Notes to presentation

Open Science & Open Access: From policy to practice

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Slide 1 – Open Science & Open Access – From policy to practice

This is a presentation about the current framework for Open Science at Stockholm University. We will talk about why and how to publish open in different formats spanning from journal articles and research data to pre-prints. We will also talk about licensing of open material and what that means for those who would like to publish. At the end, we would like to talk about the cost of open publishing, and how the university manages these administrative processes and money flows on behalf of researchers.

Sofie Wennström is an Analyst at Stockholm University Library and is an expert on publishing, working as a Managing Editor with open journals and books at Stockholm University press.

Lisa Lovén is a Librarian specialised in licensing and acquisition management at Stockholm University Library.

Slide 2 – Why is Openness Important?

- The open access movement started almost 20 years ago
- Many academics and librarians found an imbalance in publishing patterns and library purchase patterns, and figured that the institutions were paying for their researchers work twice, first for the time it took to create it and then to be able to read it. – the idea is to move the cost to the channels supporting knowledge production, i.e. funders, universities, governments etc. to gain full control of the costs and not supporting huge revenues to the publishing companies with increased subscription rates – i.e. saving costs for the end user
- The Open Access publishing model is not only about downloading files for free, but also about sharing information and data for others to build upon. The author will however never have to give up their right to be acknowledged as the original creator

Slide 3 – EU on Open Access

- The EU position on Open Access is that everything should be available online by 2020.
- cOAlition S – a collaborative initiative between the EU and some of the big research funders

- Image from article in Horizon, the EU Research & Innovation Magazine: https://horizon-magazine.eu/article/open-access-scientific-publications-must-become-reality-2020-robert-jan-smits_en.html

Slide 4 – Stockholm University about Open Access/Open Science

- Stockholm University has had a strong position for Open Access and Open Science since 2014.
- Image from Stockholm University Twitter account https://twitter.com/Stockholm_Uni (follow for more updates)
- Read more about the Stockholm University Library support for Open Access: https://www.su.se/english/library/publish/open-access

Slide 5 – New forms of publishing on the rise

- Quote from the COASP 10, Sep 17–19, 2018, tweeted by Toby Green from the OECD Library https://twitter.com/TobyABGreen
- A changing landscape/ecosystem in scholarly publishing. New digital innovations open up for more independence for universities and more academic freedom for researchers (it seems?)
- Publishers getting questions about their current model. Seen as cumbersome and overpriced.
- Preprint report: Green, T. (2018). *We're still failing to deliver open access and solve the serials crisis: to succeed we need a digital transformation of scholarly communication using internet-era principles.* Zenodo. https://doi.org/10.5281/zenodo.1410000

Slide 6 – Stockholm University Research Data Policy

- In March 2018, Stockholm University adopted this Research Data Policy meaning that we should be as open as possible and as closed as necessary
- The policy includes all activities at the university, both research and teaching.
- The policy should be used while considering all the regulations, like GDPR, and the ethical research code.
- Useful guidelines for ethical management of research data available at: http://www.codex.vr.se/en/index.shtml
- and here: https://www.su.se/english/library/publish/research-data/guidelines/policies-and-guidelines-1.359054
- Image: https://www.europeandataportal.eu/it/highlights/practical-guide-building-future-proof-open-data-portals

Slide 7 – Ongoing work towards Open Access

- The Swedish Research Council has recommended that all state funded research should be published with an Open Access licence, preferably through Gold OA, from 2017 for journal articles and by 2020 for books and by 2025 for research data.

- According to a report from the Council published in 2015: http://www.vr.se/omvetenskapsradet/regeringsuppdrag/avrapporterade2015/avrapporterade2015/nationellariktlinjerforoppentillgangtillvetenskapliginformation.4.7e727b6e141e9ed702b1307e.htm
- This follows the lead of the EU directive about Open Access to research results funded by them, called Horizon 2020, where they also aim for full OA for all funded research by 2020, with a lot of investments currently being made into digital infrastructures to support the mandate. http://ec.europa.eu/research/openscience/index.cfm
- Imc src: Wikimedia commons, Open Access logo, originally created by the Public Library of Science (PLoS). https://commons.wikimedia.org/wiki/Open_Access

Slide 8 – How Do We Define Open?

- No barriers to access material include login requirements, even if the content is free of charge.
- The copyright should stay with the author, not be taken over by publishers. Authors should always be recognised as the creator
- Licensing should be applied to ensure that users and authors have a common understanding of how to share and distribute material
- It should be available in a space available to as many users as possible – vad menar jag med detta…??

Slide 9 – Open Licensing

- Read: https://creativecommons.org/share-your-work/
- Licensing practice can be seen on a scale from open to closed, or the other way around.
- The building blocks of the creative commons license codes are made to combine in different levels of openness to ensure that the rights holder can control how the object can be used.
- The author can never sign away their intellectual right, but can choose to sign a contract where somebody else manages the economic right to the object (i.e. like the contracts traditional publishers require authors to sign when publishing their articles.)
- An open license does not replace the copyright, but allow for the rights holder to share objects online with intrinsic instructions on how it can be used or redistributed
- Open licensing is meant to reduce administrative workload and facilitate sharing online
- See also: https://vimeo.com/13590841

Slide 10 – The OA Palette: Green

What types of open publishing are we talking about when we mention the different colours of Open Access? The colours are mainly used for distinguishing different costing/payment models related to journal articles (but could include other material as well). Such payments have been introduced by publishers to ensure cost coverage for producing articles.
Green open access refers to when you upload a pre-print or a post-print of your article in manuscript format in an open database. DiVA is one example of a database for Green OA see http://su.diva-portal.org.

Green OA Pros and Cons:
+
Own control of platform
Working with the current publishing system
No charges for authors
-
Cost effective?
Extra admin for researchers & libraries
Embargo times

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https://www.goodfreephotos.com/vector-images/final1955.png.php

Slide 11 – The OA Palette: Hybrid

Hybrid OA mean that you choose to publish one article open in an otherwise closed journal. You normally pay a one-time fee. Average price per article for SU researchers is EUR 2300.

Hybrid OA Pros and Cons:
+
Working with the current system
Authors choose journal & audience
Established platforms & practices
-
Not moving the system forward
Increasing costs to pay for both publish & read
Publishers control the market

Slide 12 – The OA Palette: Gold

Gold OA means that you are paying a (small or large depending on the publisher) fee called Author Processing Charge (APC or BPC for books), while Green OA refers to free parallel publishing (or self archiving) of manuscript versions of papers or chapters.

Gold OA Pros and Cons:
+
Immediately OA

Affordable
Possibility to change the market
-
Lower tier or no status journals
Predatory journals cluttering the market
Old journals may have to close

Slide 13 – The OA Palette: Multicoloured

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There are more models out there, depending on the context. This is a problem connected to how different stakeholders approach the idea of creating new business models adapted to open science.

Other models? Grey | Brown | Black | Diamond | etc. – are they just adding to the confusion? What will the future bring in terms of vocabulary and policies to ensure that publishers can continue to charge for services?

Slide 14 – Reproducible and Sharable Research

Inspired by Amsterdam Call for action (https://www.government.nl/documents/reports/2016/04/04/amsterdam-call-for-action-on-open-science) and F.A.I.R. principles (https://www.force11.org/group/fairgroup/fairprinciples) we would like to encourage you to make shared content from Stockholm University FAIR:

The F.A.I.R principles are used as a framework to describe what it means to become open, which could be applicable to both open publications and data. This is also the point of departure when we are talking about building platforms for publishing. The research output we manage should be easy to find.

- The content should be easy to **Find**.
    - In practice this means to use trusted platforms with a perpetual archive, permanent links to material (preferably a DOI) and describe items with metadata to make sure it is found by search engines.
- The content should be easy to **Access**.
    - In practice this means that you should not hide your material behind logins or paywalls or other barriers for easy retrieval of material. You should also make it easy for other people to access the information, so use well established file formats and make the content accessible to people with disabilities (by for example facilitating for screen readers and other tools).
- The content and the platform where content is shared should be **Interoperable**.
    - The platform used for sharing should be compatible with other platforms, and should use structured metadata schedules to ensure that material is not locked-in and can be transferred to other storage spaces. It should also be possible to retrieve basic metadata for items to display in other platforms.

- It should be possible to **Reuse**.
    - In practice this means that you should use formats for sharing data that can be read, interpreted and translated by others. It should also be possible to understand the context of your data, which means that you have to describe for example collection methods, aim of study, selection of informants or whatever your research is made up of). Also, link to the publication where the data is analysed to ensure that others can compare.

For questions about how to share your data you can contact the cross-departmental team dedicated to Open Data: opendata@su.se.

Slide 15 – Types of OA Content

- What type of content do we seen in the future, and how should we deal with it?
- How do you figure out what kind of channels are most worth spending time on?
- *Articles or books:*
  + it is a well-known structure, you reach a predefined audience, peer-review.
  – peer-review takes a long time, and can be unhelpful, could incur fees, there's no journal out there with the right scope for you, is the journal dead?
- *Preprints:*
  + you can decide where and when to publish, it is usually free, several good platforms to choose from.
  – you have to do a lot of work yourself, you need more knowledge about the area & about publishing tools, problems with finding your audience, requires more active promoting
- *Open data:*
  + you can become more transparent and increase the reproducibility for your research, and it is a good complement to a published article or preprint.
  – lots of rules and regulations, you can't publish all data
- *Open educational resources:*
  + to be used when teaching about your own findings and others' results, to show merits of teaching, can use similar platforms as for preprints and/or data.
  – still a new field, more regulations and rules, teaching is more of a flow and not necessarily useful just in the format it is published/made available.

Slide 16 – What About Preprints?

- Preprints can be an option to disrupt the system, and to gain more control of your own material
- Usually without fees or other boundaries other than good research practice.
- Remember that you have to check that everything is correct yourself before publishing.
- To check publisher policies: http://www.sherpa.ac.uk/romeo/index.php
- Wiki collection: https://en.wikipedia.org/wiki/List_of_academic_journals_by_preprint_policy
- Example of a clear publisher policy: https://www.nature.com/authors/policies/preprints.html

- Examples of platforms to share preprints & data:
- https://zenodo.org/
- https://su.figshare.com/ (or, https://figshare.com)
- https://osf.io/
- https://osf.io/preprints/socarxiv/
- https://psyarxiv.com/
- https://www.biorxiv.org/

Slide 17 – Before Choosing a Journal

If you choose to publish your work as a journal article, remember to Think. and Check. before you submit.
http://www.thinkchecksubmit.org
If you are unsure of where to publish, you can use the checklist and video from Think. Check. Submit.

Slide 18 – Science as a communicative practice

- The rationality of publishing, based on what researchers need to do to earn merit
- To add something to the field, and to participate in a community of practice
- Immersing oneself into the culture of a subject area
- We are building new knowledge on the old
- Read more about reasons for this metaphor: Nielsen, K. H. (2013). Scientific Communication and the Nature of Science. *Science & Education*, *22*(9), 2067–2086. https://doi.org/10.1007/s11191-012-9475-3
- Read more about communities of practice: Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge Univ. Press.

Slide 19 – Perspectives on Openness

- Sharing can be rewarding
- You can learn more by sharing and opening up for discussion
- You can add something to the research community that gives return on investment
- The rationality of publishing, based on what researchers need to do to earn merit
- To add something to the field, and to participate
- Thoughts on Open Practices: https://youtu.be/1X0g2OvSdWc
- However, you also have to take full responsibility for all content you produce.
- Also, make sure that you get proper credit for your work.
- Register for an ORCiD to be used for recognising you in different systems - https://orcid.org/ (you can login with your SU id to connect to your work address, make sure to add relevant information to your public profile)
- Make sure to follow ethical guidelines and other best practices

- See also the guides from the Swedish Research Council: http://www.codex.vr.se/en/etik2.shtml

Slide 20 – Library support for publishing open

- Now handing over to the Licensing and E-resources Librarian, Lisa Lovén, to talk about the library publishing support. From 2018 researchers can simply contact the library to get help understanding how get financial support and to learn more about what agreements are valid for the moment.

Slide 21 – Share of OA publications at Stockholm University

- To understand what it takes and what the possible costs are for shifting to OA, the library needed more knowledge about the current behavior and choices made by authors, and thus an investigation about the level of open access publishing was initiated in 2017. This graph is the result of that work.
- There is a clear trend – OA is increasing – Offsetting deals are making a difference from 2017 and onwards, but not as much in the initial stage.
- Closed access continues on a steady level (only significant change is gold OA), as well as green OA (which for Stockholm University refers to manuscript versions of articles uploaded in the repository called DiVA).
- The rate of OA publications are on a steady increase, but only significant if you look at the development over several years.
- From 24% in 2012 to 36% in 2017
- But, considering the goal of the Swedish Research bill (from 2016);
    - All scientific publications resulting from research financed with public funds shall be published immediately open access
    - The transition shall be fully realized within 10 years, 2026
- … we are far from there yet
- We need to be more active in order to reach the goal of 100% 2026

Slide 22 – Costs for licensing and Open Access publishing 2017

- Annual reports on costs for publishing and subscriptions is managed by the Library.
- This image shows the costs for both subscriptions as well as costs for publishing Open access (including both article fees and portions of agreements with publishers where OA fees are included in the deal) for Stockholm University in 2017.
- The top 3 publishers constitutes more than a 50% share of total expenditures.
- The blue portion is the fees for Open Access publishing, and the red portions are the subscription costs.
- The ‘Springer Compact effect’ – we pay more to publish than to read. This is clearly visible in the bar for Springer Nature, where we see a proportionally larger part allocated to OA costs.
- Will the new Taylor & Francis contract signed from 2018 show the same trend? Their contract is called “read & publish”.

Slide 23 – Total cost of Open Access publishing 2017

- Amount of money spent for open access publishing of articles at SU in 2017: 875 485 EUR
- Which covered the costs of 437 open access articles
- A total of 3,098 articles were published by Stockholm University authors in 2017
- 1 100 of these were published with OA, of which 437 articles were paid by the Library funds.
- Of these 437, 262 articles were published in hybrid journals and 175 in gold open access (could also be called "full" OA) journals
- 70% of *money spent* = articles in hybrid journal, 30% = articles in open access journals
- Average cost for APC € 2 300 in a hybrid journal, € 1 500 in a gold open access journal
- Other studies show more or less the same results: Hybrid APCs = more expensive than APCs in open access journals.

Slide 24 – Current Open Access Agreements

- Local agreements for Stockholm University only with OA publishers (cost data 2017 – SU paid most to these, published most)
    - PLoS, Copernicus, Frontiers, MDPI
- Reasons for own agreements in addition to the national deals were to: Support researchers, less administration, no invoices, support full OA publishers, increase OA
- The National agreements with legacy publishers of journals with hybrid options.
- Reason for co-signing national deals: Cost effective, less administration per institution
- All agreements include that the library verifies that the "corresponding author" is from Stockholm University
- Status of ongoing negotiations at national level: Elsevier = cancelled from July 2018, Wiley ongoing, discussing new agreement to begin sometime in 2019.

Slide 25 – Funding for publishing in full OA journals

- The money that would otherwise have been spent paying for Elsevier subscriptions (paid 12,6 million EUR for journals on national level in 2017)
- Reasons for cancelling: Could not agree on reasonable price model and sustainable solution for transition towards open science
- As a result, Elsevier articles in issues published from the first of July 2018 can no longer be accessed (but we have access to the older archives from 1995 to June 2018)
- Why did we establish an "OA fund" to pay for gold ("full") OA articles?
    - Individual OA articles in subscription-based journals does not encourage the development quickly enough
    - Financial support to publish in *full* OA journals – an active step to increase OA publications
- No application form is needed for researchers to use the funds, just send an e-mail to openaccess@su.se (and don't pay before checking with us)

Slide 26 – FAQ about OA publishing and costs

These are a few of the most common questions asked by researchers
Read more about alternatives to gain access to material from publishers where we don't have an agreement anymore see: https://openaccess.blogg.kb.se/2018/07/01/alternative-routes-to-scholarly-articles-and-research-outputs/

Contact us if you have any further questions

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