendo)</td>
<td>382</td>
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<tr>
<td>Elsevier</td>
<td>338</td>
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<tr>
<td>Hindawi</td>
<td>250</td>
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<tr>
<td>MDPI</td>
<td>181</td>
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<tr>
<td>Wolter Kluwer Medknow Publications</td>
<td>177</td>
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<tr>
<td>SAGE Publishing</td>
<td>149</td>
</tr>
<tr>
<td>Taylor &amp; Francis (incl. Dove Medical Press)</td>
<td>240</td>
</tr>
</tbody>
</table>

\[
\text{Sum journals} \quad 2282
\]

- 8 publishers share 18.5 percent of the OA market
- Only 2 of them are fully OA publishers
  - MDPI and Hindawi
- Other fully OA publishers bought up by traditional publishers, e.g.
  - BMC by Springer
  - Dove Medical Press and Co-Action by T&F
- The traditional publishers with their OA brands dominate the market
  - Through buying smaller OA publishers
Financing

• Small journals/publishers – small or no income
  • Many without any author payment (70 percent of all journals in DOAJ)
  • Dependent on donations from institutions or persons
    • In cash or in kind
    • Scholar-led/Library-based publishing

• Large journals/publishers – APC-based
  • 30 percent of journals
  • Amounts vary widely
  • APC in OA journals generally substantially lower than hybrid APCs
  • Some journals also have submission fees and/or page fees

• Publishing competence seems to depend on financing model
  • Donations do not finance what is needed to do good (OA) publishing
Hybrid publishing

- Is a form of Gold OA, but in TA journals
- Not easy to create numbers for
  - Hidden among the TA articles, no registry
  - Often not very well tagged by publishers
- Early research estimated about 2 percent uptake
  - EU, RCUK, FWF, JISC, Wellcome Trust funding probably increased this
  - Increasing resistance from funders due to costs
  - But important part of some new big deals
APCs in OA journals

• The 30 percent that have an APC, publish more than 50 percent of articles
  • Overall 58 percent in 2018, 69 percent in STEM, 70 percent in Biomed

• APCs vary on a scale from nearly 0 to USD 5000+
  • A tendency that high impact implies high APC
  • Larger journals also more expensive

• An average in the USD 1500-2000 range
  • Well below the average in hybrid journals
  • Crawford (2019) estimates USD 1569 for 2018

• Good publishers have waivers for authors without funds
  • A Plan S requirement

• Some journals also have submission fees
• Some have page fees instead of APC
OA journal size

• OA journals vary in size
• 2018 numbers from Crawford (2019):
  • 2 journals publish 20,000+ articles, 5.2 percent of all OA articles, all with APC
  • 368 publishers (3 percent of all publishers) publishing 300+ articles
    • publish 41.1 percent of all articles
    • 85.2 percent of these articles published with an APC
  • 10,913 publishers (96.7 percent of all publishers) publishing <300 articles
    • Publish 58.9 percent of all articles
    • 39.5 percent of these articles published with an APC
Journal types

• Traditional journals converted to OA
  • Many still offer paper as an important service

• Upstarts starting up as new OA journals
  • Some offer paper as a secondary service

• Some OA journals convert (back) to TA

• Mega-journals: Journals that publish all research that is of acceptable standards
  • Often over a wide field
  • Two major ones each publish more than 20,000 articles annually
  • Paper just won’t work!
  • Quick growth seems to have stopped up somewhat
Hybrid OA

• Gold OA on the article level, not the journal level
• Virtually cost-free to the publisher
• “Industry standard” APC USD 3000
  • 50 percent higher than in journal level Gold OA
• Very popular with publishers
  • Few TA journals without a hybrid option
  • Green OA embargoes set to force authors to use hybrid
• Not popular with funders
  • Increasingly, they refuse to fund such APCs
Green OA

• Self-archiving by the author
  • In institutional or subject-based repositories
  • Free for the author
  • An infrastructure cost for the institution hosting it

• Does it undermine subscriptions?
  • It looks like it doesn’t
  • But that will depend on how much is self-archived
    • And how easy it is to find
    • Browser plug-ins to look for free versions of content on the rise
      • Kopernio, Unpaywall are examples
Green OA – cont.

http://v2.sherpa.ac.uk/view/repository_visualisations/1.html
Pre-prints

• Pre-print services are often field specific
  • E.g. Arxiv (some sciences), BioArxiv (biology), RePEc (economics)

• In some instances used as self-archiving/Green OA

• In others a separate way of dissemination
  • In some fields pre-prints, not publications, the means of communication
  • A large part of content never becomes formally published

• Could be the basis for overlay publications
  • Curated collections of pre-print server content
OA infrastructures and organizations

• Important OA infrastructures:
  • DOAJ Directory of Open Access Journals https://doaj.org/
  • SHERPA/RoMEO http://www.sherpa.ac.uk/romeo/
  • DOAB Directory of Open Access books https://www.doabooks.org/

• Some OA organizations:
  • OASPA Open Access Scholarly Publishers Association https://oaspa.org/
  • COAR Coalition of Open Access Repositories https://oaspa.org/
  • SPARC https://sparcopen.org/ SPARC Europe https://sparceurope.org/
    SPARC Japan https://www.nii.ac.jp/sparc/en/
Licenses

• Licenses define what users can do with content
  • Need to be explicit, and easy to find
• Local language licenses won’t work
• Creative Commons licenses are the standard
  • Demanded by Plan S
  • Comes in man-readable, computer-readable and lawyer-readable versions
    • Enabling computers to understand creates many opportunities
CC licenses

- CC BY: “Attribution only” is the one that allows the end-user most re-use possibilities
- NC adds a non-commercial clause
  - Benefits the publisher, not the author
- ND adds a clause forbidding creating of derivative works
  - Protects the work, popular with HSS authors
  - But means partial reuse, e.g. a paragraph, a table, a graph, is not permitted (unless by other laws)
- SA says content must be reused under the same license
- CC BY gives widest dissemination
What CC licenses are used in OA journals?

OASPA members' use of CC licenses - share of articles

- CC BY
- CC BY-NC
- CC BY-NC-SA
- CC BY-NC-ND

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Drivers for OA

• OA works with the nature of science
  • Freely sharing results and arguments
  • Maximises the number of readers
  • Aligns with the ethics of many scholars

• OA has become a requirement from
  • Governments
  • Employers
  • Libraries
  • Funders
OA2020

• A movement to transform deals from paying for reading, to paying for publishing
• Tries to negotiate “Read-and-publish” agreements with publishers
  • Several consortia have reached such agreements with various publishers
  • Last major deal: Norwegian consortium with Elsevier
  • Means hybrid publishing will be financed through deals
    • But not necessarily Gold OA in OA journals
• «No deal» is the alternative to a R&P deal
  • E.g. Sweden and UC currently without a deal with Elsevier
Read-and-publish and society journals

• Publishers (often) don’t include society journals in such deals
  • They cannot decide on their behalf
  • The economic consequences of such deals may be difficult to negotiate on the journal level

• Consequence: It becomes much cheaper for authors to publish in the publisher’s own journals
  • Moving some manuscripts from society journals to publisher-owned journals
Plan S

• An initiative from some major European funders and Science Europe to ensure OA for publicly funded research
• EU and ERC amongst them
  • Some national funders – e.g. Norwegian Research Council, NWO (Dutch Research Council)
  • Some more targeted funders like Istituto Nazionale di Fisica Nucleare (Italy)
• Joined later by e.g. Gates foundation, WHO
• A long list of statements of support from other funders, organizations etc.
OA according to Plan S

• Everything funded by Plan S members to be fully OA
  • From a certain date
• Both Gold OA in OA journals and Green OA OK
• Won’t fund hybrid, and hybrid articles are not compliant
  • Unless they are compliant through the Green route
  • An exception for “transformative deals” for a few years
• A number of technical requirements for publishers and repositories to be compliant
  • E.g. Green must met specific requirements
• A vow to punish non-compliance
Societies and OA

• Two kinds of societies
  • Those that live for their journals
  • Those that live off their journals

• Those who live for their journals
  • Small, both in STEM and HSS
  • Journals at best break-even
  • Many converted to OA already
    • Sutton, Suber, Page: (Jan 23 2019) 1,077 societies publishing 1,043 fully OA journals
      • Majority in STM (835 journals)
    • Fees unknown for 24 percent of these, 48 percent charge no fees, rest has some kind of publishing and/or submission fee
Societies that live off their journals

- Large societies with profitable journals
- Probably mostly in STEM
- Often highly profitable TA journals
  - No shareholders, but scholarly activities receive funding
- OA2020 could be a threat to profitability
  - Depending on your publisher?
- OA could be a threat to profitability
- Plan S could make the threat imminent
Societies and Plan S

- Starting soon, some authors will have to make their articles OA
  - Content will move to journals that can conform to Plan S requirements
- Current Plan S rules are known, but they will be evaluated and revised during 2024
  - More demanding rules from 2025 could be the result
- Societies will need to plan for Plan S
Alternatives for journals

• Plan S can be ignored
  • If you have no or very few Plan S-funded authors, and no plan to get more
• You can implement Plan S-friendly self-archiving rights
  • For all or only Plan S-funded authors
  • Will work well as long as the uptake is not very big
• Hybrid journals won’t in the future be funded or accepted as Plan S-compliant publishing
  • But Plan S-compliant self-archiving will do the trick
• You can convert your journal(s) to become Plan S-compliant OA journals
  • Non-hybrid APC-based
  • Will need low-cost publishing, and high-level APCs, to keep part of the current profits
Read up on the OA landscape

• Walt Crawford presents large amounts of facts
  • https://waltcrawford.name/goaj.html

• Some authors to look at:
  • Heather Morrison
  • Bo-Christer Björk
  • Mikael Laakso
  • Peter Suber – his «Open Access» is the bible of OA
Last but not least:

- Come to the 2019 Munin Conference in Tromsø
- An annual conference on scholarly publishing
- This year’s conference November 27–28
- [https://site.uit.no/muninconf/](https://site.uit.no/muninconf/)
Thanks!
Do not hesitate to come back with questions!

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