The role of the research library in an emerging global public sphere

Heather Morrison, MLIS
PhD Student, Simon Fraser University School of Communication
http://pages.cmns.sfu.ca/heather-morrison/
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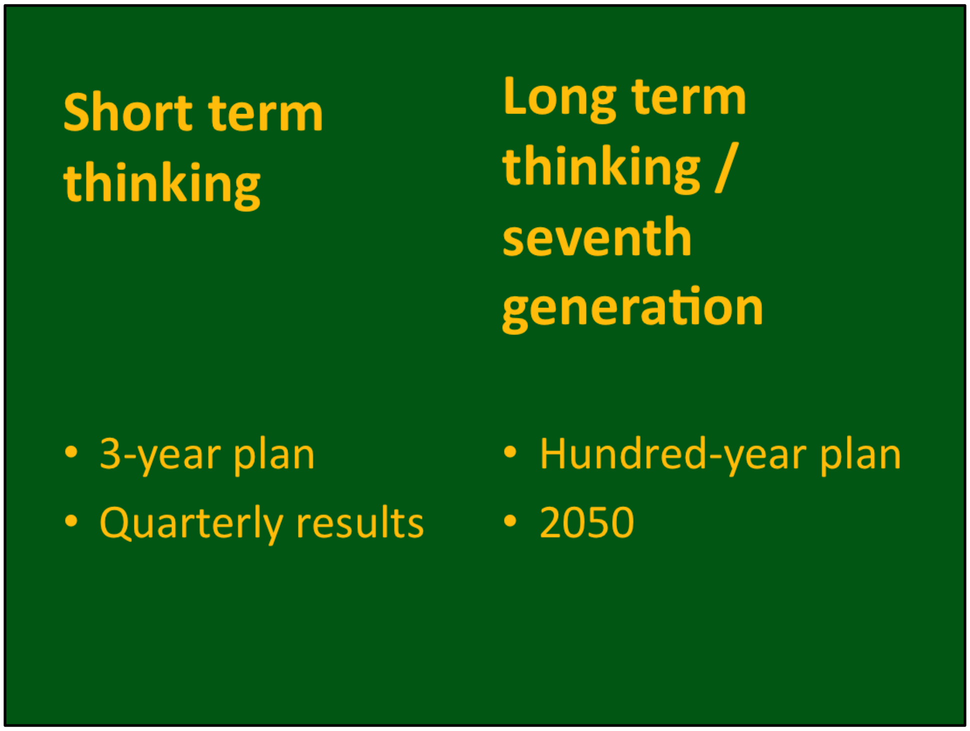
What I am going to talk about this afternoon is something that does not exist – at least not yet. That is, the global public sphere. There is a pretty solid consensus among theorists of the public sphere that there is no such thing as a global public sphere, and the idea that there even could be such a thing is quite controversial. Then after I go over the impossible and the highly unlikely, I'll explain how the research library fits in. On a serious note, I plan to make the case for the global public sphere – why we need one, and signs that a global public sphere is indeed emerging. After I cover the philosophy and politics, then I'll move on to the practical, and speak to scholarship and the research library, focusing on three key things that I think libraries need to attend to in the near future, that is, the evolution of scholarly communication, the economics of scholarly communication and transition to open access, and policy for scholarship, including open access policy.



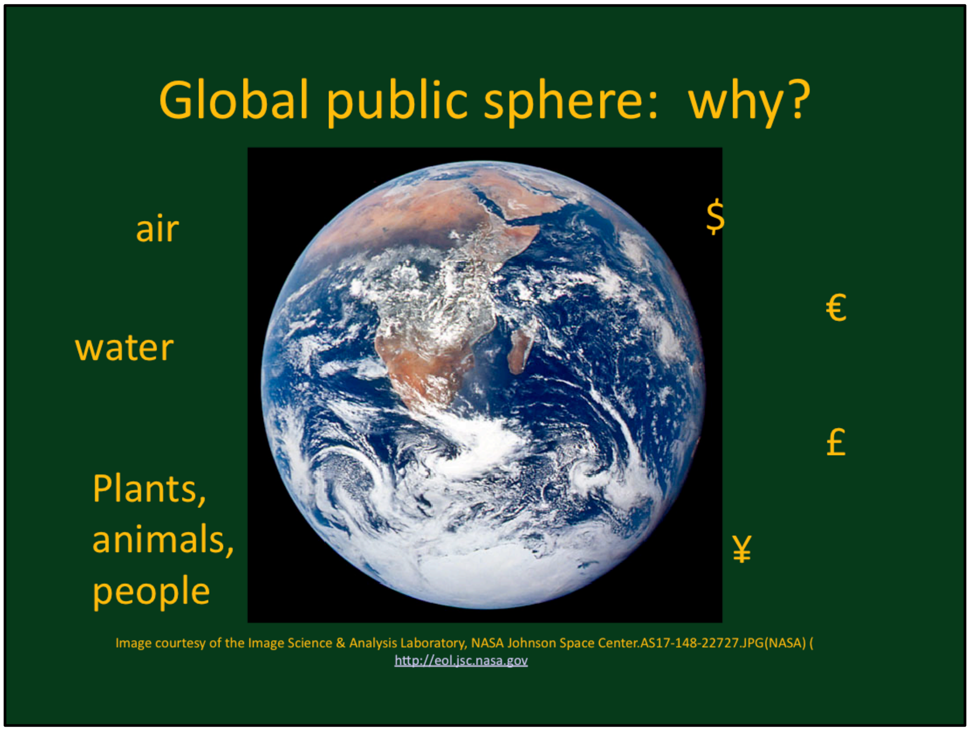
The idea of the global public sphere is a vision, and so let's start begin with vision and planning. We tend to focus on short term planning, the quarterly results, the annual report, the 3-year plan. Things are changing so rapidly, it is understandable that we tend to believe that we cannot plan more than a few years in advance. This is a very new phenomenon. Where I come from, our First Nations peoples have been practicing planning for the seventh generation for ages.

Is long-term planning really so far out of the question for us? Can we imagine, at least a little bit the long-term future, at least the one that we would like to see? Who here can imagine one day having great-great grandchildren? When might this be – perhaps a hundred years from now, 2110? Do we have some idea of how we would **like** the world to be for our great grand-children? Would we like our great-grandchildren to have clean water to drink? How about good nutritious food? Prosperity? Peace? How about the year 2050. I understand that this is the time frame that we have to get serious about global climate change. Do we want to succeed in curbing global warming? How about for our libraries, what about the scholarly works that we already have, or that are being written today? Do we want these to be preserved and available a hundred or a thousand years from now? Can we picture at least a little the research library of a hundred years from now, and librarians within the library?

Okay, so we may not have all the details filled out, but we do have some long-term goals, and I would argue that this is the toughest part of planning. Buddha once said that the beginning of any journey of a thousand steps is taking the first step. If this is true, then surely the first two steps are deciding the take the journey, and choosing a direction. And so we are now on our way.

Why do we need a global public sphere?

Laws are increasingly being made at the transnational or global level, while government and democracy are still primarily at the national, regional and local levels. If the people of the world are to have a say in how the world is run into the future, we need to figure out how democratic participation can work beyond borders; we need a global public sphere. Let us consider just one example: the Anti-Counterfeiting Trade Agreement, or ACTA. ACTA negotiations are currently underway, with many countries participating, including my own country and the European Union. This agreement deals with things like counterfeit goods and piracy. There are many issues here with profound implications for the public sphere, issues like when and how generic drugs can be made and sold, and intellectual property issues, including copyright. These are issues that should be discussed and debated in a democracy. ACTA negotiations were kept a secret for a long time. Some months ago, a few demanded that the ACTA negotiations become public. This includes me – I sent a letter to my own government on this issue – and the European Union. And now at least the ACTA text is available to the public. It is a good thing that the ACTA text is now public, but as far as I know, at least in my own country, there is minimal effort being made to inform the Canadian people, and what little consultation there is seems to be very focused on the business community rather than the citizens. I won't get into the details of the proposed ACTA treaty, but I do encourage all of you to read the draft, as well as the IFLA expression of concern about ACTA, and the Copyright for Creativity initiative that LIBER is involved with, and tell your governments what to think about the draft, whether they are asking for this input or no. Because when it comes to matters like intellectual property, we librarians have some expertise to contribute; our scholars and our societies will be better off if our advice is sought – and heeded – on topics such as ACTA.

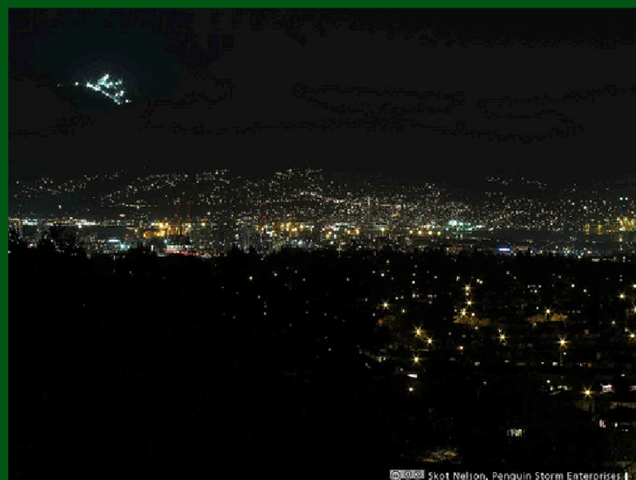


Aside from politics, we share one world, one biosphere, in other ways as well, including the environment and our integrated global business market. I am sure that everyone here is very familiar with the environmental perspective. In fact, you might well be wondering about a Canadian coming to talk to Europeans about the environment. I hear that we in Canada are not doing our fair share, and I am sorry about this. From an environmental perspective, climate change is something that affects all of us. We need to find solutions, and we need to find them soon. The world functions as one global market from the perspective of business and finance. As we have seen with the recent global financial crisis, a problem for one easily becomes a problem for all.

It may seem counterintuitive to talk about the environment and the economy together. There is a reason why I bring the two together. Money is just a surrogate for resources. We are beginning to understand that our planet is itself a limited resource. There is no real dichotomy between the environment and economics; the everyday resources of planet Earth are our budget, this is what we have to work with. More than that, the Earth is our home. We are part of this biosphere. In this sense, it is we who are a part of the earth's budget – and one that is a little out of control.

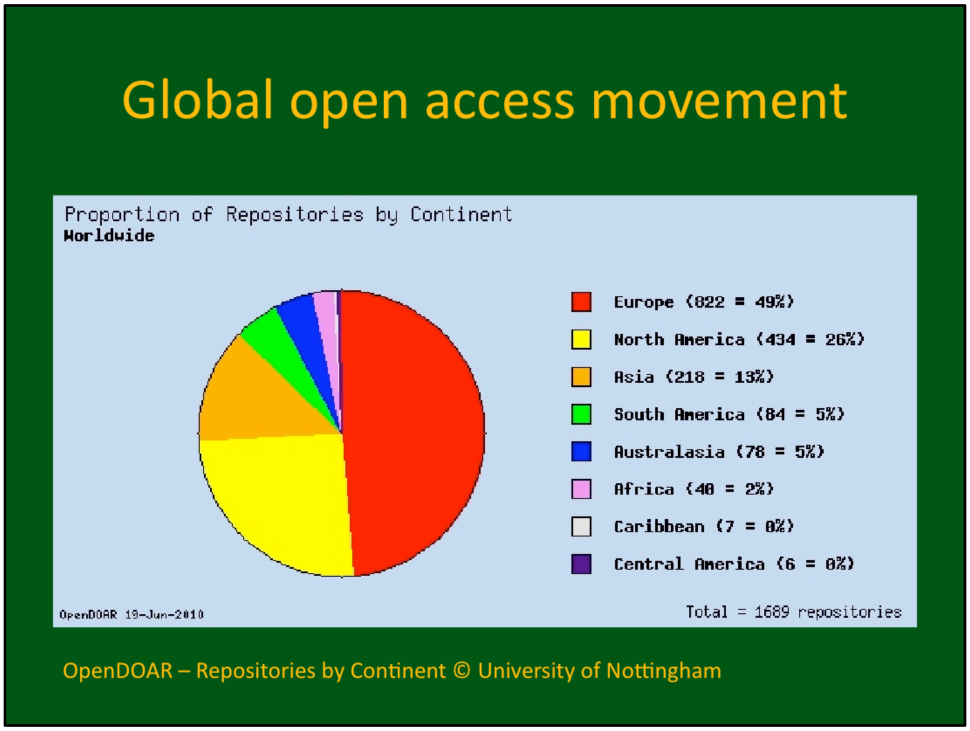
To resolve issues like global warming and the global financial crisis, we must work together, and to do so, we need a global public sphere.

Signs of an emerging global public sphere: *Earth Hour*

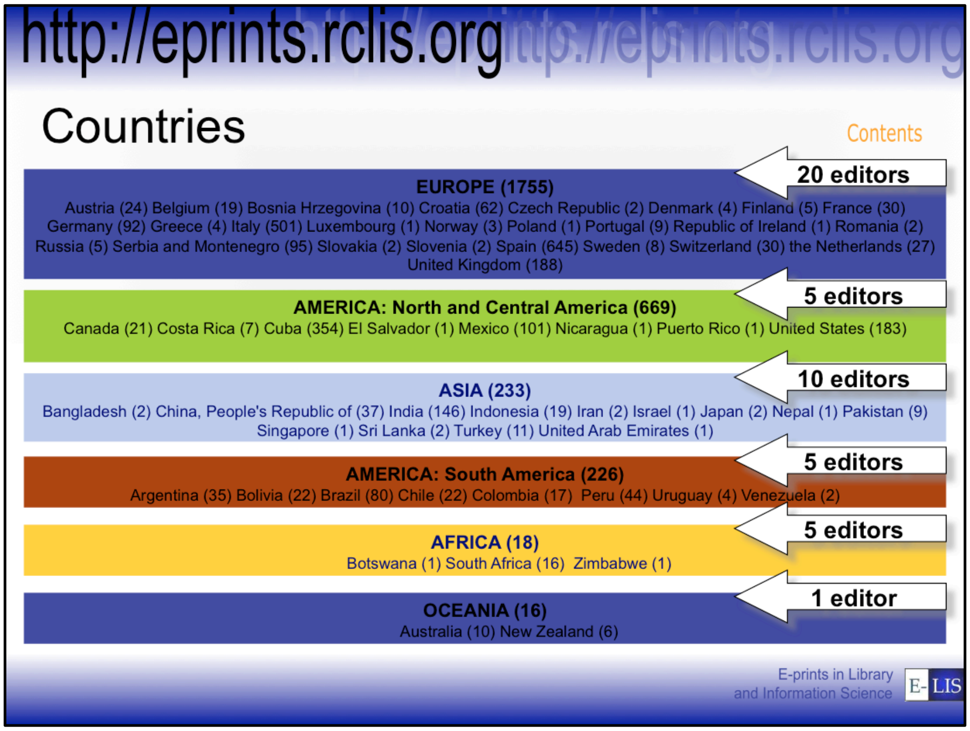


Vancouver Earth Hour 2010 from Queen Elizabeth Park. Skot Nelson
http://www.flickr.com/photos/penguinstorm/4469125096/

The environmental movement is probably the best illustration of a rapidly emerging global public sphere. There are many indicators of global concern for the environment in recent decades, ranging from the remarkable scientific consensus on global warming to early attempts by our governments to slow and stop the damage, from Kyoto to Copenhagen. One specific example of the global extent of the environmental movement is the Earth Hour initiative, begun in 2007 in Australia. In just 3 years, Earth Hour participation has grown to 128 countries and territories. This photo shows my own city of Vancouver mostly in the dark during Earth Hour 2010, March 27. This was the first time that I had heard about Earth Hours, and so the first time that I participated. Some of the appliances that I unplugged at that time, remain unplugged today. In 2011, Earth Hour will be held on March 26, and I encourage everyone to participate.



The global open access movement is another sign of an emerging public sphere. This chart shows the open access repositories by continent, as collected by OpenDOAR. Europe is on the right in red, leading the pack with about half of the world's current OA repositories. North America in the yellow has about 25%, Asia 13%. Most importantly, every continent is represented – except Antarctica.



E-LIS, the Open Archive for Library and Information studies, is another illustration of the global nature of the open access movement. Hosted by the CILEA group in Italy, E-LIS is an international collaboration of volunteer editors.
On this slide prepared by E-LIS founders Antonella de Robbio and Imma Subirats Coll, we see that the volunteer E-LIS editorial team includes members from every continent except Antarctica.

What's up with Antartica? I realize that there isn't much of a population base there – but there are research stations. Shouldn't their research be open access, too? When can we expect an Antartic open access declaration?

DOAJ by country: 107 countries

DOAJ DIRECTORY OF OPEN ACCESS JOURNALS

SPARC EUROPE AWARD 2009 For Outstanding Achievements in Scholarly Communication SPARC

Find Journals
New titles
Find articles
Suggest a journal
About
FAQ
News
Links
Sponsors
Long term archiving
Membership
Feedback
For journal owners
For authors

DOAJ by country

#	Country	Number of journals added into DOAJ									Total number of journals in DOAJ								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	United States	20	206	91	94	69	109	213	175	108	20	226	317	411	480	589	802	977	1085
2	Brazil	0	8	118	48	52	61	73	45	44	0	8	126	174	226	287	360	405	449
3	United Kingdom	5	113	47	39	40	32	33	60	40	5	118	165	204	244	276	309	369	409
4	Spain	0	6	20	63	50	27	62	30	35	0	6	26	89	139	166	228	258	293
5	India	0	15	18	14	18	18	23	50	46	0	15	33	47	65	83	106	156	202
6	Germany	1	12	19	37	22	30	25	23	23	1	13	32	69	91	121	147	170	193
7	Canada	0	25	12	11	17	15	25	30	24	0	25	37	48	65	80	105	135	159
8	Turkey	0	4	9	25	12	24	25	24	14	0	4	13	38	50	74	99	123	137
9	Italy	0	4	10	21	16	12	12	27	27	0	4	14	35	51	63	75	102	129
10	Chile	0	3	41	19	13	7	14	10	2	0	3	44	63	76	83	97	107	109
11	Romania	0	5	1	0	7	5	12	36	37	0	5	6	6	13	18	30	66	103
12	Japan	2	21	43	22	3	0	4	7	0	2	23	66	88	91	91	95	102	102
13	France	0	10	6	22	14	10	19	9	11	0	10	16	38	52	62	81	90	101
14	Colombia	0	2	2	5	19	18	18	26	3	0	2	4	9	28	46	64	90	93
15	Australia	0	19	14	11	7	10	10	13	9	0	19	33	44	51	61	71	84	93
16	Mexico	0	1	4	23	20	13	14	7	2	0	1	5	28	48	61	75	82	84
17	Poland	0	9	4	10	11	7	25	6	7	0	9	13	23	34	41	66	72	79
18	Venezuela	0	3	36	6	16	3	7	6	2	0	3	39	45	61	64	71	77	79
19	Switzerland	1	8	5	8	2	2	18	14	11	1	9	14	22	24	26	44	58	69
20	New Zealand	0	4	2	7	3	12	17	19	4	0	4	6	13	16	28	45	64	68
21	Croatia	0	4	5	4	4	30	15	2	3	0	4	9	13	17	47	62	64	67

The global reach of the open access movement is illustrated by open access journals as well as repositories – here we see the "DOAJ by country" list. More than 100 countries are listed as publishers in DOAJ.

There are many other signs of an emerging global public sphere. Over recent decades, I see what looks to me like the beginning of a series of political bodies designed to advance the public interest on a transnational or global level. And those of us who have a strong interest in the public interest, such as librarians, are working together in associations that cross borders, sometimes to speak to the interests of our own libraries – interests which are themselves in the interests of the public sphere – and sometimes directly to matters of public policy, such as intellectual property law.

So if a global public sphere is indeed emerging, what is it? It is not easy to define something when most people would dispute that such a thing even exists, and when I myself am seeing this as a vision for a future! But here are a few thoughts about what belongs in a global public sphere. First, to support democracy when decisions go beyond our borders, we need new approaches to discourse and decision-making, new ways to providing information and gathering input. But the global public sphere is about more than that. We need at least some spaces that belong to everyone, and public infrastructure, whether it is roads or an internet that is free and accessible to all. Informed public discourse in a democracy means that people have to have the ability to understand the issues and their implications – for this, we need public education, and public knowledge.

Global public sphere & research library

- Foundation for global public knowledge
- Free online
  - Digitized heritage
  - Scholarship
    - Our scholars
    - Our countries
    - Global scholarship
- Specialist expertise

Assuming that there is such a thing as a global public sphere, what does it have to do with the research library? Lots. First of all, collectively it is by and large the world's research libraries that are beginning to form the foundation for global public knowledge, a global open access library. How are we doing this? By making works freely available online, whether it is digitizing heritage materials or the works of our own scholars. The other key area is the specialist expertise that we bring, whether it is to help our own clients access the materials that they need, or to analyze and provide advice on public policy discussions.

Public knowledge in the internet age

- Free online
- Free to re-use
- Articles, journals, data, audiovisual
- New formats
- Priority: scholarship

What is public knowledge in the internet age? Free online access is one of the criteria, but it is not the only one. Free to re-use or libre open access is critical too. Why? For a moment I would like to speak as a student. Here is what the technology that we already have COULD be doing for us. As a student, teacher, or researcher, I could easily be copying each and every article and book that I read to my desktop, and adding in my own highlighting, notes and comments. I could share my version of a work with others. As a student, the version of an article that is most useful for me is not the pristine version from the publisher, or even the author's manuscript; it is a copy of a work that has been marked up by my teacher or one of my colleagues. When I submit works for marking or for publication, I could be including the works cited in a folder along with my own work. This would save the time of editors, peer reviewers, and teachers. If all of the works were on my desktop, people should be able to create automated citation checkers, eliminating some of the more routine work of publishing. I could broaden my perspective through automated translation of works in other languages, and I could expand the scope of my research through data mining. To do these things, we need scholarship that permits broad re-use rights, preferably stated clearly through Creative Commons licenses such as CC-BY or CC-BY-NC; and we need scholarly works that are NOT locked up through digital rights management or technological protection measures. DRM and TPM are not the friends of scholars; they are hindrances to scholarship. Something to leave behind. Formats are just beginning to evolve, however slowly – and need to evolve. Why? There are a number of reasons, but the one that I would highlight for today is simply this: there is a lot of scholarly information available as things stand, and the number of scholars and publications in the world keeps increasing. The proportion of the world's scholarl literature that any one scholar can read themselves is constantly decreasing. Either this will change, or we will increasingly be re-inventing the wheel, not knowing what other scholars have done. And finally, we need scholarly communication that is free to prioritize scholarship. There is nothing wrong with commercial companies making a profit – as long as the needs of scholarship come

Evolving scholarship

- Quantity
- The problem? Not enough writing, or not enough time to read?
- New forms of writing, reading, research
  - Wikis
  - Collaboration in research & writing
  - Data mining

So what are the priorities for scholarship? Our short-term approach to planning causes us to focus on quantity, to keep pushing scholars to do more and more writing. This doesn't make sense, when there is already a very great deal more written and being written than anyone has time to read, in virtually every discipline. We need to step back and think about what the real needs are for scholarship. I would argue that scholars need time to read more than they need other scholars to do more writing. Some of the solutions to the growing quantity of materials will come through new forms of writing and research. These are just a few indications of how scholarship can, and perhaps should, evolve.

Golden Apples ruralgold http://www.flickr.com/photos/rorymartin/3020214387/

You may have heard the story of Newton and his discovery of gravity while sitting under an apple tree. I am sure that there is far more to the discovery of gravity than that; but on the other hand, there is some evidence that real breakthroughs take a combination of hard work, and time for contemplation. It is hard to see how this important element of advancing knowledge can fit within current academic reward structures. Are our tenure and promotion committees asking candidates if they are spending enough time doing things like sitting under apple trees and just thinking, and if not, why not? If, as I suspect, we are not doing this – then maybe we should start!

Our tenure and promotion systems are designed to reward things like quantity of publications in prestigious or high-impact journals. But is this really what motivates great work? Let's look for a moment at a classic article from cultural studies, Stuart Hall's *Encoding / Decoding*. There is a story that Hall wrote out a first draft on a train ride to a meeting in Leicester, where he was to present. What might have motivated him to write? It seems unlikely that his focus was on cranking out a paper for the tenure and promotion committee, or getting accepted into a high impact journal. I have no way of knowing for sure, but it does seem likely that what motivated Stuart Hall was his having an understanding of a topic he cared about passionately enough to really, really want to share it with his academic colleagues. As we librarians begin to learn about scholarly communication, of course we need to be aware of the importance of tenure and promotion procedures for our faculty. But I am convinced that there is more to what motivates us scholars than that. I am glad to be a student at the SFU School of Communication where everyone I meet is passionate about the discipline and what it going on in the broader world. If we apply rational tenure and promotion procedures that assume one type of motivation for scholars which overlooks more important motivations, this is what I would call an irrational use of rationality. Hegel might have called it the ruse of reason.

New formats in OA as a sub-discipline

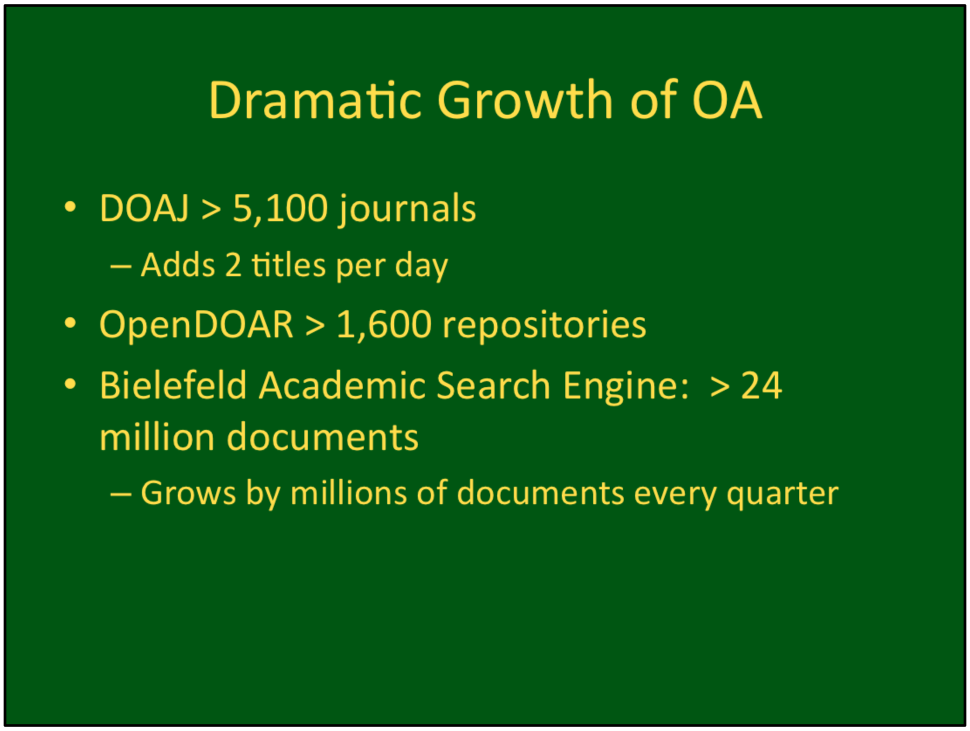
- Open Access Tracking Project
- Open Access Directory
- Twitter #openaccess
- Vaidhyanathan's *The Googlization of Everything*

When my students are writing papers on topics in scholarly communication and open access, of course I want them to refer to peer-reviewed and other authoritative scholarly literature. However, in an area that is changing as rapidly as scholarly communication, a student is missing a great deal if they do not have information that is up to date, whether it is peer-reviewed or not. Our traditional tenure and promotion procedures tend not to look at participation in collaborative activities like the Open Access Tracking Project and the Open Access Directory. As a scholar in this area, I think that any serious scholar should be both using and contributing to these resources, because if we all share this kind of information with each other, we can all be working more effectively. Currently I am in the process of finalizing the definitional essays for my comprehensives, and am thrilled that my committee is willing to consider a book blog, Vaidhyanathan's The Googlization of Everything.

Global public library…well on our way

- Building digital heritage collections: Europeana, Open Content Alliance, Hathitrust, Canadiana.org
- Open access repositories / Driver - COAR
- Support for OA publishing
  - Hosting & support services
  - Transitional models

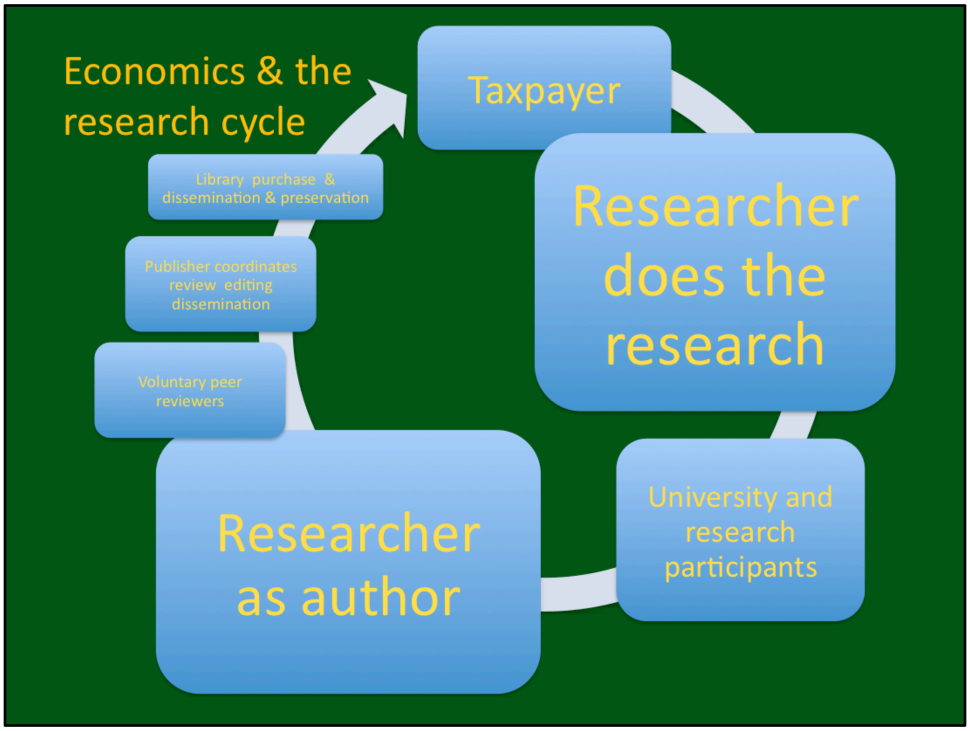
We are well on our way to collaboratively building a global public library of knowledge, through digital heritage collections such as Europeana, the Open Content Alliance, and Canadiana.org, to mention just a few, the over 1,600 open access repositories already up and running, and a variety of supports beginning to appear for open access publishing.



I write a series called the Dramatic Growth of Open Access. I guess you could call this a kind of short-term quarterly results for the open access movement. This series is a pleasure to write since the news is always good. DOAJ now has well over 5,000 journals, and adds on average about 2 titles per day. OpenDOAR lists over 1,600 repositories. Bielefeld Academic Search Engine searches these repositories, and finds more than 24 million documents. The numbers of documents available is growing by the millions every quarter. More important than these visible aspects of open access accomplished is the building of infrastructure for open access. Many of the new open access journals are the first, or among the first, OA journals to be hosted by a library, university press, or new open access publisher. The open access journals that are new can scale up to include more content. Each new journal hosting service can readily scale up to include more journals. As we know all too well, many of the repositories are far from full – by they are up and running and ready for filling. Repository software is still fairly new, and continues to evolve in ways that will eventually make the IR not only more attractive, but perhaps even compelling to deposit. Research libraries around the world have, or are developing, programs and services to raise awareness about open access and alternatives for scholarly communication. These aspects of OA success are more difficult to quantify, but for me this buildup of infrastructure is a more solid success of open access than the growth numbers, impressive though these area. In other words, while we are seeing substantial growth in OA already, it is clear that we are on track for even greater growth in the very near future. Open access is off to great start, but there is still a great deal more to be done.

Economics & Publishers

Who here has a full-time job, complete with salary? Imagine one day someone comes in and tells you that they don't think that the way that you work is optimal anymore. Instead of paying you a salary, they say, how about if you provide your services for free – and start paying us for use of the office, to boot? How would you feel? This is the source of much of the opposition to open access. I have a lot of sympathy for the smaller society publishers that have never made much of a profit who are in this position. If we librarians wish to overcome the opposition, I think we need to do more than say how important open access is (true as that is). For the scholarly journal publisher, the only potential sources of significant revenue are from academic libraries, and their own membership. Those subscription budgets are ours, and I would suggest that most of the opposition would just melt away if we were to begin to talk about how WE can help them through the transition, to find economic models that will allow them to survive and thrive in an open access environment. Some publishers, be they small society publishers or large commercial publishers like Springer, seem to be more ready to work with us on transition than others, and that's just fine. If we can't work with everyone at once, let's focus on those who are willing to partner, and work out the models that can then expand at a later date.



This slide shows in a very rough way the economics of a scholarly journal article. If you look at the article by Houghton and others in the latest issue of LIBER quarterly, you will find reference to some excellent work by Bjork and others that breaks down the costs of each step. What I would like to do is to look at this from a slightly different perspective, that is, who contributes to the article and what this ought to mean in terms of rights to the article. The larger squares represent, again very roughly, the larger contributions. This assumes a taxpayer-funder study. The taxpayer has contributed resources, money, a portion of their salaries, business or investment income, towards the research. The researcher then does the research; generally this is the step of the research process involving the most time and effort, by far. The university or research institute generally also contributes resources such as office space, equipment, and time for the researcher, and if human subjects are involved, then they have contributed as well. The researcher then writes up the results of the research, generally the second biggest task after doing the research. Volunteer peer reviewers review the article; this process is coordinated by publishers, who also add value through things like copyediting and dissemination. The library budget largely funds the dissemination and preservation of the work, and the library also plays an important and growing role in direct dissemination of the work, both to our own clients and to the world at large through repositories. It just makes sense that the work should then be shared with the taxpayer, who funded the work in the first place. The main point that I would like to make here is that there are many parties that contribute to what eventually becomes a scholarly research article. It makes no sense for any one party to say that their contribution is paramount, and so they should have all the rights to the article. Publishing comes near the end of the research cycle; the work of the publisher is closest to the finished article. What does this mean in terms of what makes sense for rights? Think about building a house for a moment. One of the very last steps before a house is ready for us to move in, is the work of painting the house. Does it make sense for painters to own lots of houses, just because their work is last in the cycle of housebuilding? Obviously not. It does not make sense for

Pricing / quality

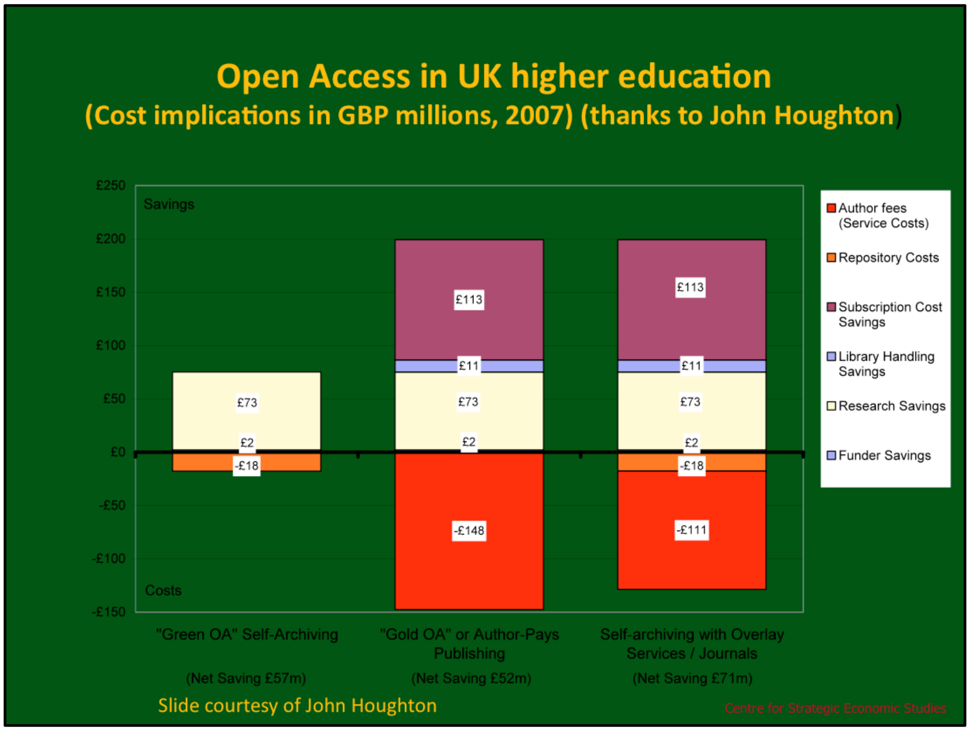
- Library Management (Emerald): Euro 11,819
- College & Research Libraries (Association of College and Research Libraries): $80 USD = ~ 64 Euro (Ulrich's)

In most areas of life, we tend to think that pricing correlates with quality. You get what you pay for, we say, or if you want quality, you expect to pay for it. And in most areas of life, this does seem to work well. However, there is evidence that this does not work in the area of scholarly publishing. In fact, Bergstrom and others have done some research illustrating that the correlation can work in the opposite way for scholarship, and I have uncovered a similar trend in my own study of journals in librarianship. It can be the low-cost journal that has the reputation for quality, in terms of prestige and citations.

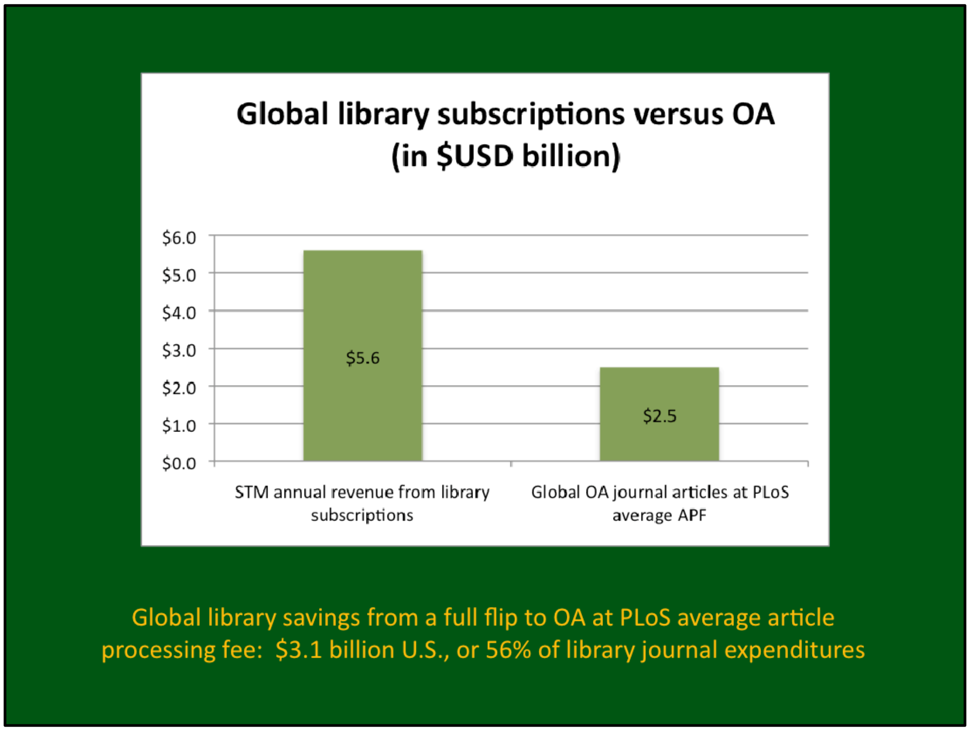
On this slide we see an extreme from our own discipline of librarianship. The cost of ACRL's highly prestigious peer-reviewed journal College and Research Libraries, at about 64 Euros per year is less than 1% of the cost of a commercial competitor, Emerald's Library Management at 11,819 Euros per year. One way to think of this, is that to keep a journal like Library Management, it may be necessary to cancel a LOT of journals – more than a hundred – like College and Research Libraries. This would be a foolish thing for us to do. Why? Imagine if College and Research Libraries were to fold. There were be authors looking for another outlet for their work. Perhaps Emerald would create another journal to complement Library Management. What would Emerald be likely to charge for this journal? Probably something similar to what they charge for Library Management, right? So if we are trying to save 64 Euros by cancelling a journal like College and Research Libraries, we put ourselves in a position where we would have to pay a very great deal more to have the same content in the future.

I would like to acknowledge that this example is far from perfect; it is an extreme example, and individual library subscriptions are not so common nowadays as consortial bundling offers. Bernd-Christoph Kaemper suggests that Emerald does not really charge this price, but rather it is a fantasy pricing model. Nevertheless, I do think this example at least roughly reflects a very wide disparity in costs. If you take all the LIS journals in Ulrich's and sort them by costs, as I did for my book Scholarly Communication for Librarians, you will see that the top half of the list, the most expensive journals, are almost all commercial journals, and the bottom half of the list

Now let's project into the future. What would we like to see, perhaps in 2050 or a hundred years from now? We could have a future with many publishers, many ACRL-type publishers with journals like College & Research Libraries, and a variety of other types of publisher. Or – looking at the trend toward merger and acquisition in recent years in the commercial sector – we could end up with just one publisher left, able to charge whatever they like because walking away would not be an option. I submit that a healthy future for scholarly communication needs lots of different types of publishers, and this is something that we should keep in mind as we move forward.

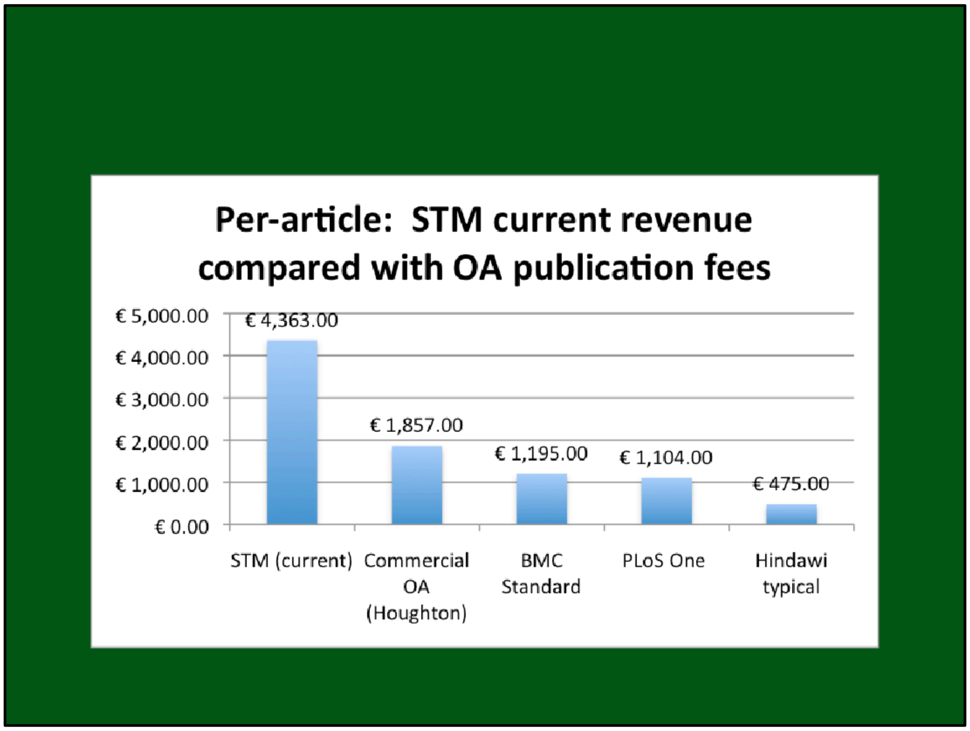


You may have heard about the Houghton studies, or read about them in the latest issue of LIBER Quarterly. Houghton and his research team have conducted major studies of the impact of a full shift to open access in several countries. These studies were in-depth, examining every phase of scholarly communication from reading to publishing to costs for subscriptions, library handling and repositories, and taking into account such factors as national inflow and outflow of capital for subscriptions. The results in every country studied so far – the U.K., Denmark, and the Netherlands – illustrate cost savings from a full switch to open access, even if the country moves unilaterally to open access for its own research output. This chart (thanks to John Houghton) shows the implications for higher education in the U.K. with a full shift to open access, using 3 models. The top part of the slide shows cost savings for each model, while the bottom part of the slide shows new costs. Simply making all work freely available through repositories, or "green" open access, with no other changes, results in net annual savings of 57 million pounds for UK Higher Education. With full "gold" open access publishing, the net annual savings are 52 million pounds. The third model, self-archiving with peer-review as an overlay, yields the greatest net savings, 71 million pounds per year. This third model is more transformative in nature; in the short-term, it is the green or the gold open access options that are more achievable. But let's keep in mind the idea that we should be thinking about the long term, too, and look at the transition to open access publishing and open access archiving as the intermediate steps that they are. I would like to emphasize that these savings are based on a unilateral move to full open access by the country involved. This is a very conservative way of estimate savings, since as we have seen, the OA movement is global in scope and any country that moves to full OA will benefit from what everyone else is doing in this area.



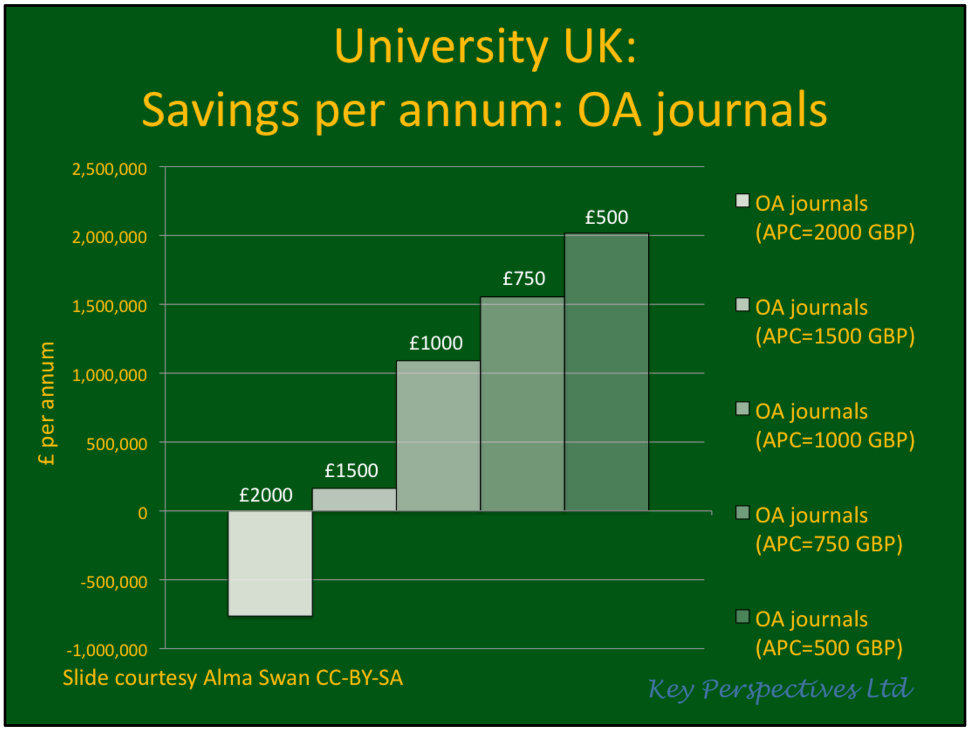
This slide shows my own, much simpler macro analysis illustrating the cost savings that would be possible with a global shift by academic libraries from subscription payments to open access via article processing fees. The global annual revenue for scholarly journals reported by The International Association of Scientific, Medical and Technical Publishers or STM, as reported by Mark Ware on behalf of STM last year, is $8 billion U.S. Ware quotes a study by the Research Information Network that the percentage of this total that comes from academic library subscriptions is between 68 and 75%. Assuming a low mid-point of 70%, we get a total global annual expenditure by academic libraries of $5.6 billion U.S. Ware quotes the Bjork study which reported a total global annual output of scholarly articles of 1.5 million. If libraries were to pay article processing fees for every one of those 1.5 million articles, at PLoS average rates, the total annual cost would be $2.5 billion. The total annual global library savings from this shift would be $3.1 billion, or 56% of current expenditures. Another way to say this, is that academic libraries could fund a fully open access scholarly journal article system, at PLoS rates, at less than half of what we pay now for journal subscriptions.

These cost savings are conservative. The real picture is likely much higher potential savings. I don't have time to cover all the details today, but I will mention just a couple. STM members do receive a large portion of the revenue from academic journal publishing, but they do not receive all of it. The actual total expenditures by academic libraries on journals, then, is somewhat larger than the $8 billion. The 1.5 million articles quoted by Bjork is full global output, not just STM output (with both excluding China). In other words, the gold OA cost is a full cost, while the STM is a conservative underestimate, so the actual savings are likely more. The gold OA costs here reflect the PLoS article processing fees. The vast majority of open access journals do not charge article processing fees; other models of support, such as university library hosting services and subsidized publishing, could be more efficient than APFs. Then, too, PLoS competes – successfully – at the top end of the publishing system. PLoS APFs are likely great value for the cost, but they are not the cheapest APFs in the business.



This chart shows the same thing in a slightly different way. For every scholarly article produced in the world – not just by STM – STM revenue from academic libraries alone is the equivalent of $4,300 Euros (about $5,300 US). As reported by John Houghton in the latest LIBER quarterly, the amount the average commercial publisher would need to charge for full open access publishing, including profit margins, is about 1,800 Euros. This is less than half the current STM revenue per article. This is also significantly more than many open access publishers that use the article processing fee approach are currently charging. The current BMC Standard fee is a little under one thousand two hundred Euros – less than a third of the current STM revenue per article. PLoS One – which recently received its first impact factor and is already in the top quartile for biology journals, so congratulations to PLoS One – is just a little bit less than BMC. And over the right we see a typical article processing charge for a Hindawi journal, at 475 Euros. Hindawi is a successful for-profit company; and here we see that they are making a profit earning a revenue that is about 10% of the average revenue per article that STM receives from academic libraries alone.

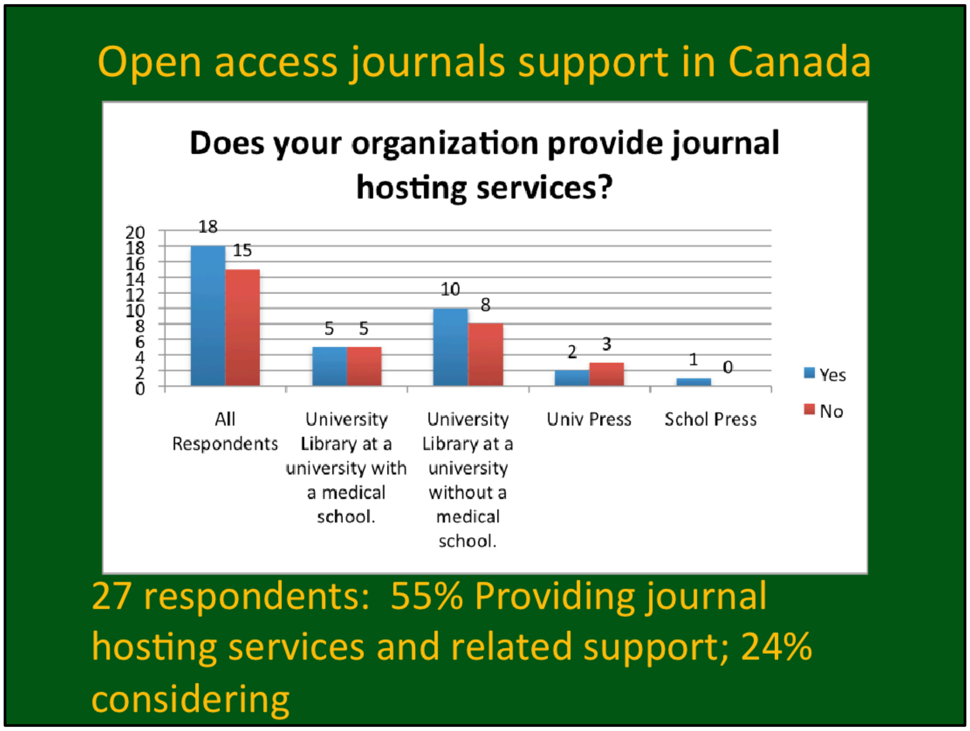
Again, this is a conservative estimate of the potential cost savings with a full shift to open access. The publishers shown here are using the article processing fee approach, while the majority of open access publishers do not charge article processing fees. Other models such as journal subsidies may be more cost-efficient, as they eliminate the need to charge the article processing fees. Also, the publishers shown here, except PLOS, are commercial publishers. As we discussed earlier, there is reason to think that many not-for-profit publishers may be a good deal more cost-efficient than some of the commercial publishers.



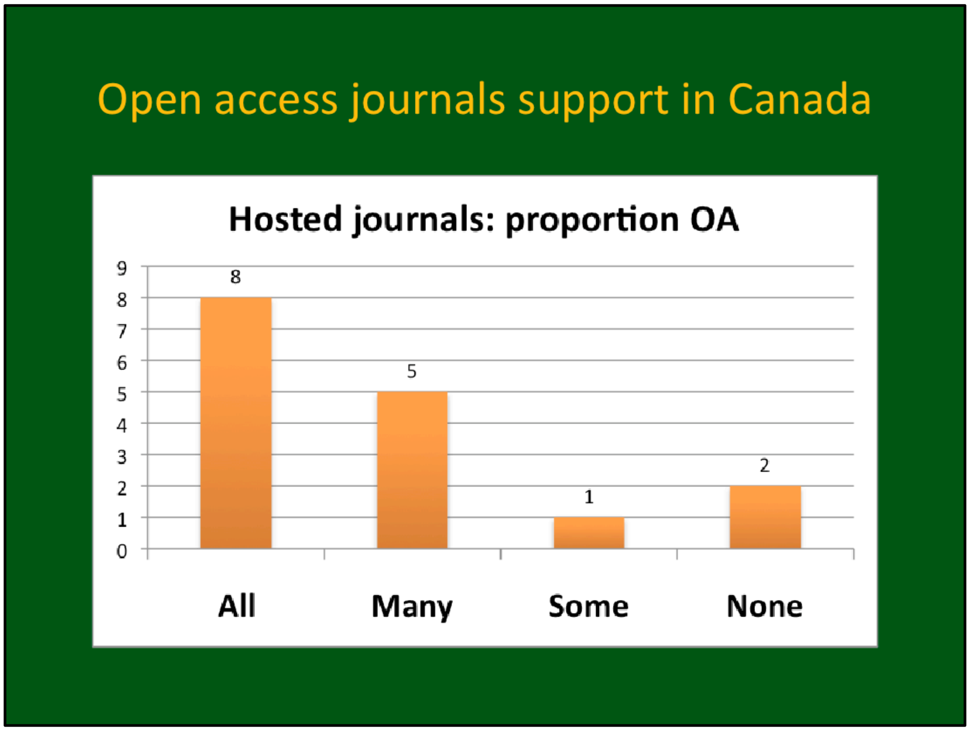
This slide, courtesy of Alma Swan, illustrates the importance of considering the cost-effectiveness of publishers as we move into the future. Here we see the analysis of savings with a full switch to open access by UK universities with full open access publishing. The difference between an average cost of 2,000 pounds and 1,500 pounds, is the difference between cost savings and added costs. An average cost of 1,500 pounds makes little difference in the total cost, while an average cost of 500 pounds results in savings of 2 million pounds per year.

The point that I would like to emphasize here is that while libraries can not only afford a fully open access scholarly publishing system and achieve significant savings to boot, we cannot afford a blank-cheque approach to open access support. We can certainly afford PLoS, Biomedcentral, and Hindawi, and other OA publishers that charge equivalent rates. It is not clear that we can afford to support many journals with substantially higher rates, however.

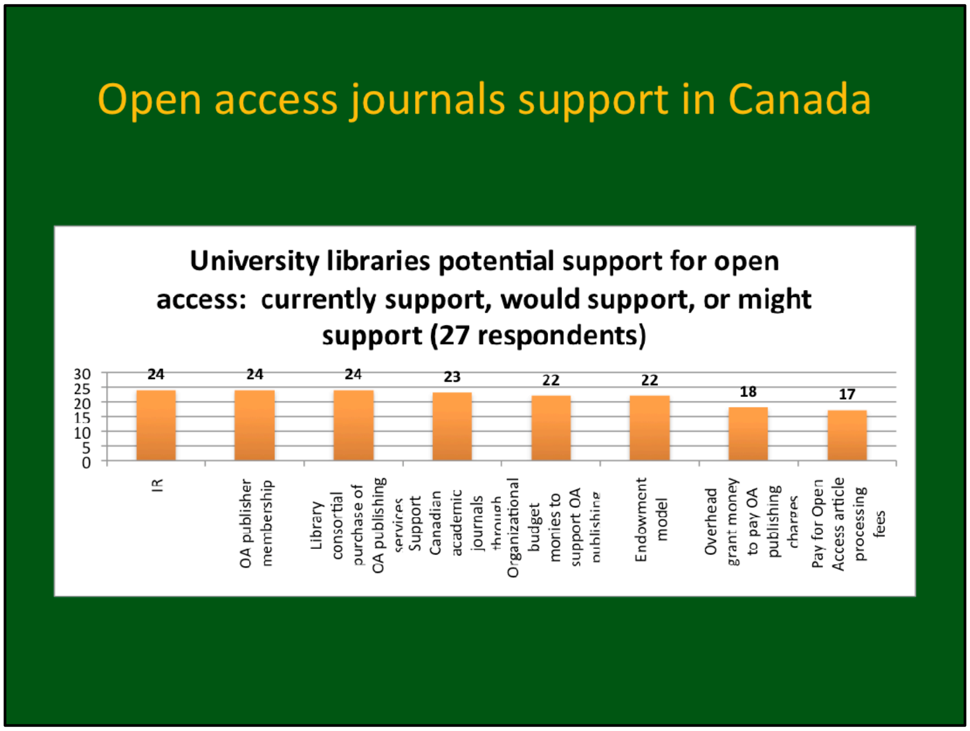
To achieve this kind of low per-article cost, I would submit that it is essential that we have as many high-quality, low cost scholarly publishers like ACRL and their College and Research Libraries as possible. It is in the long-term interests of our libraries' patrons to help such publishers make the transition to an open access future.



A group of us in Canada recently conducted a study of open access journals support in Canada by university libraries and university presses. Of the 27 respondents, 18 or a majority are providing journal hosting services and related support, and another 24% are considering providing such services.

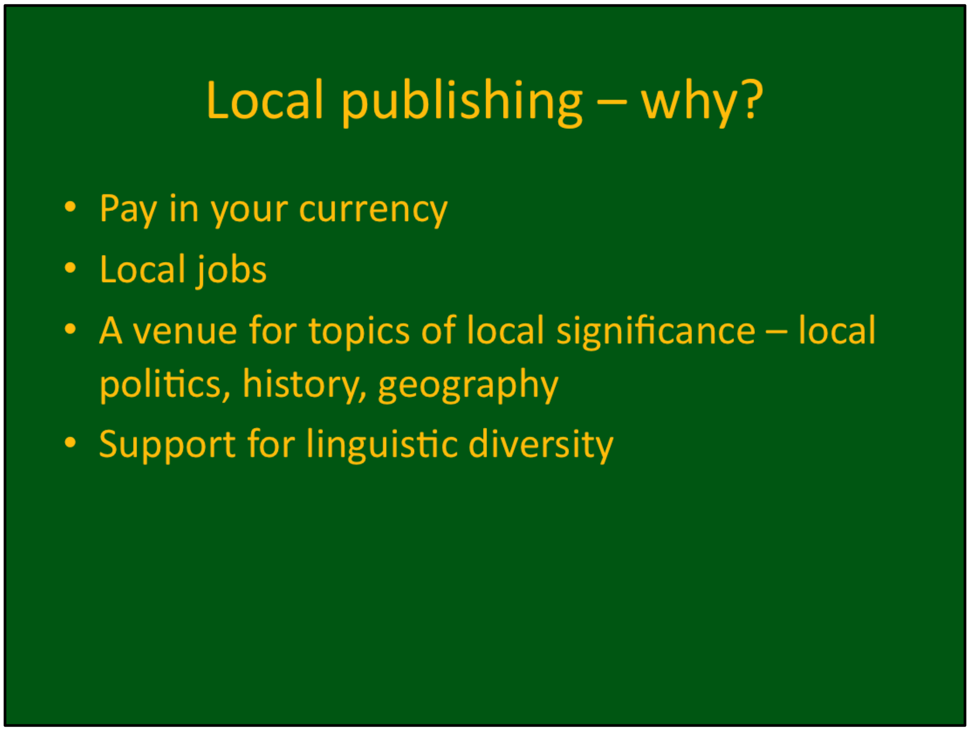


There was a strong tendency towards preference for support for open access journals. In this slide, we see that of the respondents who are providing journal hosting services, the scenario where all of the journals are open access is the most common by far, while only 2 sites report having no open access journals at all.



We also asked about support for a number of economic models for open access, ranging from article processing fees to consortia-led transition from subscriptions to open access. The good news is that ANY model for transition would enjoy some level of support from a majority of libraries.

These are preliminary results. Once we have completed the data analysis and written up the full results, we anticipate that this survey will provide an overview of journal hosting and support services in Canada, as well as help libraries to figure out the economic transition to open access by discovering which models would enjoy broad-based support from libraries across the country.

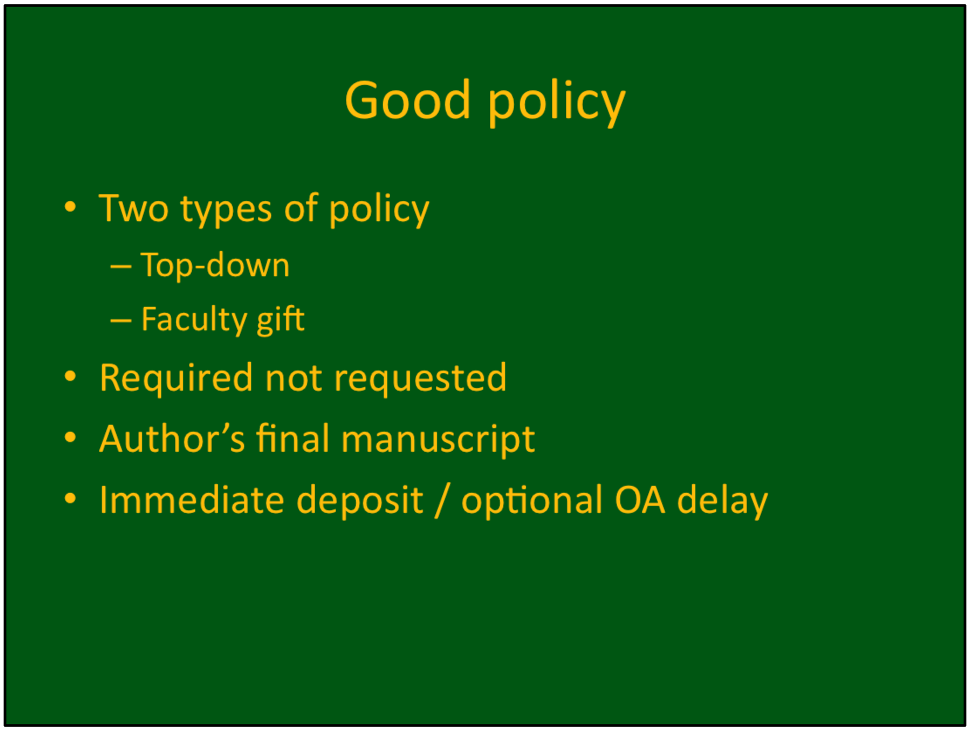


In Canada, the Synergies project is helping Canadian scholarly journals in the humanities and social sciences to go online. Current tenure and promotion committees everywhere tend to prefer publication in international journals. This is a practice that I think should be challenged. There is a lot to be said for every region to support local publishing. Supporting local scholarly publishing has economic benefits for the research library, as compared with subscribing to international journals. With local publishing, your costs are always local, and paid in your own currency. Local jobs are created. Local publishing outlets means that there will be always be a journal that considers topics of local significance to be important and of interest to the journal's readers. If Canada lost its local Canadian journals, who would publish articles about Canadian politics, history, and society? If there were no journals to publish in these areas, what would happen to the research? Finally, local publishing makes it possible to support linguistic diversity. This matters, because every language contains unique concepts, a unique way of thinking. Losing a language means losing a whole approach to thinking; it diminishes

What's next? Key steps

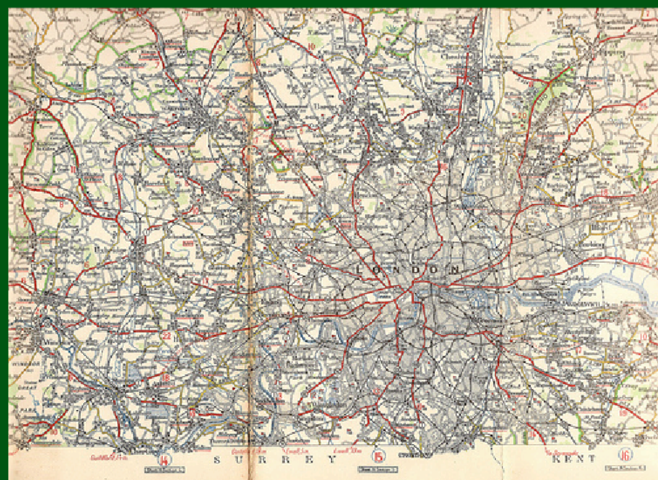
- Open Access policy
  - Local
  - National / Regional
  - Global
- Why policy?

I know that there are many in this room who are far more expert on open access policy than I, and I would love to hear from you during the question period or throughout the remainder of the conference. Nevertheless, I do want to underscore the importance of open access policy – at all levels, from the local institution to national, regional, and global levels through the Access to Knowledge Treaty.



If you are thinking about policy, here are some tips. At the institutional level, there are two basic types of policy, with many variations. One of the basic types is top-down, coming from the institution as it were. The other is bottom-up, the Harvard style where it is the faculty that grant the rights to their works to the institution. What kind of policy will fit, depends on lot on the individual institution. From my perspective, the Harvard-style bottom-up policy is best if it will work at your institution, for two reasons. First, this is the faculty’s own policy; it is always much easier to implement a policy when the people affected by it are onside. The second reason, perhaps more important in the long run, is that it gives faculty an opportunity to assert their own rights to their works. This makes sense. If funding agencies, taxpayers and institutions contribute to an author’s work, so too does the author, and some rights should remain with the author; more than has happened in the past. Deposit should be required, not requested. Early policy adopters have found that policies that just request OA are largely ignored. The policy should specify that the author’s final manuscript, following all peer-review, should be deposited, allowing the publisher to recoup costs from the value that only they genuinely add, such as copyediting and layout. The policy should specify deposit immediately on acceptance for publication, with an optional delay to open access if necessary, ideally for a minimal period (no more than 6 months).

The roadmap



London area road map - Michelin map, c1925

If the destination is the same for all, a global open access public library of knowledge built and shared by the world's research libraries, the roadmap will be different for each library, the journey a little bit different since we all start from different places. Supporting open access publishing will be easier for some libraries than for others, depending on factors such as size, local technical expertise, and whether the university has a university press. Then, too, there is local politics to consider. In Canada, as in many countries, it has long been customary to subsidize scholarly publishing, at least in the humanities and social sciences, as this has never been a profit-making area. In other countries where subsidies have not been customary, it may be difficult or impossible to set these up, particularly in these tough financial times. Another consideration is local publishers. For some of us, local publishers are the smaller society publishers; in other areas, the locals are of the large and highly profitable type. We all have limited resources to work with. If some of us are pushing first on open access archiving and others on open access publishing, that's just fine. In the long run, we need both, and it makes sense to move forward where you can move forward at your local institution.

Before we conclude, here are my suggestions for goals for long-term planning, what to aim for for 2110. A flourishing global public sphere underpinning a new phase of democracy that effectively crosses borders. Within this public sphere it is largely research libraries that support a global open access library of knowledge. Research libraries are active partners in publishing the works of our scholars, whether through local publishing or supporting international journals, or probably both. Preservation and organizing materials for access is a task for libraries. I see the role of research libraries as shifting from the traditional reference to active involvement with the research process at an earlier stage. Instead of waiting for a research study to be completed and collecting the results, we should be involved in the beginning, helping to shape the way data is collected so that people will be able to access and manipulate it when the study is done.

3 key elements for research libraries

- Evolving scholarship
- Transitional economics / OA
- Policy for scholarship / OA, + IP

In conclusion let’s look at 3 key elements for research libraries: evolving scholarship, transitioning the economics of scholarly publishing from subscriptions to open access, and developing and implementing policies for scholarship, including open access policy and scholar-friendly intellectual property policy.

3 key factors for research libraries

1. Scholarship needs to evolve to take full advantage of the potential of the Internet.

- Understanding scholarly motivation
- Importance of reading and thinking
- New formats / more collaboration
- Libre open access

Scholarship needs to evolve, to take full advantage of the potential of the Internet. During this evolutionary process it timely to give some thought to what really motivates scholars. Making tenure and promotion is important, but let's not forget the passion that drives many scholars and the need for reflection and contemplation as well as sheer hard work. New formats are beginning to appear, and the Internet facilitates social collaboration of scholars just as it facilitates social networking for all of us. And let's not forget that the real goal is full libre open access, with

3 key factors for research libraries

2. Transitional economics / OA

- Sustainable publishing
- Cost-effective publishers
- Can have our cake and eat it too (full open access and save money)
- Greatest savings with full transformation

We are just beginning a phase of economic transition from subscriptions to support for open access. If we want to have our cake and eat it too, that is have full open access as well as significant cost savings, we need to think about economic sustainability in publishing, and help the traditional publishers with low costs compared to quality succeed in making the transition to open access. And let's not forget that the greatest savings come with full transformation of the system, and leave some space for innovation to allow this to happen.

3 key factors for research libraries

3. Good policy for scholarship

- strong OA policy at all levels: global, national / regional, local
- Scholar-friendly intellectual property policies
- We have expertise

For those who do not yet have an open access policy, now is the time to be developing policy at all levels. At an international level, discussions are underway such as in the Anti-Counterfeiting Trade Agreement that could have profound implications for intellectual property. We need intellectual property policies and laws that are friendly to scholarship. Libraries and our associations such as LIBER have an important role to play in shaping policy; we have expertise.

Questions? Contact:

Heather Morrison

hgmorris@sfu.ca

http://pages.cmns.sfu.ca/heather-morrison/

The Imaginary Journal of Poetic Economics

http://poeticeconomics.blogspot.com

References

- Access to Knowledge (WIPO site) http://www.wipo.int/wipo_magazine/en/2008/06/article_0007.html
- Anti-Counterfeiting Trade Agreement (ACTA) (Government of Canada) http://www.international.gc.ca/trade-agreements-accords-commerciaux/fo/intellect_property.aspx
- ACTA (EU) http://trade.ec.europa.eu/doclib/press/index.cfm?id=552
- ACTA (IFLA) http://www.ifla.org/en/news/ifla-issues-position-statement-on-the-anti-counterfeiting-trade-agreement-acta
- Bergstrom, T. C. (2001). Free labor for costly journals? *Journal of Economic*
- *Perspectives, 15*(4), 183-198.
- Copyright for creativity https://www.copyright4creativity.eu/
- Driver / Confederation of Open Access Repositories (COAR) http://www.driver-repository.eu/
- Earth Hour http://www.earthhour.org/
- Hall, Stuart. Encoding / decoding. In Stuart Hall, Dorothy Hobson, Andrew Love, and Paul Willis (eds.), Culture, Media, Language, pp. 128-38. London: Hutchinson, 1980.
- Houghton, John. Open access in UK Higher Education. From *Implications of alternative open access publishing models*. Presentation: Berlin, 2010. With permission.
- Houghton, J. (2010). Economic implications of alternative pricing models: self-archiving
- and repositories. *LIBER Quarterly* 19:3/4. Retrieved June 23, 2010 from http://liber.library.uu.nl/publish/issues/2009-3_4/index.html?000478
- Morrison, H.; Owen, B.; Taylor, D.; Waller, A.; Vezina, K. Open access journals support in Canada. Presentation: Canadian Association of Learned Journals (CALJ) Annual General Meeting, June 1, 2010, Montreal, Canada http://eprints.rclis.org/18676/
- Morrison, H. et al. Require open access to results of research funded by the Canadian taxpayer. Submission to Canada's Digital Economy Consultation, July 9, 2010 http://de-en.gc.ca/2010/06/16/require-open-access-to-results-of-research-funded-by-the-canadian-taxpayer/
- OpenDOAR http://www.opendoar.org/
- Prosser, David. 2010. Open access policies in Europe. http://www.openscholarship.org/upload/docs/application/pdf/2010-05/david_prosser_-_oa_policies_in_europe.pdf
- Swan, A. (2010) Why your university should care about Open Access: some economic considerations. In: *JISC Conference 2010*, 12/13 April 2010, London. http://eprints.ecs.soton.ac.uk/20934/
- Vaidhyanathan, S. The googlization of everything. http://www.googlizationofeverything.com/
- Ware, M., & Mabe, M. (2009). *The stm report: An overview of scientific and scholarly journal publishing*. Oxford: STM: International Association of Scientific, Technical and Medical Publishers. Retrieved from http://www.stm-assoc.org/news.php?id=255