# Open Access Symposium 2016

Saturday, May 21, 2016 8:07 AM

May 20th, 2016 UNT

https://openaccess.unt.edu/symposium/2016

This is the 7th annual symposium hosted by UNT.

First keynote: <u>Alexandra Elbakyan</u> (of <u>SciHub</u>) [NOTE: It was hard to find a URL that still worked!) NOTE: This was Skyped from the Ukraine and translated by Kevin Hawkins and a student.

History of Sci-Hub & LibGen

Started in 2011, initial use was too heavy - had to migrate to bigger server.

Some users suggesting going to a pay model, but this was rejected.

Her goal is to disseminate knowledge...

"if people had wings, we'd have no need for planes."

She acknowledges that she is breaking copyright laws, but she disputes these laws.

Specifically, she disputes that knowledge is property

Incorporates issues of privacy & free speech

She notes that there has been no substantive discussion regarding *if* knowledge can be considered property.

The foundation of communism is the re-distribution of property to those without

NOTE: her argument falters here..if information is *not* property, she cannot appeal to communism's re-distribution of property as a metaphor.

The current model results in the inequality of access to knowledge. [no argument there] Communism & science are tightly held.

In a capitalistic society, there is motivation but inequality.

In communistic society, there is equality, but little motivation.

There have been protests of thefts of property & redistribution throughout history (e.g. Robin Hood). This is a "natural response" to cases of extreme unequal distributions.

Theft has also been at the root of science since ancient times:

Hermes - a thief

Theft came about with trade

Private property is related to withholding something behind a locked "boundary"

These locked barriers inhibit communication

"'Theft' is the root of all science"

The Egyptian god of knowledge (alchemy, magic, et.) is identified with Hermes Current sciences trace to ancient

Prometheus stole fire from the gods and gave it humans.

Conflict of private property: "if you make it known [and available] it is no longer property." Refers to Robert K. Merton - Mertonian norms of science

- universalism: scientific validity is independent of the sociopolitical status/personal attributes of its participants; to honour this principle, the scientific project requires organisations to provide equality of opportunity
- ★○ "communism": all scientists should have common ownership of scientific goods
  (intellectual property), to promote collective collaboration; secrecy is the opposite
  of this norm.
  - o disinterestedness: scientific institutions act for the benefit of a common scientific enterprise, rather than for the personal gain of individuals within them
  - o organized scepticism: scientific claims should be exposed to critical scrutiny before being accepted: both in methodology and institutional codes of conduct.

#### Summary:

Science as part of culture conflicts with private property & copyright.

Science communication is twice conflicting...

Open science is returning to its true essence.

Keynote: From Subscription to Open Access: A Road Map Johan Rooryck

The end of *Lingua* and the beginning of *Glossa*.

<u>Lingua</u> has been published by Elsevier for decades. The editorial board was concerned about the increased subscription prices, and presented a letter to Elsevier requesting changes. After Elsevier refused, the editorial board resigned and started their own OA journal, <u>Glossa</u>. Authors generally supported this change and moved their contributions.

The parable of the chocolate: Imagine a tribe that raises, processes and eats chocolate. But at some point, they give the chocolate to a company that packages it in pretty boxes and delivers the chocolate back to them at a steep price. This is scholarly publishing today.

★ He considers what the publishers offer is a packaging & delivery service that should not include ownership of the content. Elsevier claimed to have started the journal, but actually it was merely a printer, hired to print the journal. This is the model that Rooryck is attempting to return to - publishing as a service.

Compares two models of publishing:

Classical	Fair OA
Publisher-centric	Researcher-centric
Antagonistic / Dualistic relationship with content providers & readers	Pluralistic / collaborative
User pays	Producer pays (APC)
Subscription-based	Production-cost-based (cost-recovery via APC)

To transition to Fair OA, librarians & researchers need to take over many of the roles of the publisher.

<u>LingOA</u> - organization that supports journals as they transition from subscription-based to open access ("flipping").



(Note the "tree of knowledge" image - a direct reference to Elsevier's logo) Standards/Conditions:

- The editorial board or a learned society owns the title of the journals.
- The author owns the copyright of his articles, and a CC-BY license applies.
- All articles are published in Full Open Access (no subscriptions, no 'double dipping').
- Article processing charges (APCs) are low (around 400 euros), transparent, and in proportion to the work carried out by the publisher.

Support: Pays the APC's for 3 years while the journal seeks permanent funding. The journals contract with a "press" (albeit, digital) for packaging & distribution - but the services and fees are transparent and market-driven.

### Sustainability

Lingua "flipped" to Glossa (OA) in 4 months.

They sought permanent source to pay the APC's.

Open Library of Humanities - non-profit that supports OA journals with *no* APC's (interesting). They are supported by membership fees of libraries.

[NOTE: this model "plays on guilt" to secure funding...]

He proposes their model for "flipping" to OA:

- 1. Set up a discipline-specific foundation to generate funding to support journals.
- 2. This foundation pays the APC's for a limited time.
- 3. Journal finds permanent funding source.

[My thoughts: This changes the APC's to LPCs - *library* processing charges. This spreads the production costs across all members of the consortium. He did not address the "free rider" problem.

Also, this assumes that the APC's are set based *solely* on the production costs. But "editorial board or learned society" that *owns* the title may decide to base the APC's on market value of their journal. This, too, was not addressed.]

Making an Open Information Age: Power, Freedom & Inequality in an Age of Bits Rufus Pollock

Open Knowledge - non-profit founded in 2004 to "open up public-interest information", notably government and academic.

"How information is controlled is imperative..."

"open" defined as free to be accessed, shared, or built-upon/re-used.

Open Access is a variant of Open Knowledge - a better word may be "Open Research" Considers the *cost* (to society, to innovation, to growth of knowledge) to putting scholarly information behind a paywall.

Indeed, the paywall is antithesis to scholarly communication [NOTE: echoes of Alexandra].

The publisher's role of being a "filtering mechanism" has become inefficient.

Obstructing access to information has a cost: the concentration of information & power.

Re-use is important to scientific discovery: Scholarship is essentially re-use.

Panel: Sustaining OA

Kevin Stranack,

Publishing Knowledge Project (PKP), Simon Fraser University

The status quo (of scholarly communication) is *still* not working, resulting in inflation of prices, flat budgets for libraries, and the continued proliferation of "Big Deals".

The Author-Processing Charge (APC) option is not a sustainable solution:

Insufficient change to benefit libraries - many libraries shift from paying subscriptions to paying APCs - where is the benefit?

Retains the established relationship of power between publisher  $\&\$  libraries.

Is challenging to sustain in the social sciences & humanities.

APC's rising to upwards of \$5K,

Not transparent

Library cooperatives may be a solution

OA-Cooperative.org - Open Access Publishing Cooperative Study
Two year study

Goals:

gathering data from journals and organizations to create a business model and/or to participate in pilots of cooperative publishing with libraries

to consult with stakeholders, including journals, societies, funders, publishers, authors, and readers on what would make cooperatives work or not work

develop open source infrastructure for conduct co-op pilots to assess journal efficiency and quality through cooperative publishing on a global scale.

Why Co-ops?

Co-operatives are a response to a market failure that results in the exclusion of participants from the market.

Based on 7 principles (International Cooperative Alliance):

Voluntary & open membership Democratic member control

Autonomous & independent

Includes education & training of members

Cooperative with other cooperatives

Concern for the community

How would a library OA cooperative work?

Identify the stakeholders: journals, libraries, funders, service providers (presses)

Establish the economics: transparent financial information, allocation of resources

Benefits to libraries: stable and transparent prices, open access

[NOTE: still not discussion of the "free rider" problem.]

Benefits to journals: stable income, cost savings, access to resources, low risk.

The cooperative member libraries would continue to pay the subscription price for up to 3 years, *if* the journal committed to becoming OA.

Daniel Paul O'Donnell, Lethbridge University

Preparing journals for OA

The Web was *designed* to disrupt scholarly communication

Noted early model of Web only included scholarly, not commerce.

But academia has been slow to change.

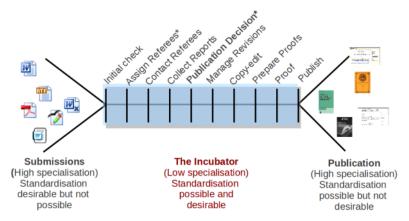
The reason, he posits, is that the users of the content do not control the process: "If parents had been obliged to pay for their teenager's music, we'd still be using CD's."

If buyers were the consumers, change would happen more quickly. Within the scholarly communication cycle, the *cost* of publishing is relatively low, even when including all the non-automated tasks (like peer review). Notes difference: APCs are a *cost*, while subscriptions are an *investment*. Lethbridge Journal Incubator

Turns the cost of production into an investment.

Trains students (graduate) in the skills of publishing.

"sells" the skills/labor back to the university in the form of publishing services.



<sup>\*</sup> Step requires decision by academic editors

## BlueSky to BluePrint, LLC

Nancy Maron

Study of university presses regarding the costs of publishing monographs. Big question: Could a <u>supply-side model</u> (essentially, remove barriers to production to increase supply) work for monographic publishing? Participants: 20 AAUP members tracking 20 monograph titles each. Method:

Isolated monograph costs from journal costs Interviewed staff regarding time spent on their activities Weighted the overhead costs for % of work on monographs Defined 3 tiers of costs:

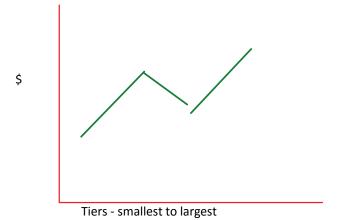
Basic (just monograph costs)
Full costs (Basic + overhead)

Full Costs Plus (includes "in-kind" contributions)

#### Results

Table 1. Full cost of a High-Quality Digital Monograph (Excluding In-Kind Cost)

Group	Group Average	Group Median	95 <sup>th</sup> Percentile	5 <sup>th</sup> Percentile	Highest Cost Title	Lowest Cost Title
1	\$30,091	\$27,955	\$57,991	\$18,678	\$65,921	\$16,401
2	\$44,906	\$42,851	\$69,417	\$26,292	\$129,909	\$19,516
3	\$34,098	\$33,199	\$53,084	\$18,149	\$76,537	\$15,140
4	\$49,155	\$48,547	\$73,885	\$31,760	\$99,144	\$24,234



The biggest cost in the process is *acquisition of content* - selection, peer-review, author support (this is the "X-factor" - widely variant)

# Cost does not equal price

Will eventually develop a "tool" to determine cost/title with a dashboard for comparisons across groups.

Improving Openness and Reproducibility in Scholarly Research & Communication Brian Nosek

# **Open Science Framework**

Problems of scientific research that have been widely known & discussed for decades:

Great flexibility in analysis

Selective reporting (notably of only positive results)

Ignoring nulls

Lack of replication

## Study to test this problem:

29 teams studied a single question using the same data - they could choose the methodology.

Result: "Crowdsourcing data analysis, a strategy by which numerous research teams are recruited to simultaneously investigate the same research question, makes transparent how variations in analytical choices affect results."

1/3 show no statistically significant effect

Another study was to replicate published studies - same methodology, different samples.

97% of original studies produced positive results.

37% of replicated studies produced positive results, with much smaller effect sizes.

The wrong incentives are driving publication.

Barriers to addressing the challenges:

Perceived norms of the community.

Motivated reasoning (rationalization)

Minimal accountability, especially of the process

Noted that the article is merely the advertisement of the research, not a documentation of the process.

Time, or lack thereof. Solution needs to work within the existing workflow.

Open Science Framework: http://osf.io

Open Source tools meant to improve transparency of workflows

Assists with 4 things that researchers care little about:

Documentation

Curation

Preservation

Accessibility

Ostensibly covers the entire research lifecycle.

Enables the connection of existing (or future) services/applications smoothly.

Essentially a lab notebook

Provides platform for documentation (file storage or links to file storage apps)

Curates (with version control)

Preserves (via cloud) - persistant, citable identifier

Notes that we need to enable citation of research outputs beyond the article.

Makes accessible - research controls access.

Documents re-use of research via Forks

Borrowed from OS development

Establishes links between studies

Builds a network

Provides "functional citations"

Registration is formal and irrevocable - a study cannot just "disappear".

Connect to external services (not reinventing the wheel)

Network for institutions: OSF 4 Institutions

Coming soon: OSF Preprints

This is:

Technology to enable change.

Training to *enact* change.

Incentives to *embrace* change

Be rewarded for transparent processes: Badges work

Make other outputs citable

Open Data

Open Data & GIS

Douglas Burns & Allyson Rodriguez

Provided examples of the power of GIS in the world.

Range of openness in GIS from free to \$\$\$\$ (ESRI ~ Elsevier)

OA/OS allows for innovation, user-driven development, and accessibility.

OA GIS (notably QGIS) is close to capabilities of ESRI products, but not quite.

OS is pressuring ESRI to change - e.g. ESRI made its foundational format open, but then developed a new, proprietary format.

Open Data Button

Chelsea Bowley & Sarah Melton

Had developed the OA Button - enables the connection of users to pre-prints.

Developed the Open Data Button to do the same with data.

User enters the email address of the author.

Service contacts author requesting data.

Author may respond.

If author agrees to share data, URL is stored in database.
Users who seek data can then find it more easily.