Open Scholarship wish list

(KE) Knowledge Exchange

a European partnership to improve services for higher education and research, recently held a conference on *Pathways to Open Scholarship*. The conference briefly looked back at the first ten years of KE and its achievements. But the main focus was looking forward. As the conference was held in Helsinki in December, it seemed appropriate, as a starting point for future planning, to write a wish list for Santa Claus on behalf of Open Scholarship. A conference report will be written in the clear light of the new year which will look at who might take what actions to deliver any presents which have not magically appeared under the tree. And also to further identify the many "presents" (services, advice and technologies) which already exist and are just waiting to be opened. Perhaps we need an Open Scholarship version of Dickens' famous "A Christmas Carol" where gloomy ghosts of the past and the present frighten us with potential disaster but a happy ending is possible if change happens and action is taken. What are the actions and who should take them? Who will fund them?

Meanwhile, here is our wish list (with some questions for us all to consider):

- An independent open scholarship institute should be launched.
- Institutions to provide Open Scholarship publication options as part of the "academic plumbing" like the telephone and the academic email address; this will also need more librarians and tenure committees to encourage and support researchers to make their publications open as preprint or postprint.
- Show researchers the presents that are already waiting for them to open: e.g.
 - the Open Access button
 - Contributor badges and Open Research Badges
 - 6000+ researchers telling about their research practices
 - ACUMEN Portfolios for individual academics
 - Science in Transition
 - Joint Declaration of Data Citation Principles
 - The Open Library of Humanities https://www.openlibhums.org/
 - Research Ideas and Outcomes http://riojournal.com/
 - ReScience http://rescience.github.io/
 - Wiki publishing http://compbiolwiki.plos.org/
 - Data Management Plan tools such as: UC's <u>DMPtool</u> and the Digital Curation Centre's <u>DMPonline</u>¹.
- Show Institutions, funders and other actors the presents that are already waiting for them to open: e.g.
 - The NISO Alternative Assessment Metrics (Altmetrics) Initiative
 - Article-Level Metrics like <u>Lagotto</u>

_

¹ In the PASTEUR4OA project, Alma Swan is working on a briefing on the current picture on Data Management Plans – who requires them, what are the trends, see also below for more on PASTEUR4OA. Also promised but not yet fully delivered is the fledgling <u>Open Citations Corpus</u>

- <u>Declaration on Research Assessment</u> (DORA written for funders and institutions)
- The Metric Tide: Final Report and executive summary of the independent review of the role of metrics in research assessment and management
- o The Leiden Manifesto for research metrics (original article in Nature)
- <u>SCOAP3</u> a partnership of thousands of libraries, funding agencies and research centres in more than 40 countries – has converted key journals in the field of High-Energy Physics to Open Access at no cost for authors
- <u>FORCE11</u> a community of scholars, librarians, archivists, publishers and research funders aiming to bring about a change in modern scholarly communications toward improved knowledge creation and sharing
- How Open is Your Research? a tool for institutional managers to help them visualise how open is the way they manage and disseminate their research and teaching output
- The <u>PASTEUR4OA</u> project is developing a similar tool for individual researchers, plus a simple summary for institutions of the advantages of Open Data, plus a briefing for research managers on openness as a key element of the European Commission's Responsible Research and Innovation (RRI) agenda.
- Researchers of tomorrow The research behaviour of Generation Y doctoral students showed us that we need to actively make Open Scholarship something a young career researcher will want to do. One possibility is to create some sort of Early Career Researcher Protection Programme which takes a <u>Science in Transition</u> approach (protecting early career researchers in the current system whilst also changing to evaluation which supports Open Scholarship). And a handbook for young researchers to navigate the current system and to help them take action to influence a transformation.
- Reliable metrics or a calculator for likely revenues coming from an open approach (who might create this?).
- Simple to understand guidelines (from whom, suggestions please?) on sensitive data handling; and an easily-used and widely recognised and adopted approval process declaring data "safe to publish".
- Encourage all of us in our working lives to challenge any use of proprietary metrics and to suggest replacement by public/open metrics, using our data and our building power.
- New systems for reflecting merit, contribution and worth of individual researchers (and, aggregated, institutions). Less measurement by (individual) citations, more by (collective) research progress.
- Provide incentives to make Open Scholarship make sense to an individual's career as well as to society in general (see above for badges providing

Reputation Mechanics) and give researchers credit for the everyday activities they perform / contribute in their (open) research endeavour.

- Gaming or manipulating metrics can be a problem. Rather than looking for one magic metric, maybe encourage a large number of different ones; then gaming becomes far more difficult and researchers are stimulated to just do good research ("we want to be human again"). Other opinions on this also expressed – some want one number that indicates impact of research to society.
- A broad international coalition of libraries could collaborate to push for completely transparent journal costs. By working together they could act boldly for open scholarship and move away from the current economic and reward system ...
- ... to pursue innovative and open models for access to research articles. This could help build the marketplace for Open Scholarship publishing and be a significant step towards construction of a new economic and reward system.
- Work with the Learned Societies to take a new look at Open, to reconsider current financial models and consider other than traditional approaches:
 - o a citation-sabbatical to experience how it can work in an alternative open environment.
 - look for practical, pragmatic strategies and avoid the aggressive evangelism and past religious debates of Open (which may not be palatable when under severe economic pressure).
- Presents in the stockings for those who do practice open research, and those who do counter problems with solutions:
 - the ability to draw information and expertise from a number of different places in the research lifecycle. Multinational publishers can draw from many places in their "walled gardens" – can we replicate this by drawing from a number of Open Scholarship sources and services? Who can bring this together?
 - o an integrated approach to evaluation/judgement/portfolios which includes peer review plus tools which deal with a multiplicity of quality criteria. Who is likely to bring this together?
 - lots of copies of everything in different places. LOCKSS is a good example we need to go
 further, to protect against the danger of depending on one storage location / one service
 provider / one source of funding / one government. So all services must demonstrate that
 the data they hold and the data structures on which the services depend will not disappear if
 their funding or their business model or the politics of their government suddenly changes.
 - astronomers, human genome and particle physics communities have used their history of collaboration to establish control over and access to their publications. Whether by circumstance, good luck or good management, these are examples of good practice – are there lessons for us to learn here? how might this spread to other communities?

- Some more technology presents:
 - o long term archiving and preservation technology allowing **Re**discovery.
 - automation ... technology that automatically adds metadata (which I can review) and minimises the effort needed to deposit data.
 - simplification ... technology that aids and assesses creation of metadata and contextual data (e.g. provenance, error estimations) and estimates likely quality, giving credit to the author for their efforts to ensure data quality.
 - technology which seeks to ensure that the experiments described in my papers are reproducible and preserved over XX years and allows me to share and reuse methods described by others.
- A reward system for senior staff to incorporate and reward open scholarship practice in their research group. Encourage them in their supervision and mentoring of early career researchers to be part of the transformation and not to assume that past experience is necessarily the key to current and future career progression.
- Make it more attractive to publish the research process underlying those final outputs. For humanities in particular, make it easy to publish the story around the article along with the article, a set of attached things around the process – also include multiple authors and collaborators, moving away from concept of individual authorship which is still predominant in humanities.
- Different disciplines will require different approaches. The scale and cost of data has an effect (is it true that some data e.g. at CERN is so expensive and so huge that it is widely recognised that it must be shared to make progress, while other much smaller data is sometimes closely guarded?). Help us to understand better the disciplinary differences. Allow us to accept complexity, while striving for simplicity help us to remember there are parallel worlds to Open Scholarship.
- Please deliver something better than this wish-list: an action plan beginning to point to what actions we should be taking and who else we should approach to take actions – e.g. KE partners, learned societies, high profile champions, institutions, transnational collaborations.

<u>Nicky Ferguson</u> (collated from the participants of the KE event *Pathways to Open Scholarship*) 30 November and 1 December 2015 Katajanokka, Helsinki