Open Research – an institutional perspective

OASPA Open Science Webinar: A view from Researchers, Institutions and the Open Science Policy Platform
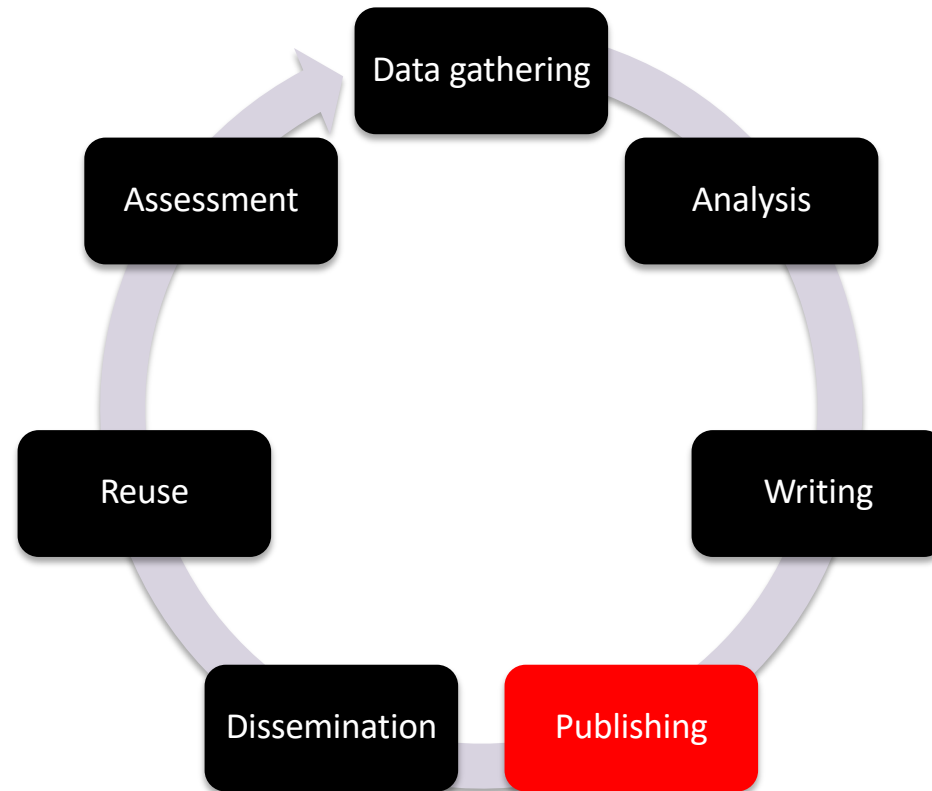
29 November 2018

Dr Danny Kingsley
Deputy Director, Scholarly Communication & Research Services
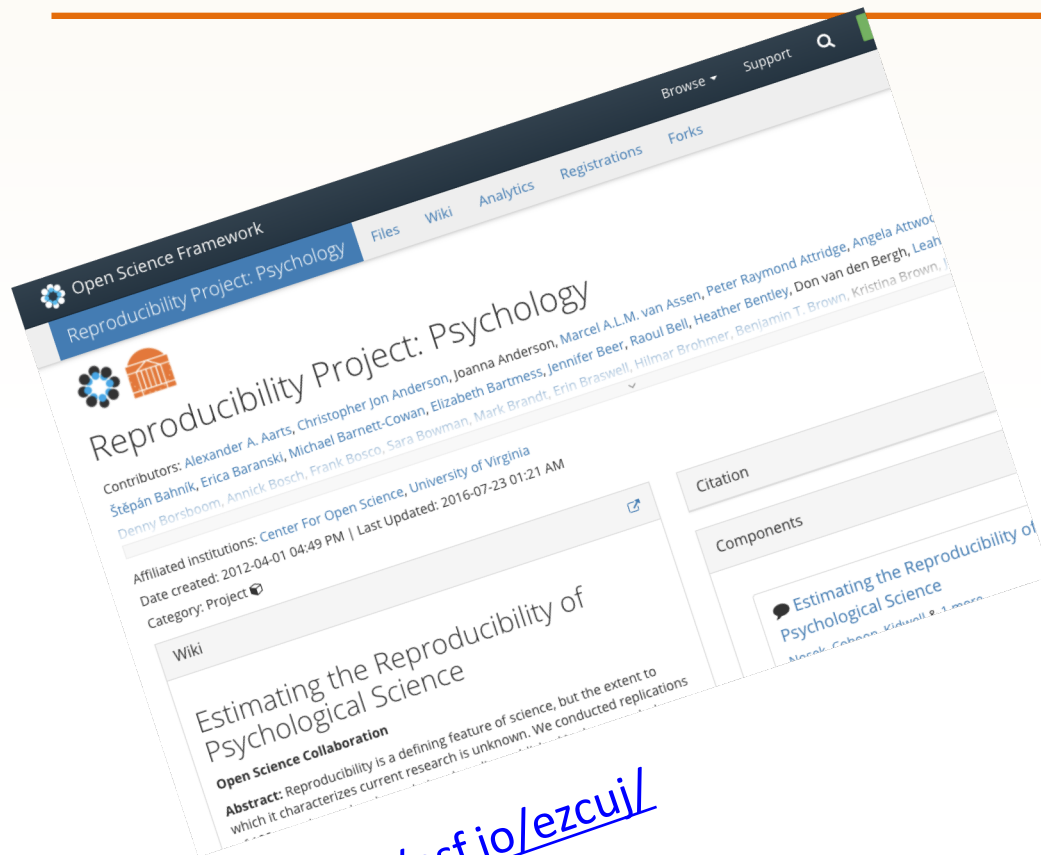Cambridge University Libraries
@dannykay68

Why Open Research?

The only thing that counts in academia is publication of novel results in high impact journals
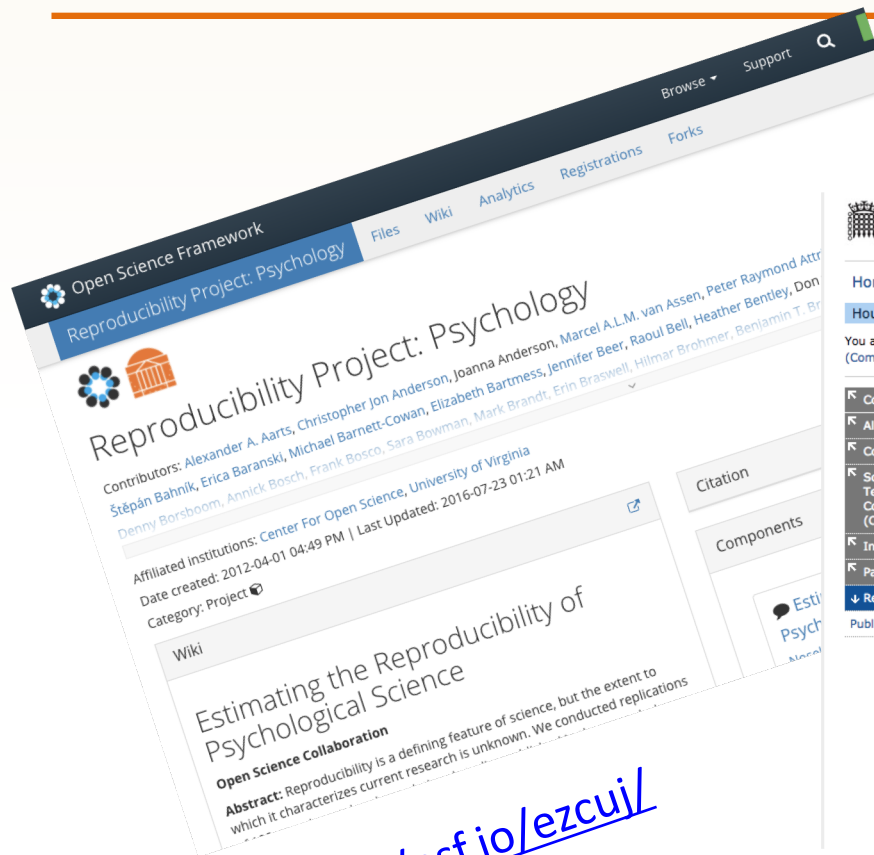
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Reproducibility

https://osf.io/ezcuj/

Integrity

https://osf.io/ezcuj/

https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/research-integrity-17-19/publications/

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Replicability

https://osf.io/e7

http://sites.nationalacademies.org/dbasse/bbcss/reproducibility_and_replicability_in_science/index.htm

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Irreproducibility

https://osf.io/e7...

http://sites.nationalacademies.org/dbasse/reproducibility_and_replicability_in_science/index.htm
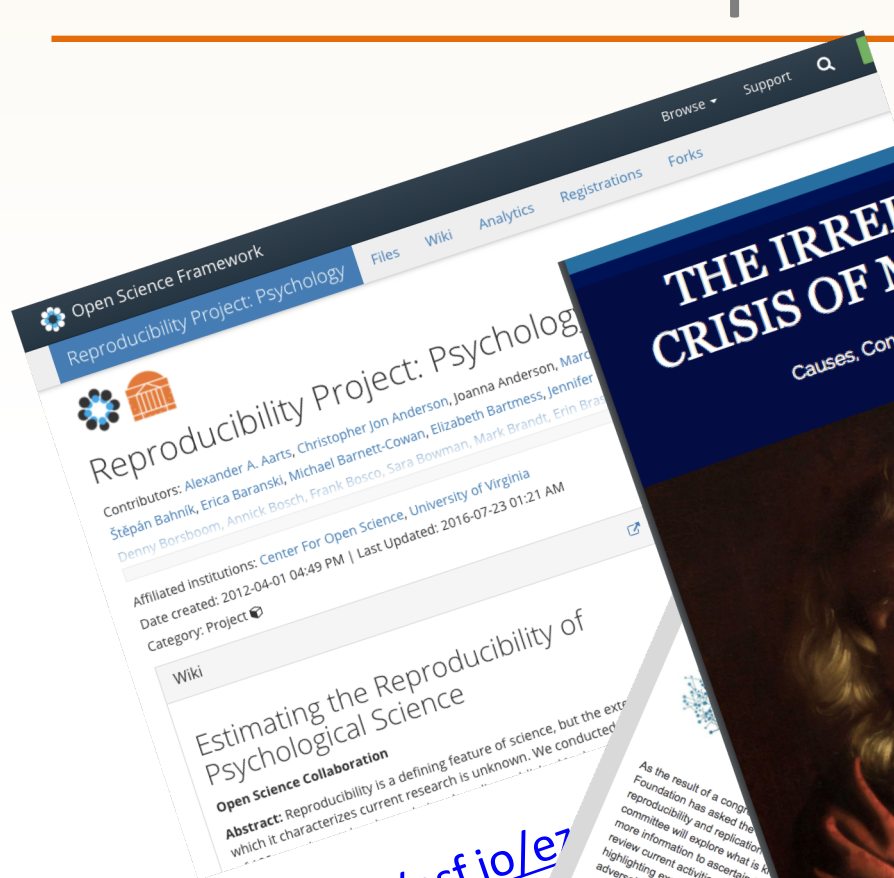
https://www.nas.org/images/documents/NAS_reproducibilityReport.pdf

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The Solution = Open Research

Distribute dissemination across the research lifecycle and reward it

What do we mean??

> 90 declarations and position statements from around the world

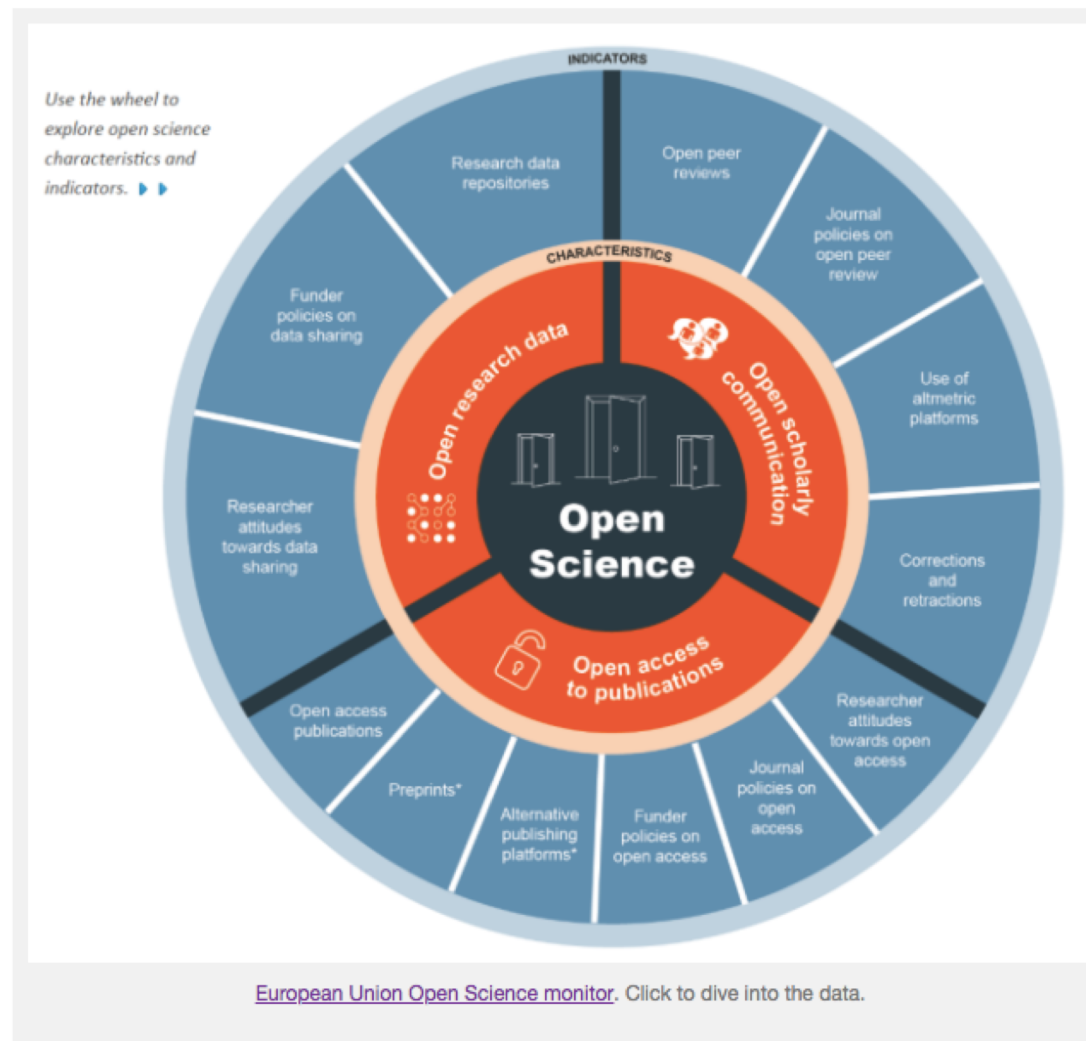| Statement/declaration	Year	link
San Francisco Declaration on Research Assessment	2012	http://www.ascb.org/dora/
Force11 Joint Declaration on Data Citation Principles	2014	https://www.force11.org/datacitation
FAIR data principles	2015	https://www.force11.org/group/fairgroup/fairprinciples
Science International - (draft) Accord on Open Data	2015	http://www.icsu.org/news-centre/news/science-international-to-agree-international-accord-on-open-data
Leiden Manifesto for research metrics	2015	http://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351
Science Europe Principles on Open Access publisher services	2015	http://www.scienceeurope.org/uploads/PressReleases/270415_Open_Access_New_Principles.pdf
European open science cloud for research - position paper	2015	http://libereurope.eu/wp-content/uploads/2015/11/OSC_Position_Paper-final-30.10.15.pdf
The Hague declaration on Knowledge Creation in the Digital Age	2015	http://thehaguedeclaration.com/
Principles of the Scholarly Commons	2017	https://www.force11.org/scholarly-commons/principles

http://tinyurl.com/scholcomm-charters

There are so many different definitions of Open Research/Science that now there is an attempt to define the definitions
https://im2punt0.wordpress.com/2017/03/27/defining-open-science-definitions/

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One of many graphic representations
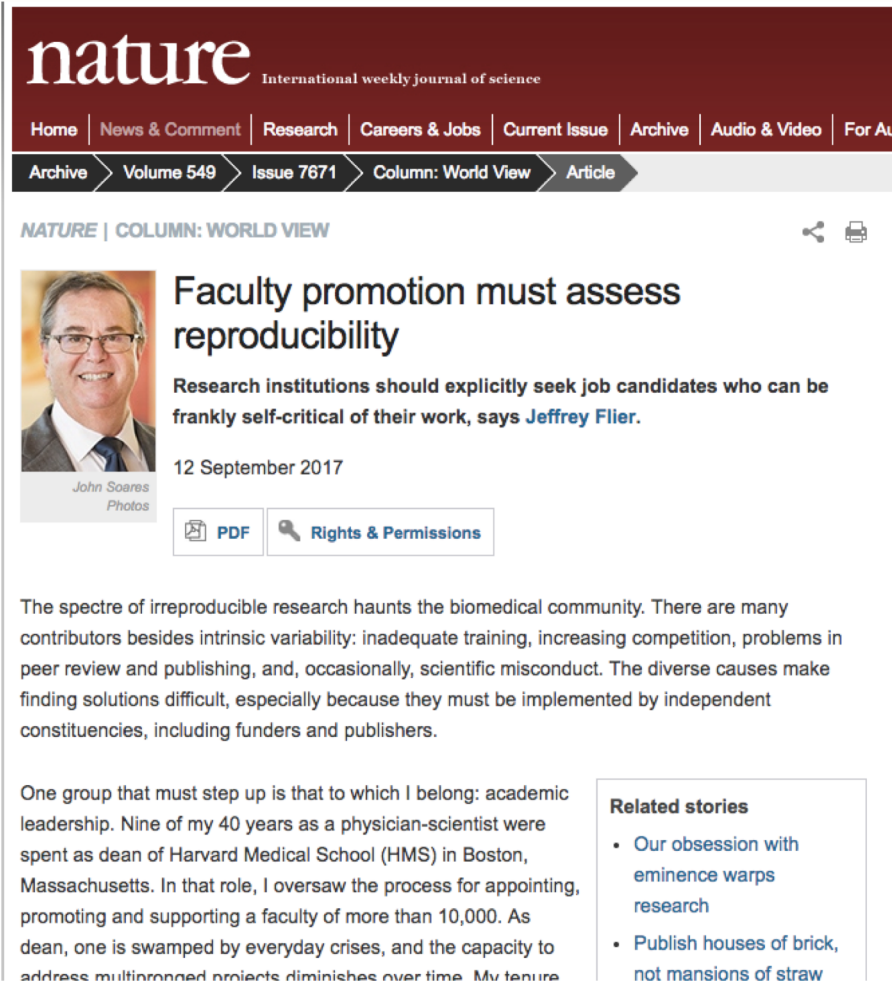
Open Science Monitor - European Commission. 28 March 2017
http://ec.europa.eu/research/openscience/index.cfm?pg=home&section=monitor

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We need institutions to play along

- "Improving the quality of research requires change at the institutional level"
  - Smaldino PE, McElreath R. 2016 The natural selection of bad science. R. Soc. open sci.3: 160384. http://dx.doi.org/10.1098/rsos.160384

- "Universities and research institutes should play a major role in supporting an open data culture"
  - Science as an open enterprise The Royal Society Science Policy Centre report 02/12 Issued: June 2012 DES24782https://royalsociety.org/~/media/policy/projects/sape/2012-06-20-saoe.pdf

A call to arms – 12 Sept 2017

- One group that must step up is that to which I belong: academic leadership.
- Academic institutions can and must do better. We should be taking multiple approaches to make science more reliable. One of the most effective (but least discussed) is to change how we appoint and promote our faculty members.
- Our processes should encourage evaluators to say whether they feel candidates' work is problematic or overstated, and whether it has been reproduced and broadly accepted.

http://www.nature.com/news/faculty-promotion-must-assess-reproducibility-1.22596

An institutional perspective - pilot

Investigation

- During 2018 had an Open Research Working Group to investigate what Open Research might mean for the University
  - https://osc.cam.ac.uk/open-research/joining-scholarly-communication-discussion/open-research-working-group

- Undertook a survey of research community –
  - ~500 responses
  - Generally positive: *"We want our research to benefit the common good. We believe that this is most likely if others are able to reproduce and build upon it without restriction."*
  - Next steps indicate three clear themes

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1. Reward and recognition

- Many comments about current workload
  - Everyone is overwhelmed and this is 'extra work'
  - What do they 'stop doing'?
  - Why engage if this 'doesn't count'?
- From an individual's perspective the benefits of Open Research are not always obvious
- The disadvantages are clear – this is risky, and while unrewarded potentially offers others a chance to get ahead

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2. Training and guidance

- Varied responses about the need for training and/or guidance
  - Clear disinterest in being 'trained' on how to use technology or systems
  - Some desire for more conceptual information
  - Responses indicate a level of confusion about what open access and research data management actually mean
  - Training might not be desired but may be needed

3. Infrastructure (in house)

Integrated solution

Data submissions
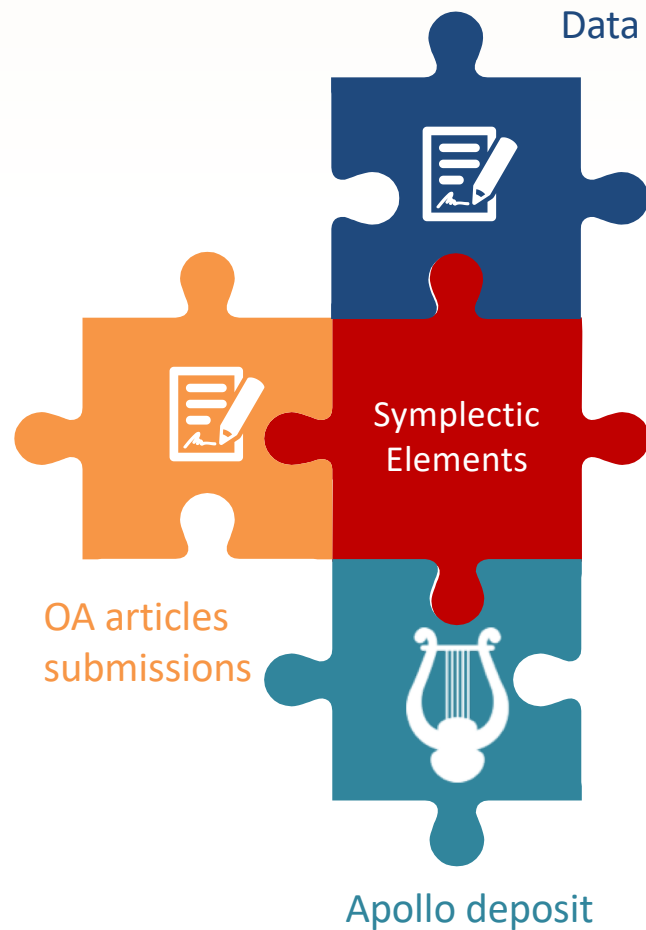
Benefits

Apollo deposit
Automatic deposit of data
and articles in the repository

Symplectic
Elements

Enhanced reporting
OA compliance data
available from a single source

OA articles
submissions

Bonus: ORCID integration
Pre-populate Researchers'
ORCID profiles

Apollo deposit

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3. Infrastructure (bigger picture)

- If there is any move to Open Research, we need to ensure the necessary infrastructure is in place

- Infrastructure includes:
  - Institutional wide systems we build and buy (eg: Symplectic and DSpace)
  - International infrastructure we contribute to (eg: arXiv, DuraSpace, SCOAP3)
  - Other?

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We need to keep a grip on this situation
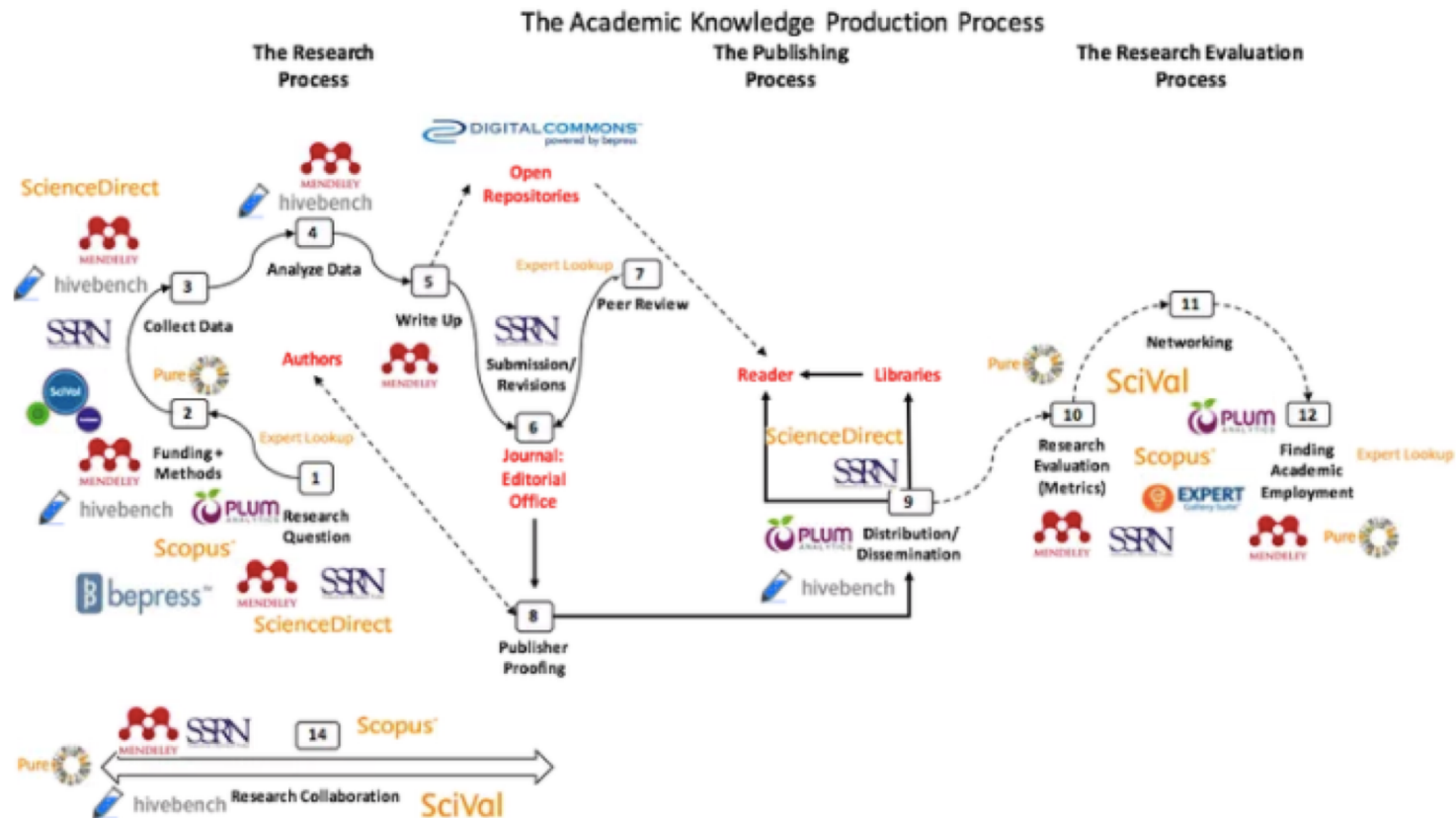
Vertical integration resulting from Elsevier's acquisitions, from Alejandro Posada and George Chen, (2017) *Rent Seeking and Financialization strategies of the Academic Publishing Industry - Publishers are increasingly in control of scholarly infrastructure and why we should care- A Case Study of Elsevier*
http://knowledgegap.org/index.php/sub-projects/rent-seeking-and-financialization-of-the-academic-publishing-industry/preliminary-findings/

Questions/Discussion

Thanks!

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