

# Small scholar-led scholarly journals: Can they survive and thrive in an open access future?

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## Abstract

This article presents early results of a research project designed to further our understanding of how to ensure that small scholar-led journals can survive and thrive in a global open access knowledge commons. This phase of the research focuses on generation of ideas through interviews and focus groups with 15 participants involved in producing small scholar-led journals that either are or would like to become open access. Although a couple of journals reported that they could survive in an open access future based on existing resources, most were concerned about survival and none expressed confidence that they could thrive in an open access future. These journals are far more diverse than one might imagine. Comparing the costs of article production from one journal with another might not make sense. A number of avenues for further research are discussed.

## INTRODUCTION

[Open access is] the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds. Removing access barriers to this literature will accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge. (Budapest Open Access Initiative, 2002).

Since 2002, there has been substantial growth in the two major approaches to open access (OA), OA archiving and OA publishing, as documented in the quarterly series *The Dramatic Growth of Open Access* (Morrison, 2007). However, most scholarly journal publishing is still funded through subscription revenue. I argue that developing economically sustainable approaches to OA publishing is essential to further the transition to OA (Morrison, 2013). My current research programme *Sustaining the Knowledge Commons* (2014) aims to further our understanding of how to manage an economic transition to a global OA knowledge commons.

A global OA knowledge commons would be a collective sharing of all the knowledge of humankind, free of charge to anyone interested in reading, with minimal limitations to accommodate other public interest priorities such as protection of individual privacy. In addition, my idea of the knowledge commons is one that is open to contributions from anyone

qualified. *Resource Requirements of Small Scholar-Led Journals*, the subject of this article, is one of the lines of research within this overall research programme. The other lines of research include a longitudinal study of OA article processing charges of the minority of fully OA journals that use this business model (Morrison, Salhab, Calvé-Genest, & Horava, 2015) and a macro-level analysis of the potential for economic transition designed primarily for academic libraries.

From 1900 to 1940, almost all scholarly publishing was in the hands of the scholarly societies (Mabe, 2003). As of 2005, a study of journals listed in Ulrich's by Crow (2006) found that commercial publishers owned outright 45% of peer-reviewed scholarly journals and published another 17% on behalf of not-for profits. Note that Ulrich's was developed primarily as a directory of serials for purchasers, not for this type of research, and so these results likely overstate the involvement of commercial publishers and journals published in the developed world. As Crow explains, the small size of society publishers is a structural constraint that makes it difficult for them to succeed. Over 90% of society publishers have just one title, and 97% publish three or fewer journals. Crow recommends the formation of publishing cooperatives as one option to overcome this constraint. Edgar and Willinsky (2010) ask whether the relative ease of publishing online today has led to a 'certain renaissance' of the scholar-led publisher. Their survey of over 900 journals using the OA Open Journal Systems (OJS), most OA or providing free access to back issues, found that many were small scholar-led operations.

### Key points

- There is no average cost of article production because journal articles can be brief or monograph length, technically simple or complex.
- Almost all scholar-led journals studied that are, or would like to be, open access, are concerned about their survival in an open access future.
- Providing ongoing open access requires at least modest support, especially for staffing, even for journals run almost entirely by volunteers.
- Library philosophical support for open access would be more effective if it were backed up by equitable economic support.
- Paying over \$1,000 for an article processing fee for an OA author but charging a scholar \$1,000 a year to host their journal is not fair.

The average revenue per article reported by Edgar and Willinsky for the OJS journals was \$188 per article. By my calculations, based on 2008 research by the UK-based Research Information Network (RIN) (2008), global industry reporting by Ware and Mabe (2009) and an estimate of global peer-reviewed journal production by Björk, Roos, and Lauri (2008), this is about 4% of the over \$US4,300 that libraries around the world currently spend for every peer-reviewed research article (Morrison, 2013). This amount likely underestimates the full cost for many journals. For example, the cost of subsidized journal hosting may not be included. Also, this amount may not be sufficient to sustain all of these journals. However, there is a lot of wiggle room between \$188 and the over \$4,300 currently spent globally by academic libraries for every peer-reviewed journal article produced in the world (Morrison, 2013).

Bergstrom and Bergstrom (2006) found that not-for-profit scholarly journals in several disciplines were less costly to produce than commercial journals and were of higher quality or value to authors in terms of numbers of citations to articles. This suggests that the not-for-profit sector could be important for sustainable OA economics.

Finally, as recently summarized by Scott-Lichter (2014) in *Learned Publishing*, scholarly societies and associations are engaged in many other activities besides publishing itself that support what I call the knowledge commons. Unlike the commercial sector that returns profits to private investors or shareholders, not-for-profits use surpluses to fund conferences, scholarships, and educational activities and support the advocacy work that some scholarly societies undertake to inform the public interest.

## METHOD

The overall method used for this research at this early phase is grounded theory. This approach, as initially articulated by Glaser and Strauss (2009) involves generating ideas and theories from observation, a qualitative, inductive approach. Eight interviews and one focus group were conducted. This is a small, non-random sample. Results are useful for generating ideas for further research but cannot be generalized.

### Interviews

After obtaining ethics clearance from the University of Ottawa research office, a bilingual English/French call for participation was sent via e-mail

to the Canadian Association of Learned Journals listserv, the Society for Scholarly Publishing listserv and posted to the social media site of the Public Knowledge Project (responsible for development of OJS Public Knowledge Project (PKP), 2015). The call invited editors of small scholarly journals that either are or would like to be OA, to participate in a virtual (phone or skype) interview. Participants were given a choice of confidentiality/anonymity or OA to their interviews (e.g. transcripts or the audio recordings would be made openly available according to the interviewee's choice). Eight interviews were conducted from December 2013 to February 2014. The interviews were very open-ended, with probe questions prepared in advance to explore the human and technical resources required to support the journal, and whether participants felt that the journal had sufficient resources to survive and thrive in an OA future and barriers to OA. The focus group protocol was developed on the basis of the interview questions with some adjustments to the ethics certificate to accommodate minor differences in handling of confidentiality and some added questions drawn from the interviews.

## RESULTS

None of the interviewees agreed to make their interviews OA. In retrospect, this makes sense. Participants talked about their staff, supports available through their university or funding agency in a context of concern about cuts, and support or lack thereof for OA in their local groups. A small, specialized journal in a limited geographic region and/or with a distinct specialization is usually one of a kind and could easily be identified. For this reason, results are presented for the group as a whole without presenting a unified story of any particular journal and described in general rather than specific terms, for example, 'humanities journal' rather than 'history journal, fine arts or music journal'.

### Demographics

Details of the journals represented are presented in Tables 1–3.

All but two participants played a major role in coordinating the academic (as opposed to administrative) work of publishing their journal. Most were something along the lines of academic editor-in-chief, although there was a wide variety of titles and approaches to division of labour. Most participants were volunteers. A few were paid staff, one full time, another 0.8 full-time equivalent and two others (editorial assistants) about 0.2 full-time equivalent. One participant was retired. Editing experience ranged from very limited experience primarily due to a practice of rotating of editorial duties in society journals and editors with decades

**TABLE 1** Country of origin.

|        | Interviews | Focus group | Total |
|--------|------------|-------------|-------|
| Canada | 4          | 7           | 11    |
| USA    | 2          |             | 2     |
| Italy  | 1          |             | 1     |
| UK     | 1          |             | 1     |
| Total  | 8          | 7           | 15    |

**TABLE 2** Publisher type and size (only one peer-reviewed journal unless otherwise indicated).

|   | Interviews | Focus group | Total |
|---|------------|-------------|-------|
| Society journal, based at university*                           | 4          | 7           | 11    |
| Independent scholar, based at university                        | 2          |             | 2     |
| University-based, type (society or independent scholar) unknown | 1          |             | 1     |
| Professional publisher, 3 peer-reviewed journals                | 1          |             | 1     |
| Total   | 8          | 7           | 15    |

\* One of these publishers also has a single community-oriented trade journal.

**TABLE 3** Disciplines (by broad categories to protect confidentiality).

|                                | Interviews | Focus group | Total |
|--------------------------------|------------|-------------|-------|
| Humanities                     | 4          | 2           | 6     |
| Humanities and Social Sciences | 3          |             | 3     |
| Social Sciences                |            | 3           | 3     |
| Health Sciences                | 1          |             | 1     |
| Sciences                       |            | 1           | 1     |
| Not known                      |            | 1           | 1     |
| Total                          | 8          | 7           | 15    |

of experience with the same journal. Most of the participants were full-time academics contributing to publishing as part of their research or service commitments, in some cases with the benefit of a course release.

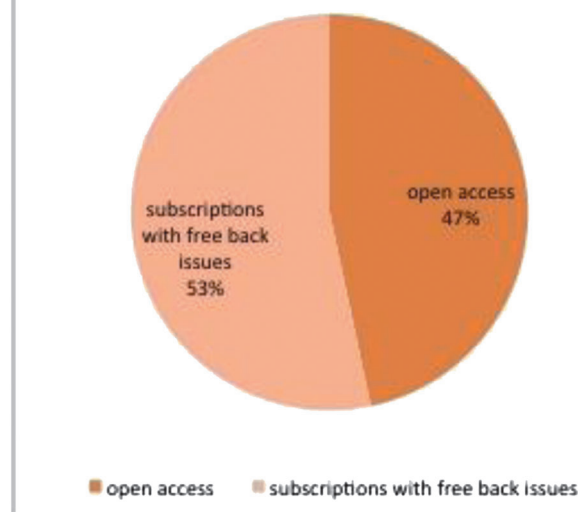
Seven of the 15 journals (one-third) are fully OA. The rest are subscriptions based with free back issues, after an embargo period (usually 2 years, one journal is 3 years, and one is 4 years). One of the journals is hybrid, subscriptions based with an OA option. Four of the seven fully OA journals are born online OA journals. The other three transitioned from subscriptions to OA; all three dropped their print editions in the process of transitioning to OA. None of the fully OA journals produces a print edition. One journal started off as online and OA with a library subsidy but was forced to move to a subscriptions model when the subsidy ended. Only one of the subscriptions-based journals is online only; all others have both print and online editions. Some print-based journals had digitized back issues while others had not (Fig. 1).

### Resources to survive and thrive in an open access future

The best way to characterize almost all responses to a question about whether their journal has the resources to survive and thrive in an OA future is 'it depends'. There was only one clear no to this question.

The strongest positive responses were 'yes, although better technical support and training would really help' and (paraphrasing) 'yes, and if we had more resources to provide for better design, marketing and translation, which is lacking'. In other words, the strongest positive responses are 'we can survive' and *no one indicated confidence*

### Open access status of journals

**FIGURE 1** Open access status of journals.

that their journal could thrive in an open access environment. The publisher with three journals, two OA and one scheduled to move to OA in the near future, expressed a lot of trepidation about 'all those subscription dollars' that would be lost and noted that the two OA journals are subsidized by the subscription revenue of the non-OA journal. A number of participants (Canadians) noted that their ability to remain or become OA would depend on the journal's success in obtaining or renewing subsidy funding. At best, subsidy funding such as SSHRC's Aid to Scholarly Journals (2015) is available for 3 years at a time. Many are concerned about the future of subsidy programmes in light of overall government cutbacks at both the provincial and federal levels in Canada. Similarly, concerns and experiences were noted about cuts to university-based support. Institutions are providing a variety of types of support, such as funding to hire graduate students as editorial assistants, a portion of the time of a support staff person, and facilities. This kind of in-kind support is somewhat unstable and vulnerable to cutbacks in tight financial circumstances. As noted previously, one journal started OA and moved to subscriptions once the subsidy programme was ended.

### Who does the work of the journal

All but two of the journals have a full-time academic serving a major role in the editing of the journal (e.g. encouraging authors and editors of special issues, making editorial decisions, coordinating the work of the Editorial Board). For many of these editors, this work is seen as part of their academic research or academic service duties. In some cases, subsidies are available for a course release (i.e. to hire someone else to teach a course so that the professor can devote time to the journal). Two of the journals are run entirely with volunteer labour. Most commonly, the journals have part-time support staff, sometimes shared with other journals. Duties of support staff range from financial and subscriptions management (especially important for journals still

publishing in print) to communicating with authors and peer reviewers to copyediting. In several cases, graduate students do this work. One journal sees the opportunity to hire graduate students as a fabulous training opportunity for the students while another had had a recent negative experience and was not enthusiastic. Translation was important for many of the journals, particularly Canadian journals due to the bilingual requirements of federal funding agencies. Journals in Québec had particular linguist requirements due to local language law; anglicisms that are considered acceptable in other regions of *la francophonie* (including France) are contrary to Québec law. For example, in Paris, it is considered acceptable to use the term e-mail, but in Québec, the term is courriel. For some journals, support staff are also important to maintain links with the scholarly community, that is, having a consistent person communicating with authors and especially with peer reviewers. For society journals, there was often some overlap between society business and publishing.

### Journal hosting and support services

All the Canadian journals use OJS, hosted by university libraries or in one case by a university press in the USA, or the Érudit platform. Several of the Érudit journals are either using or interested in using OJS to supplement Érudit's services. OJS is a journal management system, tracking communication between authors, reviewers, and editors, while Érudit focuses more on article production and hosting. Two journals have developed separately their own homegrown html or web-based systems. One of these journals would like to move to OJS but does not have the funds for a hosted service or the local knowledge and server support to manage their own instance of OJS. Two participants have outsourced journal production. One is satisfied; the other is looking for a new platform. One participant noted that there is a steep learning curve with OJS, a concern because of the practice of rotating editors every 2 years.

### Hard dollar costs

Overall, hard dollar costs vary widely and likely to some extent with the funding available for the journal, that is, journals that rely entirely on volunteer labour and in-kind support have no direct spend. For journals that are still producing a print edition, this is a major cost item, even though in most cases print subscriptions have decreased. The hard dollar costs associated with journal hosting ranged from free for a few journals (provided for free through institutional or library support) to \$CAD1,250 per year for two issues to \$US3,000–\$US4,000 to over \$US12,000 per year (for the publisher with several journals). One journal outsources article production (layout) at a cost of \$400–\$600 per article. Other costs include layout editing and translation. One journal funds a professor's course release that used to be subsidized.

### Barriers to open access

The most common barrier to OA mentioned by all but one journal is figuring out *how to make ends meet*. Specific concerns mentioned include loss of subscriptions revenue, loss of royalties (not a huge amount but still a factor), potential loss of society members if the journal is no longer a

membership benefit, and the journal's ability to pay for support staff and vendor services. Concerns about potential loss of subsidy funding are not limited to OA. Although many journals have full buy-in to OA in principle, several reported issues in this area. One journal has nearly total buy-in: 'we have to overcome the negative prejudice of one of our members...[x] is just totally against it'. Another has just one person pushing for OA: 'that at this point there is absolutely nobody in our society talking about that... except for me'.

### Library support

Support from libraries was variable. In some cases, substantial support in the form of journal hosting and sometimes staff assistance was provided, and where provided, these services were very much appreciated. As one of the fully OA journals reported:

the university library supplies tech support when we are putting our issue online, there is someone in the library who assists us, and the other support was that the library supporting the scanning of all our back issues when we went online, they scanned all our back issues, so all the back issues in the beginning back to 1978 are online and they're freely available open access.

Two of the participants noted that they were aware of such services being available through other libraries but not their library at this point and wished they had access to these services.

A few participants found that their libraries were very strong on philosophical support for OA and very good at providing education and support for scholars-as-authors but that economic and information support was not provided for scholars-as-publishers. As one journal (with a 4-year moving wall) expressed it:

we have had discussions with people in the library, they have urged us in strenuous terms to go open access, they have offered all kinds of philosophic reasons for why it's important and they're preaching to a choir, we agree that it's important, but no, they have not offered any kind of model for how it might work financially.

Another expressed the difference between support for scholars-as-authors and scholars-as-publishers: '[the] library will pay [a] \$1,000 APC in the sciences but this will not work in the humanities; they charge a humanities journal \$1,000 for journal hosting'.

Perhaps the best illustration of broad-based library philosophical support for OA not being backed up by library financial support is an OA journal that reported a total loss of all of their library subscriber memberships in the move to OA. As the participant expressed it:

...We used to have about forty library members, but when we went to open access online, we lost the whole bunch of libraries. Yeah, so basically we sent everybody, you know, a letter saying we are going to open access online, the annual membership is only [less than \$100], we hope you will continue to support us even though there are no longer print journals, and then a whole flu of cancellations came in from a whole bunch of libraries, which we had kind of thought might happen but given how cheap we are, I have to say I was really disappointed when it indeed did happen especially from the whole

bunch of libraries [for whom this is particularly relevant]. I was going, seriously [less than \$100]?

## Benefits of open access

The most common benefit of OA mentioned as a significant motivating factor in the decision or desire to move to OA is the potential to expand readership. For example, for francophone journals OA would expand readership in francophone Africa, where few institutions can afford subscriptions. One benefit of online-only OA noted by participants is eliminating the need to place limits on pages and articles, which means the journal is free to accept longer articles if desired and a small journal can publish a special issue with a substantial number of articles, beyond what they could have achieved if they still had to publish in print. One of the journals mentioned that leaving copyright entirely in the hands of authors eliminated all copyright permissions work for the journal.

## DISCUSSION

Some small journals appear to be able to manage OA with minimal resources (i.e. volunteer labour and free journals hosting services). However, the results of discussions to date suggest that it would not be wise to assume that all small scholar-led journals have the resources needed to survive and thrive in an OA future. This includes journals that are currently OA. Participants from journals that are OA and journals that would like to be fully OA expressed similar concerns about ongoing resources in an OA environment. The most frequently cited need was ongoing, reliable funding to provide for staff resources (salaries in the case of support staff and sometimes course release funds in the case of professors) and technical support (e.g. journal hosting).

The subsidy model is common in Canada, where scholarly publishing, particularly in the social sciences and humanities, has never been profitable. The Government of Canada's Social Sciences and Humanities Research Council (2014) has a long-standing *Aid to Scholarly Journals* programme. Grants are awarded on a competitive basis following a journal-level peer-review process for a period of 3 years at a rate of \$CAD850 per accepted, peer-reviewed scholarly article. The per-article subsidy facilitates but does not require OA.

One potential advantage of the SSHRC system is that the journal-level peer review provides a non-metric means of assuring quality control at the journal level. The potential of systems like this as an alternative to impact factor and/or as a means of developing a reliable and valid list of trustworthy journals to publish in merits further exploration.

The uncertainty of ongoing funding due to the 3-year review cycle is a disadvantage. Some of the SSHRC regulations with respect to content, particularly quotas for Canadian content and gender split, as well restrictions on type of content supported, were noted as negatives by some of the participants. For broader transition to OA, programme funding would need to be expanded. The current keen interest by funders in OA and supporting a transition to OA suggest that it might be timely to pursue this strategy. Reckling & Scherag (2012) note that the Austrian Science Fund came up with a very similar model in 2012, inspired by the SSHRC *Aid to Scholarly Journals* programme, providing

about €1,100 for every article published in a journal that publishes about 20 articles per year (€22,000 per year).

The wide diversity of small scholar-led journals illustrated by this small sample suggests that a one-size-fits-all approach to support may not be the most productive route. A journal that often produces monograph-length works is something between journal and book publisher. The journal of a society with strong community connections likely needs to include a wider variety of content than a strictly academic journal. Institutions and research funders often support this kind of activity in such forms as support for knowledge transfer, media relations, or institutional external communications. This suggests potential alternative approaches to advocacy for economic support for the work of the journal.

The philosophical arguments for OA, and the benefits of OA in terms of greatly expanded potential readership, are generally well understood. Information and assistance tailored to scholars-as-publishers would be a useful addition to the current educational focus on scholars-as-authors. Library and other institutional support is currently highly variable. Some university libraries provide journal hosting services, but not all. A library may pay OA article processing fees for authors but charge local professors for journal hosting services for OA journals.

The case of the OA journal losing all its library memberships at the rate of (less than \$100) for an annual membership may not be quite what it at first appears. A university library will not achieve noteworthy cost savings cancelling a journal at this rate. Even if the library would like to support an initiative like this, it may be hard to explain a voluntary payment of this kind to a university financial administrator or auditor. The cost of tracking and paying such small amounts is likely much higher than the subscription cost. This may help to illustrate the advantages of the cooperative model described by Crow from the libraries' perspective. There are administrative efficiencies for libraries in supporting cooperative-like initiatives like Open Humanities Press and Knowledge Unlatched that compare favourably with the administrative disadvantages of maintaining large numbers of very small annual payments.

## Limitations

This research involves a small, non-random sample that draws heavily from Canadian scholarly journals. Results cannot be generalized. The need to protect the anonymity of participants and their journals limits my ability to identify issues and opportunities that may be more relevant in a particular geographic region or scholarly discipline. The focus of this study on small scholar-led journals omits a large segment of scholarly publishing, professional publishers, and professional/society partnerships.

## FURTHER RESEARCH

As an idea-generating exercise, this research has brought to the forefront a number of avenues for future research that would be beneficial to developing and sustaining a global OA knowledge commons. It is clear that more work is needed to understand how to develop sustainable means of supporting fully OA journals. Historical and social sciences



approaches could be used to study the development and current operations of scholarly journals in the context of the formal and informal scholarly societies, associations, and communities within which these often emerge and with which they are often intertwined.

Research on the value provided to universities and research organizations themselves through support for scholarly societies and publishing services, such as local leadership opportunities, knowledge transfer, and non-academic community relationships, could become the foundation for advocacy for support for these activities. A case study approach might be used to explore the transformation of publishing *per se* (e.g. combining publishing services and data archiving, and expanding article sizes) as this would permit a focus on journals actually involved in a particular type of transformation.

Support for scholarly publishing activities at the university level takes place within the overall context of a university system, a topic that merits further attention. The traditional gift economy of scholarly publishing where authors and peer reviewers give away their work for free developed in a particular historical context, where 'publish or perish' has long been the norm with the rewards connected very indirectly through the tenure system. Universities in many countries are facing significant financial constraints, as evidenced by the cutbacks and fears of further cutbacks expressed by a number of participants in this study. More research is needed to understand scholarly publishing in a systemic context. For example, modest supports for scholarly publishing at a university such as a few hours per week of support staff time that are cut as an unnecessary expense may result in an increasing portion of scholarly publishing in the hands of large, profit-oriented commercial publishers, that is, such cuts may be penny wise but pound foolish.

Similar studies involving professional publishers and professional/society publisher partnerships would provide a fuller picture of the needs of scholarly journals to transition to OA.

## CONCLUSIONS

There is widespread philosophical support for OA. However, the results of this research underscore the need to address the questions of how scholarly journals, in this case small independent scholarly journals, are going to make ends meet in an open-ended future. This was seen as a key challenge for 14 of the 15 journals involved to date, whether the journals are already OA or not. Small journals are far more diverse than one might think. This suggests that it might not be profitable to pursue a 'one-size-fits-all' approach. The length of typical articles can range from quite short to monograph length. One journal is very esoteric and tailored to an almost exclusively academic audience, while another engages a broader community and has greater diversity of content. This was a small study, not random, and focused on just one type of scholarly publisher. Results are suggestive for future research but cannot be generalized. This early research will form the basis of development of a series of case studies to address this diversity

## ACKNOWLEDGEMENTS

The author gratefully acknowledges the support of Canada's Social Sciences and Humanities Research Council through an Insight Development Grant and contributions to the conduct and transcription of interviews and focus groups by members of the Sustaining the Knowledge Commons team, Alexis Calvé-Genest, Jihane Salhab, Guinsly Mondésir, and César Villamizar.

## REFERENCES

- Bergstrom, T. C., & Bergstrom, C. (2006). *The economics of scholarly journal publishing*. Retrieved from <http://octavia.zoology.washington.edu/publishing/>
- Björk, B., Roos, A., & Lauri, M. (2008). Global annual volume of scholarly peer reviewed journal articles and the share available via different open access options. In L. Chan, & S. Mornati (Eds.), *ELPUB2008. Open Scholarship: Authority, Community, and Sustainability in the Age of Web 2.0 - Proceedings of the 12th International Conference on Electronic Publishing*. Retrieved from [http://elpub.scix.net/cgi-bin/works/Show?178\\_elpub2008](http://elpub.scix.net/cgi-bin/works/Show?178_elpub2008)
- Budapest Open Access Initiative (2002, 14 February). *Read the Budapest Open Access Initiative*. Retrieved from <http://www.budapestopenaccessinitiative.org/read>
- Crow, R. (2006). Publishing cooperatives: An alternative for not-for-profit publishers. *First Monday*, 11(9). Retrieved from <http://firstmonday.org/article/view/1396/1314>
- Edgar, B. D., & Willinsky, J. (2010). A survey of the scholarly journals using open journal systems. *Scholarly and Research Communication*, 1(2). Retrieved from <http://www.src-online.ca/index.php/src/article/viewFile/24/40>
- Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: Strategies for qualitative research*. New Brunswick, USA: Aldine Pub. Co.
- Government of Canada. Social Sciences and Humanities Research Council (2014). *Aid to scholarly journals*. Retrieved from [http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/scholarly\\_journals-revues\\_savantes-eng.aspx](http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/scholarly_journals-revues_savantes-eng.aspx)
- Mabe, M. (2003). The growth and number of journals. *Serials*, 16(2), 191–197.
- Morrison, H. (2013). Economics of scholarly communication in transition. *First Monday*, 18(6). doi:10.5210/fm.v18i6.4370
- Morrison, H. (2007, 11 November). The dramatic growth of open access, [Web log post]. Retrieved <http://poeticeconomics.blogspot.ca/2006/08/dramatic-growth-of-open-access-series.html>
- Morrison, H., Salhab, J., Calvé-Genest, A., & Horava, T. (2015). Open access article processing charges: DOAJ survey May 2014. *Publications*, 3, 1–16. doi:10.3390/publications3010001
- Public Knowledge Project (PKP) (2015). *Journal hosting*. Retrieved from <https://pkpservices.sfu.ca/content/journal-hosting>
- Reckling, F., & Scherag, E. (2012). Initial funding for high-quality open access journals in the humanities and social sciences. *Zenodo*. doi:10.5281/zenodo.16462
- Research Information Network (RIN) (2008). *Activities, costs and funding flows in the scholarly communications system in the UK*. Retrieved from <http://www.rin.ac.uk/system/files/attachments/Activites-costs-flows-report.pdf>
- Scott-Lichter, D. (2014). Learned societies: resilience not reliance required. *Learned Publishing*, 27(2), 83–84. doi:10.1087/20140201
- Sustaining the Knowledge Commons* [Web log] (2014). Retrieved from <http://sustainingknowledgecommons.org>
- Ware, M., & Mabe, M. (2009). *The STM report: An overview of scientific and scholarly journal publishing*. Retrieved from [http://www.stm-assoc.org/2009\\_10\\_13\\_MWC\\_STM\\_Report.pdf](http://www.stm-assoc.org/2009_10_13_MWC_STM_Report.pdf)