

MONOGRAPH PUBLISHING IN AN OPEN ACCESS CONTEXT

A review for the Association of Canadian University Presses

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Executive Summary

The Association of Canadian University Presses (ACUP) is a partner in the common goal of all Canadian scholarly funding agencies and participants in the academic system: the development, production and dissemination of adjudicated research. University presses are a primary mechanism by which publicly funded research is distributed and made discoverable both within and outside the Academy. This report reflects the material realities of this mechanism, and highlights the additional resources required in order to fulfill this goal in an Open Access context.

The Canadian research funding agencies have indicated a clear and near-term commitment to Open Access, for journals, principally by making OA a condition of funding support. To date, there is no similarly clear policy relating to monographs. The Tri-Agency Policy (geared to journal articles) and the announcement by the Federation for the Humanities & Social Sciences on proposed changes to the Awards to Scholarly Publications Program by April 2015 are, though, silent on the financial implications of these developments. In whatever form it is implemented, OA will reduce publisher revenue from subscriptions and sales. There are ways to offset those reductions. They can take the form of increased funding for dissemination in research grants, and higher institutional support. And embargoes - specifically, the length of the embargo - on the availability of the OA version also play a key role in managing Open Access initiatives.

Reviews of Open Access policies and practices in Canada, the US and UK show that there are no established business models for monographs in either the commercial or university scholarly publishing sectors. For journals, the requirement of article processing fees as a condition of publication is increasingly common. And while these may allow for the continued viability of journals published on an OA basis, they can be a barrier to authors without appropriate funding. There is therefore a risk that without careful planning and an understanding of the cost aspects, Open Access may distort the flow of content by favouring authors who are funded to a level sufficient to pay those fees, while also directing them to what may not be their journal of choice.

Although the extension of Open Access to monographs might seem logical, there is consensus in the scholarly publishing community that it is premature to go in that direction. There is insufficient data on the cost and revenue models for monographs, despite studies such as the Open Access Publishing in European Networks (OAPEN) project. And in the UK, there is broad agreement by the government, the universities and the research councils that it may take another four to six years to develop viable OA monograph policies and funding strategies. If Canadian funding agencies want to take this path, then, a lot of work needs to be done to identify the costs of monograph publishing, and the relationship between OA and sales. Press directors interviewed for this report stress the differences across disciplines, and the need to correlate unit sales (and revenues) with embargo periods.

ACUP will work with funding agencies to explore possibilities for developing viable Open Access business models in Canada. These must be evidence-based, so that the implementation of OA is aligned with the sustainability of the presses, and the channels they provide for Canadian-authored works. Next steps include meeting with the Federation with a view to understanding the timelines; sharing some of the data collected for ACUP on the costs of monograph publishing; obtaining UK and US intelligence relevant to OA scholarly publishing; assisting with the research and pilot projects needed to assess the impacts of monograph OA; and working with the agencies to develop grant models and other financial supports that better reflect the costs of Open Access. Given that ASPP-funded monographs currently lose on average as much as \$15,000 after allocating overheads, and Open Access could reduce revenues by as much as 50%

for each title, the financial gap for ongoing sustainability becomes even wider. If Canadian university presses are no longer financially able to produce high quality publications reflecting the calibre of Canadian research output in the social Sciences and Humanities, it is reasonable to assume the work will go unpublished. Certainly foreign publishers would not undertake publishing works that guaranteed an impecunious result.

PART 1: BACKGROUND AND CONTEXT

What is Open Access?

The birth of OA is usually traced to the Budapest Open Access Initiative (February 2002) which defined it as the "free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers...the only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."

There are several ways that OA can be achieved, but for journal articles it typically involves:

- publication in an OA journal, with an embargo of not more than 12 months - "gold" OA; or
- archiving the final peer-reviewed article (but before copyediting and typesetting) in an institutional repository where it is freely accessible within 12 months - "green" OA.

For the purposes of this report, it isn't necessary to describe these in detail. The Tri-Agency policy allows both options. However, there are significant differences at the distribution end of the cycle, and these are discussed in later sections of the report.

The true genesis of OA can be traced several years further back, certainly to the mid-1990s. The Association of Research Libraries published "Scholarly Journals at the Crossroads" in 1995. There were several other studies earlier that decade, and in September 1995 an AUCC-CARL Task Force released a discussion paper "Towards a New Paradigm for Scholarly Communication". The trigger for the Task Force was financial ("...control of academic publishing lies in the hands of a relatively small number of major publishers whose pricing practices...") and many of the recommendations echo the goals of OA. They included institutional repositories that would both archive and disseminate, the need to revisit aspects of peer review, a review of whether hiring, tenure and promotion practices were negatively impacting scholarly communication, and the importance of developing partnerships to develop and apply technological solutions - with these partnerships including university presses, although none of them were represented on the Task Force. Significantly, though, it was acknowledged that while costs might reduce, they would not be eliminated, and that there would be a shift away from library acquisitions and towards content management and dissemination.

OA and faculty

It may be helpful to discuss here the peer review and tenure/promotion issues flagged by the AUCC-CARL Task Force, because these were identified as possible impediments to changes in scholarly communication. Nearly 20 years on, there has been no systematic review in any country. The Task Force canvassed the possibility that peer review might transition to an ongoing and progressive function, and that the status of

an article might therefore change over time. This has not happened. Journals that publish only peer reviewed articles have not changed their protocols.

Paul Courant - who in addition to directing the University of Michigan Press is also a professor of economics - says that empirically he doesn't doubt that there is a correlation at an informal level between where articles are published and their impact on tenure and promotion decisions, because most of the prestigious journals have been around for quite a while, and open access journals are a fairly recent invention. But he maintains that faculty relies too much on the reputation of journals and not enough on their own careful reading, when making tenure decisions. Works in open access journals will usually be in relatively new journals which will have relatively less prestige. However, he argues that there are now many open access journals, in many fields, that have good reputations and where publication adds to the strength of a tenure case. Open access *per se* is not therefore the issue. There are also, he points out, many fields in which open access preprints are central in scholarly publication, and therefore in promotion and tenure. In his view, "open access itself is orthogonal to what the Academy should be looking for, which is the quality and impact of the work".

Anecdotally, the issue is not Open Access as such but the reputation of the journal. Peter Suber, a professor at Earlham College, summarizes what seems to be the consensus position: "All the major open-access initiatives agree that peer review is essential to scientific journals, whether these journals are online or in print, free of charge or 'priced'. Open access removes the barrier of price, not the filter of quality control". [legacy.earlham.edu/~peters/writing/jbiol.htm]. Texas A&M University has a Rule that makes much the same point, although in somewhat tepid terms, in that tenure requires a faculty member (among other things) to "be productive in scholarly or creative activity" and that "whether or not publication in open access journals will be accepted at tenure/promotion time will largely depend on the judgment of the departmental faculty within the disciplines". And Virginia Commonwealth University picks up from there with a more outward-facing resolution that its "promotion and tenure committees should recognize that publication and editorial effort in open access, peer-reviewed journals...offers added value and greater public good that scholarship made only available in expensive journal publications".

In the UK, the recent Research Assessment exercise that all universities have to undergo every five years or so, and on which the level of central funding depends, is that where you publish is crucial. Every journal has an impact rating and some publications will, therefore, "count" much more than others, even if the quality of writing and the number of citations is lower. It follows, then, according to two professors interviewed on this topic, that Promotion committees at UK universities pay a lot of attention to the number and quality of outputs when assessing performance. How quality is judged differs according to the discipline of the candidate. The quality of an output will depend on several factors, including (perceived) originality, significance, contribution to knowledge, etc. The standing of the journal (measured by its impact factor) is more important in medicine than in the social sciences. However, it doesn't much matter whether or not the journal is open access.

Summarizing these assessments, Open Access in and of itself is not currently high on the radar when tenure and promotions decisions are made. Committees typically look both at the content of an article, and where it was published. While some OA journals lack history and prestige, many and perhaps most do not, and it is the "impact" rating that matters, although even that may matter more in some disciplines than others. Given the importance that seems to be placed by some universities on accessibility of content, publication of peer-reviewed articles in OA journals is unlikely to have a negative impact on career progression for faculty.

The Tri-Agency Open Access Policy

Released in October 2013 by CIHR (Canadian Institute of Health Research), NSERC (Natural Science and Engineering Research Council) and SSHRC, this consultation paper articulates how the three agencies intend to promote OA in publishing publicly-funded research. The policy objective is very clear: "...to improve access to the published results of research funded by the Agencies, and to increase the dissemination and exchange of research results." For peer-reviewed journal articles, there is a clear mandate for grant recipients to ensure that these articles "are freely accessible within 12 months of publication, either through the publisher's website or an online repository.

The policy specifically acknowledges that OA has cost implications, and states that "The Agencies consider the cost of publishing in open access journals to be an eligible expense under the Use of Grant Funds". They do not, though, address whether those costs will be adequately allowed for in grants for funded research.

Journals OA (Gold and Green) clearly has a financial impact on publishers. The experience of large-scale private and university presses in the UK and US is that there are viable ways to accommodate OA, but the extent to which it has changed the cost structure and profitability of these publications cannot be determined. Clearly, without realistic embargo periods, subscription revenue will be reduced. The key is to find a balance in terms of embargoes and funding that combines the core goals of OA with the viability of the publication. This has been addressed in the UTP and ACUP responses to the Tri-Agency Policy. Both responses address the fundamental differences between science publications and social science/humanities journals, different funding models across these disciplines, differences in the length and half-life of articles, and the potential relationship between OA, embargoes and subscription cancellations. UTP cites recent UK research by the Association of Learned, Professional & Society Publishers (ALPSP) that indicates a significant risk of cancellation in the event of six month embargoes. This echoes concerns expressed by most of the Press directors interviewed for this report.

This balancing of funding and embargoes is also critical to any workable solution for monographs. Although monographs are not included in the policy, that is likely to change. What a policy for monographs might look like is unknown. Similar reviews in other countries (see for example the UK's HEFCE/RCUK/REF positions) have concluded that it is premature to implement OA for "long-form publications", but that suggests that the question is when, not whether. As Professor Rowland Lorimer observes in his response to the Tri-Agency Policy, there is no research on the potential impact of Open Access in Canada, and that the relevance of foreign research is questionable. It should also be noted that none of that research has generated viable business models.

Perhaps the most glaring fault with the Tri-Agency Policy is that unlike, for example, similar documents released in the UK, it does not incorporate any research into the funding or the publishing implications of Open Access, and there is no discussion of any of these issues. The responses submitted by Canadian stakeholders – and there were also several from outside Canada – go some way towards highlighting these omissions. But the appropriate next step is a consultation process that will allow the evolution of a gradual OA protocol geared to how research is funded in Canada, the role of funding agencies, relationships between those agencies, universities and researchers, and the Canadian university presses.

Awards to Scholarly Publications Program

The Awards to Scholarly Publications Program (ASPP) is administered by the Federation for the Humanities and Social Sciences, and is funded by SSHRC. It follows, with a high level of certainty, that the SSHRC position on Open Access will progressively shape ASPP grant criteria. That position, at least as articulated by the Federation in relation to journals, is quite restrained. It supports the principle, but stresses that OA must be "incremental and flexible, not mandated" and states that "the financial viability of associations and journals must be assured in the transition toward open access". This reference to associations is important, because as Ella Colvin at Cambridge University Press points out, many of the UK learned societies are now struggling to support their journals in the face of declining subscription revenues as open access reduces sales.

Currently, ASPP grants for scholarly books (which includes primarily monographs and contributed volumes) in the humanities and social sciences fund up to 180 titles a year, to a maximum of \$8,000 each. Canadian university presses dominate the list of eligible publishers. The key question is whether a migration of these grants towards an open access mandate for funded publications will have a negative impact on sales revenue. While the Federation has indicated it is sensitive to the financial implications of OA and the importance of a measured approach, the risk is not low. However, this is clearly on the radar and it is therefore important to develop credible business models that demonstrate the economics of monograph publishing and the extent to which additional support might be required. To quote from Federation's recent announcement:

"To date, most Open Access discussions have focused on articles published in academic journals and have not included scholarly books in the humanities and social sciences. As Canada's single largest supporter of scholarly books in the humanities and social sciences, the Federation is taking a leadership role on this issue...The Federation is committed to supporting the dissemination of research through scholarly books and will carefully consider potential impacts on book publishers and authors while crafting its policy. The Federation expects to release a draft ASPP Open Access policy in early- to mid-2014 followed by an open consultation period. It expects to release its final policy in January 2015, to come into effect in April 2015."

There is a clear implication that OA monographs are on the radar for the ASPP.

PART 2: OPEN ACCESS IN PRACTICE

Open Access in other countries

In order to confine this report to manageable and relevant dimensions, only the UK and US are addressed in any detail, through a review of key policy and position statements, and interviews with directors of selected scholarly presses. Although there is therefore a degree of generalization, the picture that emerges is broadly representative of how OA is being implemented in the other two leading English-language markets. Also included is an analysis of the OAPEN final report, which brings in some other perspectives.

United States

The scope of scholarly publishing in the US almost automatically precludes a unified approach to Open Access. The principal document that has been reviewed is "Sustaining Scholarly Publishing: New Business Models for University Presses" published by the AAUP in March 2011. In addition, there have been important announcements on behalf of the US government and the principal funding agencies. Interviews have been conducted with:

- Peter Berkery, Executive Director, AAUP
- Alison Mudditt, Director, University of California Press
- Paul Courant, Acting Director, University of Michigan Press
- Gabriel Dotto, Director, Michigan State University Press

In addition, materials from several other Universities were reviewed.

In response to a policy memorandum issued in February 2013 by the Office of Science & Technology (OST) ["Increasing Access to the Results of Federally Funded Scientific Research"] the AAUP outlined how its members were committed to "confront the many challenges...to the existing system of scholarly communication that Open Access presents". They went on to stress that this necessarily involved balancing "the mission of scholarly communication with its costs".

Peter Berkery emphasizes the unusual characteristics of funded research in the US which, he argues, may limit the comparisons with other countries. There is, for instance, very little federal funding of HSS (humanities and social sciences) research, which has a very different publishing model to STEM (Science, Technology, Engineering & Math) publishing. The latter is more easily susceptible to sustainable OA publishing, and "publishers have acquired the accumulated data and experience to project the embargo period required under certain OA models to recover the costs associated with the publication of a STEM journal article. Conversely, and allowing for what Berkery terms "the longer half-life" of HSS scholarship, "similar knowledge with respect to an HSS monograph is scarce". However, the OST proposed policy recognizes the need to move carefully, and advocates for flexibility in developing funding agency guidelines. Four key points therefore arise:

- Even among the 130+ AAUP members, there is no consensus on how to develop viable OA models, although they have more experience with journals than monographs.
- Reflecting the strong bias in favour of STEM funding, they have very little experience with HSS publishing in an OA environment.
- Federal funding agencies in the US are being urged to understand the economics of Open Access publishing as they develop guidelines for researchers.
- There are no established OA models for HSS monographs.

Since the policy was released, Berkery says that the scope of OA is being questioned, and it's possible that at least in the medium-term, it may not embrace HSS monograph publishing. He believes that many of his members see it as more of a threat than an opportunity, at least in the absence of radically different funding models capable of offering stability. Specifically, there is a widespread belief that without an adequate "pay-to-publish" model that can offset what is in any event the continuing decline in revenue from "pay-to-read" sales, this strand of publishing is at risk from OA. With the right model, though, there could be some upside from print sales once the costs of publication are underwritten. But so far, none of

this is proven. The few isolated examples of what seem to be OA successes do not at this stage amount to a trend.

Paul Courant's background is unusual for a press director, and it shapes some of his views on how a university press should respond to open access. He was (and still is) an economics professor, and also served as Library Dean. His basic premise is that "someone has to pick up the tab". He believes that the Academy (and this includes the learned societies) must take more responsibility for funding the dissemination of scholarly content, which revolves around the digital file. If that is free, then demand for other versions, such as print editions (whether or not PoD) may be very thin. There will be exceptions to that, one of which might be material geared to student demand. Although he is mindful of alternative approaches to dissemination, he acknowledges the crucial role of the university presses in managing key aspects of journal publishing; their high-quality trade programs; in developing series and in making available older materials, for neither of which is funding readily available. Currently, Michigan runs its press on business lines. It has been slow to explore OA, but there are two key initiatives: Digital Culture Books (OA monographs) and Maze Books, which is a program less oriented to selling.

Michigan State University Press (MSUP) is not dealing with OA directly. Dotto has, though, had extensive discussions with colleagues elsewhere in the AAUP membership. He says that of the Presses that have gone (partially) OA, all have seen an undeniable effect on print sales, especially for those books that live mostly through "course adoption", where the user has no use for the volume beyond brief consultation.

There is less of a problem in the hard sciences, where the OA book is usually fully funded to the pre-press stage, so that the Press can take print-on-demand orders as they come and not worry about break-even. The significant problem, in his view, lies in the humanities, where funding (if any) usually falls far short of covering all costs of peer review, editing, typesetting, coding, etc even if the book is meant to be electronic-only.

MSUP is certainly not alone in having no OA initiatives. Even at the much larger Stanford University Press, the recently-retired Director Geoffrey Burn says that they haven't yet moved in that direction. Nor really has the University of California Press (one of the largest) whose Director, Alison Mudditt, advises that their only engagement with OA is with some of their journals. Even that has been confined to Green OA via institutional repositories, so that beyond agreeing to the policy, there is no burden on the Press. All of the university and funder policies in place only apply to journals at this point, so it has not yet become an issue for books. Mudditt believes that most people understand that there simply isn't sufficient money in book-based disciplines (primarily humanities) to cover the costs of OA. She also referred to an initiative called UC Publishing Services, which combines faculty and Press resources to manage and finance the OA dissemination of faculty scholarship, with the Press deriving revenue from POD sales. Two points need to be made. First, this solution relies heavily on institutional support (channeled primarily through not exclusively) through the university library system; and secondly, UCP has an unusual funding model that includes significant foundational support.

Interesting, though probably only marginally relevant, are some comments by the Ken Wissoker, editorial director of Duke University Press. They don't have an OA policy, but instead are usually amenable to Creative Commons licenses that remove many of the limitations on redistribution. The challenge remains, though, that their press is required to break even, which is of course what Paul Courant sees as the systemic problem of how university presses are managed. One solution identified by Wissoker is the initiative developed by Frances Pinter (CEO of Knowledge Unlatched) that offers libraries the option of committing to sharing the costs of publishing a proposed monograph, which would then be available without charge in a flat PDF. The sponsoring press would still be able to sell the print version, or an

enhanced e-pub edition. [By way of context, Pinter used to run Bloomsbury Academic and launched its OA monograph program, which is often lauded as a highly successful initiative. According to Richard Charkin, Executive Director of Bloomsbury Publishing plc, "it's a relatively small part" of their overall academic program, and "was a very good way to establish our academic publishing credentials", which suggests that its value was more as a marketing ploy than a commercial enterprise.]

The scale of scholarly publishing by US university presses makes it difficult to discern any clear trends with monographs. Journals are more straightforward, at least those in medicine and the sciences, where research tends to be well-funded and where OA is increasingly required by funding agencies. Absent the same profit imperative of commercial publishers, university presses have generally responded with Green and, increasingly Gold OA journals. Although much of this is described as early stage or experimental, there is a corresponding awareness that Open Access in one form or another is the way of the future. Philosophically, this is also the case with humanities and social science journals. These lack the same level of funding in the US, though, and there is a risk to established journals that are unable to develop financially viable OA models as authors explore other forms of disseminating their content. This will become clearer over the next few years.

With monographs, US university presses cannot yet articulate a draft strategy. The consensus is that it is simply too soon to publish these on a front list OA basis, even in areas of research that are adequately funded. However, there are some initiatives in place, or at least planned; and some presses are experimenting with putting out backlist titles in OA editions. But these are largely local decisions and influenced by not just available research and related funding but the level of institutional support for OA. There are two levels to this – how some universities fund the dissemination of research by their own faculty and, for those universities that have a Press, whether they accommodate OA in their Press budgets. These two imperatives may converge, but they may not: university presses cannot simply be vanity publishers for their own university, and there are many ways in which faculty can be supported in ensuring the widest-possible dissemination of their research. The role of the university library is also a factor in how universities facilitate scholarly communication, and this too may or may not converge with the role of the university press for those universities that have one.

United Kingdom

The Higher Education Funding Council for England (HEFCE) coordinates the distribution of government money to universities, and as such it isn't in quite the same position as the Canadian research funding agencies. Its mandate is much broader, and it derives its mandate and its money from the government. While research is one factor in allocating funds, there are others. However, as the Council produces the Research Excellence Framework (REF) which sets out the criteria for assessing the quality of research in UK universities, this is obviously an important focus. And it's within that context that the HEFCE published last July a "Consultation on open access in the post-2014 Research Excellence Framework". The UK equivalent to the Tri-Agency construct is Research Councils UK (RCUK) and their Policy on Open Access outlines a detailed set of expectations and requirements relating to the outputs of publicly-funded research. Some of the key points are:

- RCUK provides separate block funding to cover OA costs, and so research grant applications do not include these as a proposed expense
- Although both Gold and Green OA is supported, the strong preference is for immediate access, and this is mandatory if article processing fees are paid from block grants

- For Green OA, STEM articles must become OA within six months of online publication; and for arts/humanities/social sciences, the maximum embargo period is 12 months
- RCUK acknowledges that "the journey to full Open Access is a process and not a single event", that the transition period is likely to be five years, that it will "undertake a comprehensive, evidence-based review of the effectiveness and impact of its OA policy" every two years, and that different embargo periods across disciplines may continue to be necessary

There are relatively few university presses in the UK (less than 10) and this might be a consequence of the dominance of the Oxford University Press (OUP) and the Cambridge University Press (CUP). To put this in context, OUP last year reported revenue of almost £760 million (approx. \$1.3 billion) and a pre-tax profit of £116 million. CUP generated £260 million, although with a much smaller profit margin. While their operations are international and the bulk of their revenues come from outside the UK, the scale of their operations clearly limits room for manoeuvre by other domestic scholarly presses. Nonetheless, and this isn't researched further here, there appears to be a significant commercial scholarly publishing sector in the UK. Both will therefore be impacted by the HEFCE proposals for implementing an open access requirement in the revised Research Excellence Framework.

Interviews were conducted with three university presses, and with the UK-based head of Elsevier's Access group:

- Ella Colvin, Director of Publishing - Social Sciences, Cambridge University Press
- Rhodri Jackson, Senior Publisher, Oxford University Press
- Tim Wright, Chief Executive, Edinburgh University Press
- Alicia Wise, Director of Access & Policy, Elsevier

The OA policy of Manchester University Press was reviewed, and is discussed below.

As noted above, OUP and CUP are not remotely typical of the great majority of scholarly presses. That, though, has probably drawn them more deeply into Open Access because of the size and diversity of their publishing programs. They also have the revenue base to be able to experiment, and the resources to assign senior staff to think through these issues.

At CUP the focus has been on journals. They have six Gold OA journals (a tiny fraction of their journals list), all in the sciences, and these perform adequately in all measures of success. Colvin notes, though, that these tend to be limited to authors with adequate funding. Additional funding is needed if they are to be as active in the social sciences. Overall, though, CUP has an extensive Green OA journals program, and also publishes some 50 journals for UK learned societies on a hybrid basis, with some but not all of the articles Open Access. There is some concern over the financial impact on the societies, but CUP itself has not experienced any negative impact. However, UK-authored content is a minority component of most CUP journals, which has probably reduced the impetus for OA. CUP has extensive guidelines for its OA journals (posting of abstracts, handling of the version of record, embargo periods) but these are not really relevant to the purposes of this report. There is also an ongoing discussion about whether Cambridge University should fund the OA publication of university-generated content.

OUP is moving slowly in that according to Jackson they are still developing their OA policy for journals. He anticipates that it will revolve around article processing fees. For monographs, he notes that the HEFCE (see below) is not advocating an OA mandate for these in the current (2014) Research Excellence

Framework, and that this will allow time for policies and business models to evolve. OUP is experimenting, and is soon to publish an OA monograph with Wellcome Trust funding. They also participate in the OAPEN initiative, which allows publishers to contribute titles and review the results. Jackson questions whether there is adequate consumer awareness for these to be meaningful.

Edinburgh University Press (revenue of approx \$4 million) is the third largest, after OUP and CUP. To the extent that these are in a category of their own, EUP is therefore the largest of the presses as the term is usually understood. They have a policy for journals - Green, with embargo - and are considering an OA Gold journal, to get a better sense of the issues and economics. There are no current plans to publish OA monographs, and Wright notes that the Higher Education Funding Council for England (HEFCE) decided not to mandate OA monographs in the current cycle of the Research Excellence Framework, which effectively pushes this at least five years down the line. He argues that Open Access must be viewed in terms of disciplines, because STEM research in the UK is well-funded, the sales cycles are shorter, and it seems to be less of an issue at least for university presses. The debate that has to occur is over social sciences and humanities, which are not as well funded and it isn't clear where the extra needed for OA will come from. The final point discussed was reporting lines. EUP is part of the university's Corporate Services Group, which includes finance, HR and property. Although this arguably takes the Press outside the academic core of the university, he sees it as preferable to being a division of the Library, which is the case with Manchester University Press. That arrangement has apparently led to conflicts as the Press is required to meet budget goals incompatible with aspects of the OA requirements of the Library.

Manchester University Press has an OA policy for journals (not discussed here other than to note that the article processing charge is very low, at £500, which is approx. \$850 in comparison to other presses that charge \$3000) and also for monographs. The Press, as a founding member of OAPEN, offers a Gold OA option that includes a print edition and what it describes as a "consumer eBook" edition, with availability through the OAPEN Library and the Press website. Interesting, they must be mindful of concerns around access because there is a reference to search-optimization "to ensure the maximum possible availability and discoverability of content". This point is touched on by Kathy Killoh (below) in relation to distribution. There is a "publishing charge" for OA monographs, based on length; it starts at £5,900 (\$10,000 approx) for up to 80,000 words and increases by £600 for each "band" of 20,000 words thereafter.

Elsevier dominates the scientific and medical journals sector (2,000 journals, 20,000 books) and although many of its operations are in the UK, it is better seen as an international publisher with a strong UK presence. That being the case, it has been influential in both steering the OA debate and in developing financial models designed to align the objectives of funding agencies and commercial publishers. They responded to the Tri-Agency consultations, supporting the principle of OA, but insisting on the need to ensure the commercial viability of journals which, being purchased mainly by libraries, may be at risk if the content is simultaneously available without charge. Elsevier argues that the Tri-Agency option 2 (archival of the final article manuscript) is not really a business model and that in any event a flexible approach to embargoes is required to allow for the different market dynamics and economics of journal publishing.

Elsevier uses "an evidence-based approach to setting embargo periods for its journals, which takes into account the usage profile of the journal over time, and helps us decide at what point we believe it is sustainable to allow a parallel distribution of a free version". With a nod perhaps to their market dominance, they go on to observe that "it would limit the freedom of authors to publish in their preferred journal if they had to choose only ones with a 12-month embargo period". Elsevier typically works with a range of 12-24 months, some longer but others shorter, and they give a good example of the latter: The

Lancet, which is described as "news-breaking" can be sustainable with a 6 month embargo. Others, they say, need up to 36 months.

Of particular interest, because it might perhaps form part of an ACUP set of proposals, is the payment system that the leading UK publishers have established with the funding agencies and a growing list of participating universities. This allows what is termed "prepaid open access" whereby publication fees (of up to US\$5,000) are paid directly to the publisher by the agency funding the research. Details are at www.elsevier.com/about/open-access/open-access-policies/funding-body-agreements/jiscc and elements of this are discussed in the Conclusions/Recommendations section below.

Finally, it's worth noting the role of the Wellcome Trust, which is a charitable foundation that sponsors biomedical research at UK universities. With investments of more than £16 billion and an annual funding budget of £720 million last year, the Trust is clearly able to influence the OA movement through its funding policies. These already cover journals. And they have just been extended to monographs, through partnering with a commercial publisher (Palgrave Macmillan) and Oxford University Press, to cover the pre-pub costs of OA monographs. The cost of the first of these initiatives was £11,000 (approx. C\$19,000) and the arrangements allow the publishers to sell print editions, with the digital editions easily available and (in the case of the Palgrave book) with a Creative Commons licence that permits commercial re-use. This is a much higher subvention that is typical for OA journal articles and (although it isn't intended to facilitate OA) substantially higher than the ASPP monograph support program which is capped at \$8,000 per title and as a subvention or subsidy rather than to cover the cost of OA. [And note that Springer, through its SpringerOpen program, charges 15,000 euros, or more than \$21,000 at current exchange rates, though this may in part reflect high costs in its base of operations.]

The close link in the UK between "standing" and higher education funding places pressures on universities that are not replicated in Canada or the US, where post-secondary education is more of a local than a national responsibility. The role of the Canadian research agencies will therefore be more influential in how Open Access is implemented here, because they are the steering the agenda independently of overall university funding. And this may keep the focus on the goal (OA) rather than OA as a publishing means to a funding end.

Open Access Publishing in European Networks (OAPEN)

This initiative is ongoing, and in many respects is still at an experimental stage. It allows publishers to participate in a range of OA projects. In the words of its website (project.oapen.org):

OAPEN is an initiative in Open Access publishing for humanities and social sciences monographs. The consortium of University-based academic publishers who make up OAPEN believe that the time is ripe to bring the successes of scientific Open Access publishing to the humanities and social sciences.

The OAPEN partners are all active in the Open Access movement already, with details available on their pages on this site and on their own websites.

The project will find useful, exciting and beneficial ways of publishing scholarly work in Open Access, enhancing access to important peer reviewed research from across Europe. Most importantly it will find a financial model which is appropriate to scholarly humanities monographs, a publishing

platform which is beneficial to all users and create a network of publishing partners across Europe and the rest of the world.

It therefore has important but limited goals, with the added challenge of operating across multiple languages and on a voluntary participation basis. Some university presses (see Tim Wright's comments above) believe that it is too soon to say if it will achieve anything helpful.

For the purposes of this report, there are three aspects of OAPEN that are relevant, derived from its recent study of OA monograph publishing in the Netherlands:

- The analysis of the costs of monograph publishing
- The assessment of the effects of OA on sales
- Some of the recommendations for libraries and for publishers

The OAPEN study looked at the Netherlands, and the cost of publishing matrix is expressed in Euros. Given significant differences in the cost of living between the Netherlands and Canada, and fluctuating exchange rates, it is more helpful to focus on ratios rather than actual spending. But even then, comparisons are complicated by the study being confined to monographs published both in OA and print, and including costs specific to each, some of which wouldn't be incurred in a print-only edition. For that reason, details are not included here, beyond noting that the average cost of a 350 page monograph published in the Netherlands in both formats was calculated as €12,166 which is approx. \$18,000 at current (January 13, 2014) rates. It isn't entirely clear, though, how printing costs have been addressed, both as to the number of copies printed, and whether there is an initial print run (and its size) or whether all copies are generated on a PoD basis. Nor is it clear what costs are included in overheads. The value of this study is therefore rather limited.

Methodologically, the OAPEN study has some weaknesses in how it reviewed the impact of OA on sales, because it proved impossible to line up a control group of equal size to the OA titles surveyed. There were also some assumptions about the phasing of sales that may not be valid. Nonetheless, given the paucity of research in this area, it cannot be discounted. The study did find, though, that Google Books page views were typically 50%+ higher for OA titles, although that is of course a function of the book being accessible through Google Books, a metric that favours OA titles. Perhaps more significantly, citation rates were virtually the same for both formats.

The OAPEN report contains extensive lists of recommendations for all of the stakeholders. Those for libraries include a few that may be applicable in Canada:

- Libraries should, if possible, set up OA publication funds
- These funds should be extended to monographs
- A portion of library acquisitions budgets should be reserved for OA publications
- Libraries that support campus-based publishing should encourage OA publication, within the context of OA mandates, and allowing a reasonable embargo period for monographs

These recommendations inevitably raise the question of defining the best relationship between the library and, if there is one, the university press. Although practices and opinions differ, and this can only be answered at the local level, an independent press can undertake a wider range of publishing than one which is essentially the production and marketing arm of the library. That approach also levels the field

somewhat as between those universities that have a press, and those that don't. For a university to have an OA mandate for disseminating the research of its own faculty might but does not necessarily require the use of its press (if it has one) as the vehicle for implementing that mandate. This is implicit in the OAPEN recommendations for publishers:

- OA monograph publishing should be provided as a service to authors, as well as to research funders and universities
- OA is a powerful mechanism for disseminating backlist and out-of-print titles, which will likely have a wide authorship that goes well beyond local faculty and which are not integral to what the library is trying to achieve

The respective roles of the library and press within institutional OA mandates are obviously a matter for debate. The OAPEN initiative avoids an opinion, but as there is a strong commercial publishing outlet for OA monographs (and journals) and this will probably grow – or at least not diminish – as funding grows for OA through research grants, the balance of convenience tilts towards keeping a university press as independent as possible, at least when it is not dependent on institutional support. Clearly, though, this may be less the case if the press was intended in large part as a way to disseminate the university's own research and scholarship.

Open Access in Canada

The Open Access environment in Canada is in an early stage of development, and only a few of the presses are currently implementing OA initiatives. Interviews were conducted with three of them:

- Kathy Killoh, Acting Director, Athabasca University Press
- Lara Mainville, Director, University of Ottawa Press
- John Wright, Director, University of Calgary Press

Also noted are university funding for OA projects, and a limited initiative by Irwin Law, a commercial publisher. No other presses were contacted, except for UBC Press, which may proceed with a funded (SSHRC) project but which is completely outside the journal and monograph focus of this report, and which is not discussed further.

AU Press has an active OA program, and a developed OA policy at the institutional and Press levels. AU President Frits Pannekoek is on record as saying that a university should commit 1% of its budget to scholarly communication. All AU Press staff and overhead costs are covered by the university, and the Press aims to recoup all other costs from revenue sources such as publishing grants, sales, and other forms of external financial support. Publishing decisions are made independently of funding by the editorial committee, but funding is a discussion that usually occurs, and alternative funding may be requested if the costs are excessive.

All AU Press books are available as no-charge PDF downloads, but print copies are marketed and distributed through UBC Press, and e-pub editions are available through Kobo, B+N, etc. All AU Press journals are OA digital from the date of publication except for one, which is published in both print and digital formats. The print edition is subscription based and the digital edition has a one year embargo before it becomes OA on the journal's own website. Overall, however, 85% of all AU Press sales revenue is from print sales and 15% from digital.

Killoh flags what she identifies as "a piece missing to this [the OA] puzzle", being the distribution system at least as it applies to libraries. AU Press doesn't have an easy way to get its OA titles into a library. Generally, she says, "most libraries use databases for their digital content (e.g. Ebsco, OverDrive, CEL, etc.). These vendors are proprietary and receive content from the publishers to offer the titles for sale, rent, subscription, pay per view, etc to all the libraries. Many libraries and institutions do have an institutional repository with OA content, but...there is no central distribution system to enable OA content to be deposited. These repositories are typically used for faculty to submit their own completed work, not for publishers to deposit publications". She explains that it isn't feasible to contact each and every library to arrange individual titles transfers, and libraries are currently not interested in searching the internet to find OA monographs to download, catalogue, and upload into their repositories. This is clearly an important issue, and it's addressed in the Conclusions and Recommendations section below, in the context of how ACUP might choose to influence the OA debate in Canada.

University of Ottawa Press has a significant OA commitment. The reality of scholarly publishing, according to Mainville, is a steady march towards Open Access, although many critical questions remain to be answered. The Press has put 50 backlist titles in a repository, and in 2012 began working with the university library on a 3-year pilot project for front list titles. This will direct up to \$30,000 a year for three years, to fund three titles annually, and will be reviewed to determine whether offering open access to front list titles is financially viable.

The Press has not yet determined the overall impact of OA on sales. There isn't clear evidence that it boosts sales, but there isn't much to support the contrary, either. One title authored/edited by Professor Michael Geist (who also has an earlier OA-type initiative with Irwin law - see below), UOP sells *The Copyright Pentology* (2012) in paper, pdf and epub. The OA version is also available on the uOttawa Library Repository as a pdf file. When the sales and financial data were reviewed a few months ago, "it seemed that the book was selling well except for the pdf file, which is normal, since it's available for free. In fact, it is our second-best direct-to-consumer seller. But are sales good because of the additional publicity generated through the availability of the book, or is it because of Geist's name, or because it's a controversial subject, or for some other reason? It's very hard to say, and I don't feel that the data we are currently able to generate would allow us to measure the impact of OA on sales." It is this lack of history that makes it somewhere between difficult and impossible to assess the financial impact of OA as well as the extent, if any, to which OA increases or diminishes access to the content.

Details of the University of Ottawa OA policy are at www.ou.ottawa.ca; the UOP collection is at www.press.uottawa.ca/open-access and information about the front list initiative discussed above is at www.press.uottawa.ca/news/university-of-ottawa-press-launches-innovative-open-access-collection

University of Calgary Press is explicitly OA-oriented. OA is integrated into its publishing decisions, and its workflow. Authors are informed of the approach at the outset, and are offered an appropriate Creative Commons licence. Usually, though not always, they come to the Press with the necessary funding. The organizational backdrop is that the Press is part of, and integrated with, the University's Libraries and Cultural Resources (LCR) which constitutes the University's Library, Archives, Museum and University Press.

The Vice-Provost (head of LCR and the University Librarian) increased the Press budget significantly, to support its print and OA format publishing. This was accompanied by changes in base budgeting to reflect

dissemination through OA. Even with this increase, staffing and production costs still have to be covered by revenue: grants and other industry support mechanisms, and sales.

According to Wright, though, the challenge remains that “there are more good books than they have the resources to publish”. This, he believes, goes to a fundamental point about the university press mandate flagged in a recent Economist article (October 26, 2013) by Peter Berkery of the AAUP, where he remarked that “no-one asks the chemistry department to be profitable”. The questions that this poses tend to be ignored in favour of short-term solutions, with the result that a big picture approach to OA has yet to emerge, and a growing vulnerability for university presses that depend on institutional budget support.

Wright also confirms the point made by Killoh that OA is an added marketing challenge in that PDF Open Access is outside standard distribution chains, making promotion and discoverability very difficult.

Irwin Law is not primarily a scholarly press, but it does have a strong academic list and shares an author (Michael Geist) with UOP. They published three books with creative commons licences, mainly (according to Jeff Miller, the company's President) to assuage the authors. With all three, they offered free PDF on a chapter-by-chapter basis, and then sold the print edition. The first book (edited by Professor Geist) generated significant traffic to the site by people who bought other titles. They sold all of the printed copies, and made a profit on the exercise. The second book sold modestly in the print edition, but did not result in sales of other material. For the third title, print sales were extremely low. In terms of OA lessons learned, there seem to be two: without external funding, OA is unlikely to be viable; and the success of any publishing initiative seems in part to be a function of authorship and content.

This report does not address institutional journal article processing fee funding for OA, but there are several such initiatives, typically though not always managed by the libraries. Examples include Dalhousie, Calgary, Ottawa, Brock, Victoria and Simon Fraser. These enable faculty to publish with whichever publisher they choose.

Finally, when reviewing developments in Canada, there are two papers that should be mentioned, both authored by Andrea Kwan, now at Rotman Commerce and at one point a researcher/writer with ACUP: Open Access and Scholarly Monographs in Canada, 2011 (submitted as part of the requirements for a Master's degree at SFU) and Open Access and Canadian University Presses, 2010 (a White Paper, prepared for ACUP and funded by the Canada Book Fund). The focus in both (there is some overlap) is more on a review of OA initiatives and publishing models than of funding models, though there is some discussion of costs. They contain some interesting and useful history, but are not sufficiently current to include the recent developments in the UK, or the proposals outlined in the Tri-Agency Policy.

The key points relevant to how ACUP responds to the challenge of monograph OA can be summarized as follows:

- Open Access for monographs is a likely consequence of the Tri-Agency Policy.
- The economics of OA monograph publishing have not been adequately researched in Canada or indeed in any other country, as the OAPEN project is incomplete in some respects and is of little if any application to Canada, and while others studies identify challenges they rarely go on to identify solutions.
- The research summarized in part 3 of this report shows that there is little uniformity in the costs and revenue aspects of monograph publishing in Canada.

- Funding models for OA monographs need to be based on this research, and must then be incorporated in grant and institutional support of research.
- Responsibility for OA is at the institutional and research funding agency level, as university presses have no capacity to absorb the financial impacts of sharply reduced revenue flowing from Open Access.

PART 3: FINANCIAL ASPECTS OF MONOGRAPH PUBLISHING

The Federation for the Humanities & Social Sciences has this to say about Open Access:

“Open Access seeks to take advantage of the reduced distribution costs associated with online publishing, while shifting the remaining costs away from the end user by using one or more alternative ways to finance the considerable costs of production. While free of cost to the user, scholarly literature is by no means cost-free to publish.” [<http://ideas-idees.ca/issues/open-access>]

As the Federation has now launched a research and consultation process that commits to a “final ASPP open access policy” to come into force in April 2015, ACUP has collected data on monograph publishing in Canada to enable the discussion about those “considerable costs of production” to be better informed. The data collected reflects English language publishers only.

Average cost to publish a “standard” monograph

Participants were first asked to provide specifications. These were uniform around only two elements:

- size (6x9)
- cover (4/c)

There was a considerable range on:

- pages (212 to 472, although the latter is an outlier which, if excluded together with another atypical input, narrows the range to 212 to 272 [mode: 272])
- illustrations (0 to 32)

There is no significant (or at least no discernible) correlation between the number (or type) of illustrations and the cost of production. While this seems counter-intuitive, there are possible explanations not captured by the survey, such as manuscript requirements, the use and cost of in-house technology, relative efficiencies, and variations in labour costs.

In order to avoid identifying survey participants, and also to indicate the diversity of some responses, some of the data will be presented both as averages and as ranges.

Survey results: cost of production

The survey responses show a very wide range of costs [production/direct/allocated]:

- lowest \$21,726
- highest \$71,201
- mode \$27,500 [two presses]
- mean \$36,426

Removing four exceptionally high-cost responses, the range narrows:

- lowest \$21,726
- highest \$36,881
- mean \$28,549

These variations are primarily a function of atypically high editorial and production costs, and in the levels of some indirect costs which, in turn, may be a consequence of how institutional overhead are allocated.

Average cost of production

The average cost of publishing a scholarly monograph in Canada is calculated below, based on survey responses from the four largest presses (by Canadian author revenue). This excludes the smaller presses (obviously) but it also focuses on monograph output from presses that published 93% of ASPP-funded monographs in 2013:

	average	minimum*	maximum*
Peer review/acquisition	5,285	4,685	7,840
Direct editorial/non-print production	10,850	10,517	11,376
Print costs	4,341	3,200	5,500
E-conversion	425	300	700
Print distribution	1,868	910	3,108
Sales/marketing, and royalties	5,673	2,295	9,407
Indirect: IT/Accounting/Admin	2,217	1,516	2,606
TOTAL	\$30,659	n/a	n/a

* The numbers in the minimum and maximum columns are taken from the data of whichever press reported the highest and lowest costs in these categories. They are not therefore totaled.

Total average: \$30,659

In the analysis that follows, though, average profitability is calculated for a selection of titles as reported by the four larger presses.

Survey results: per-title revenue

Respondents were asked to provide budgeted average lifetime revenue for a typical ASPP-funded title. As is done elsewhere in this report, some of the estimates that follow are based on the four largest presses (which in 2013 published 166 of the 179 ASPP monographs that year) as their volume of output and the degree of uniformity in pagination makes them a better proxy for averages.

Digital edition revenues for these presses ranged from 1% to 8% of total revenues; and across the 10 participating presses, the range was 1% to 10% with one of them reporting 30% on a single title.

PRESS	A	B	C	D
Average revenue	14,636	17,500	14,109	15,422

Average profitability per ASPP title

Isolating average profitability has its limitations, because of the wide range in revenues, and in production costs. Many of these differences between university presses are a function of small and sometimes highly specialized publishing programs, and institutional decisions around how overheads are allocated. As these combine to produce an average that doesn't align with any of the presses, profitability is therefore presented by way of samples, using the average revenues (see above) reported by the four largest presses for their ASPP titles, and their average costs:

PRESS	A	B	C	D
Sample revenue	14,636	17,500	14,109	15,422
ASPP subsidy	8,000	8,000	8,000	8,000
Sample costs	28,215	27,873	32,006	35,312
Sample profit	(5,579)	(2,373)	(9,897)	(11,890)

Survey results: other financial information

The data below track the volume of publishing, and revenues for ASPP-funded and other Canadian-authored titles, and the distribution of revenue between new and backlist sales. As with the production costs discussed above, averages can be misleading – even when focusing on just largest presses – and ranges and/or examples may be more helpful for some purposes.

Number of titles published by ACUP/APUC members

	ASPP-funded	Other	Total	% ASPP
2013	179	232	411	44%
2012	153	232	392	39%
2011	155	220	375	41%
2010	159	232	391	41%
2009	148	220	368	40%
Totals	794	1,136	1,930	41%

Revenues from Canadian-authored books over the past 5 years [million \$]

2013	\$7.8
2012	\$7.5
2011	\$7.8
2010*	\$9.1
2009*	\$8.5

* includes one-time revenues from e-sale to CRKN

Revenues from ASPP-funded books

Respondents were asked to provide budgeted average lifetime revenue for a typical ASPP-funded title. As is done elsewhere in this report, some of the estimates that follow are based on the four largest presses (which in 2013 published 166 of the 179 ASPP monographs that year) as their volume of output and the degree of uniformity in pagination makes them a better proxy for averages.

The sales survey data total \$2.9 million for 2013 from all ASPP titles, and of that \$2.7 million (93.5%) came from titles published between 2009 and 2013. In 2013, there were 179 new titles, and the average in each of the previous four years was 154. Revenue for earlier years is based on these assumptions:

- in 2013 the year 1 revenue for new titles was \$1.5 million/179 = \$8,451
- in 2009, 2010, 2011 and 2012 there were on average 154 new ASPP-funded titles
- revenue from new titles in each of those years is estimated at \$1.3 million

Although there are small fluctuations in the number of ASPP-funded titles in each of the four years, the average revenue in each year from new and backlist sales is estimated at slightly in excess of \$2.5 million for the 10 presses that participated in this study.

% breakdown between ASPP funded/non-ASPP funded Canadian titles

FY	# ASPP titles as % of total	Canadian author revenue - total	ASPP revenue	ASPP revenue as %
2013	44%	7,821,805	2,921,078	37%
2012	39%	7,466,962	2,511,880	34%

Although ASPP titles account for 44% of the total 2013 output of the ten university presses, they generated only 37% of their revenue.

OA policy: analysis of impact

ASPP-funded monographs are further supported by the four largest university presses by amounts that average more than \$8,000 a title. There are exceptions: some presses report a profit on some of their monographs, once subsidies are factored in; and some titles are obviously more profitable than others. Once indirect costs are allocated, though, all presses are in negative territory, with per-title losses averaging almost \$20,000.

In light of the Federation’s plan to implement an OA policy for ASPP-funded monographs by April 2015, Canadian university presses (which publish almost all of these titles) need to communicate what the Federation has already acknowledged are the “considerable” costs of open access. As there is (as yet) no indication that any additional funding will be available, the Federation needs to understand the potential revenue impacts of mandating open access on publisher sustainability and on the ability of Canadian faculty to secure outlets for their research. At its most extreme, if funding is not adjusted to offset reduced sales revenue, presses may reduce their publishing output of Canadian scholarship. This is clearly not consistent with the Federation’s goals, which makes it all the more important to reach a mutually acceptable outcome that matches those goals with the need for university presses to maintain current levels of financial performance. Putting this another way, without addressing the revenue implications of monograph OA, the current level of output by the dominant publishing partners and the sustainability of university presses in Canada is at risk.

In order to assess these impacts, further research is needed into how open access affects sales. This will be challenging because there is very little experience to draw on. Journal OA is more advanced, and may provide some indication of, for example, the relationship between embargo periods and subscriptions. Even there, though, it will be difficult to find relevant examples in the sense of disciplines (most OA journals are STEM rather than HSS) and it doesn’t follow that the experiences of publishers in the US and UK are valid predictors of what might happen in Canada. Nonetheless, the way in which Elsevier has calibrated embargo periods for journals (from six months to 3 years) will at least help inform the discussion, as will the carefully managed OA activities of Cambridge University Press and Oxford University Press.

The sales data submitted by the 10 Canadian university presses, while not specifically answering this question, do quantify what might be termed “at risk” revenues in various embargo scenarios. The key metric is the revenue in 2013 from ASPP-funded titles publishing between 2013 and 2009.

In 2013 the 166 ASPP-funded monographs published by the four largest presses generated sales revenue of \$1,458,970 which averages \$8,790 per title. Further complicating these calculations are year-on-year variations in the number of titles published by each press. And there may also be differences that simply reflect publication dates within a given year, and the timing and effectiveness of marketing. That translates to average lifetime sales of perhaps \$12,500 - \$17,500 in all editions.

The impact question in relation to embargo periods can therefore be framed thus: by how much will revenue be reduced by embargoes of any period, taking account of formats and the phasing of sales? It is an entirely speculative question, since there is no research, and certainly no research in Canada that provides any answers. To answer that question requires more focused research, but drawing on the experiences and assessments of publishers that have implemented journals OA in the US and UK (which is not reasonably comparable to monographs), these are the speculative conclusions that can be drawn at this point:

- A minimum of one year embargo will reduce sales of ASPP-funded monographs in that period. This will especially impact sales in the latter months of the embargo, as acquisitions are deferred.
- It is impossible to quantify the reduction because some purchasers (library and individual) will want the material as quickly as possible and/or will want a print edition, while some will be willing to wait until the end of the embargo.
- Conservatively, a one year embargo will reduce year 1 sales revenue by 25%-50% and year 2-5 revenue by 50%-75%. There will continue to be purchases of print editions, which will obviously be outside OA.
- An embargo of 3 years is unlikely to affect year 1 sales, but might reduce year 2 revenues by 10%-25%, year 3 revenues by 25%-50%, and subsequent years by at least 50%.
- An embargo of 5 years will have the least impact given that more than most sales occur within that period. The likelihood is that the bulk of sales after the first two or three years are from purchasers that had not considered buying the work until they became aware of it or (if a library) received a request.

The impacts of different embargo periods, excluding consideration of sales more than 5 years after publication, are very conservatively estimated (more research/testing is required to test these assumptions) as follows:

- A one-year embargo that reduces year 1 sales by 25% and years 2-5 sales by 50% will have a minimum financial impact of at least 40% and as much as 50% of sales revenues.
- A 3-year embargo that reduces year 2 sales by at least 10%, year 3 sales by 25% and years 4 and 5 sales by 50% will have a minimum financial impact of almost 20% of sales revenues.
- The average financial impact of a 5 year embargo will be approx. 10% allowing for reduced sales in the years before, and some print edition sales post-embargo.

The lack of any data makes this impossible to verify, though, as almost all mandated OA applies to STEM journals which have a much shorter half-life, and which are typically much better funded.

Impact of OA on the number of titles published

On the basis of the 166 titles published by the four largest presses, Open Access with a one-year embargo would reduce revenues for these publishers by almost \$1 million a year. Even a three-year embargo is estimated to translate to a reduction of nearly \$350,000 a year. If presses were required to maintain existing levels of financial performance, and without any increase in ASPP subsidies, the obvious solution would be to reduce the number of titles published. The savings from doing that cannot easily be calculated because it is impossible to assess the extent to which direct and indirect overheads would be affected, although the latter would probably stay much the same. One approach would be to reduce the number of titles by an amount that would generate savings to offset the reduced revenues from the rest of the program. Other possible outcomes would include a shift of the editorial function away from book development and review towards fundraising and a pronounced difference in the role of external grants other than the ASPP in affecting publishing decisions. A decrease in title output or more stringent selection based on financial criteria would likely also coincide with a reduction of professional staff in editorial, production, and marketing departments in order to cut costs, but that would decrease the overall publishing capacity and expertise that a given press has developed over the years. The calculation would be different for each press.

The impact of OA on monograph publishing will be compounded further if SSHRC extends their proposed open access requirement for the outcomes of funded research from journals to monographs,

Conclusions

As the Federation notes, there are significant costs of Open Access. Also noted by the Federation is that the UK has deferred implementing monograph OA for several years. In the US, Open Access is currently confined most to STEM journals, and many of the AAUP members emphasize the need to take a longer term view of OA for HSS in general and monographs in particular. The framework of scholarly publishing in Canada is defined by the small number of university presses, the challenges of selling Canadian content internationally, and the unprofitable nature of publishing ASPP-funded monographs. Even for the larger presses, each ASPP-funded title delivers an average loss over 5+ years of more than \$8,000 and for some of those presses these losses exceed \$12,000. Mandating Open Access will increase those losses by up to 50% depending on the embargo period.

Without additional support, the presses may need to consider reducing their commitment to publishing these titles. They may, alternatively, require author fees to offset those reduced revenues. As both of these are obviously inimical to what the Federation is trying to achieve, it is reasonable to ask for more time to assess the impacts, determine how the revenue shortfalls can be addressed, review developments in other countries, and craft a policy that combines embargo periods and subsidies geared to implementing monograph OA in Canada without threatening the valuable university press infrastructure that currently exists in this country.

The UK is further ahead in this review process. Some UK publishers (Palgrave Macmillan, OUP) are working with the Wellcome Trust to better understand the subsidies needed to support OA monographs, and the indications are that these could be close to \$20,000 per title, at least in STEM disciplines. The leading journal publishers are assembling valuable data; and there are several monograph funding initiatives that acknowledge the subsidies needed to offset reduced sales revenue.

The Federation, working with ACUP, can frame the research needed to develop a best practices Open Access framework for HSS monograph OA in Canada. This will also involve pilot projects, the design and funding of which require careful planning. And the economics of monograph publishing needs to be much more extensively researched than was possible in our survey. Currently, the margins from subsidized monographs are unspectacular, and would be unsustainable for a commercial press. Mandated OA that fails to address these realities will be self-defeating.