

# 12: Globalization and Scholarly Communication: A Story of Canadian Marginalization

Frits Pannekoek, Helen Clarke, and Andrew Waller

## Introduction

Within the last five years Canada's libraries, archives, and museums, the prime institutions for communicating Canadian identity, have moved aggressively into a digital environment. Five years ago academic libraries subscribed to a few digital data bases and full-text journals. Now many of the largest subscribe to over 25,000 digital full-text searchable journals each, and most have at least a half a million full-text searchable digital monographs. Many are also creating their own digital products and are developing digital depositories for faculty research output, although this remains in its infancy. Their motives for doing so are mixed.

While these institutions have embraced the digital environment, they have also exacerbated the accompanying problems. Their failure to resolve these problems will seriously affect scholarly communication and the ability to exercise their responsibility to maintain repositories. In short, academic libraries have contributed to economic concentration in the digital publishing industry and become so enmeshed in international treaties, conventions and practices, albeit not of their own making, that rather than being instruments for the advancement of the national identity and memory, they have become agents of globalization. As we shall see, despite the rhetoric of free unfettered access and a professed role in preserving intellectual output, they have failed to significantly alter their information purchasing, preservation, and cataloguing practices to maximize the opportunity to develop a national digital information infrastructure. They remain mired in the past, tinkering with the digital world on its periphery, but rarely solving the core issue – an alternative economic model that will not only allow but facilitate the mobilization of knowledge by society. What we have instead is an information environment in which the best information is sometimes less accessible than it was in print, is more controlled by corporate agendas, and more than ever subject to government regulation. Before investigating the current issues in some detail a more general discussion might be useful.

The current digital environment within the academy took shape almost overnight. Until recently, most Canadian academic libraries neither planned their response, nor were involved in the creation or capitalization of new information products. That was left to visionaries in the private sector. Two companies that developed economic models to recoup capital investments and generate handsome profits for their shareholders were Thompson Gale and Elsevier. Elsevier has a long history of owning, publishing, and/or managing thousands of the most prestigious scholarly journals. By carefully mapping the transition from print to on line, by offering outstanding product, and by exploiting aggressive pricing, Elsevier has become the *bête noire* of the academic world. Their annual price increases threatened the very viability of even the largest libraries in the 1990s (Jones 2002). In order to keep the best journals, university libraries cancelled thousands of other titles during this period (Bergstrom and Bergstrom 2001). For smaller specialized Canadian journal publishers, most of which were in the social sciences and humanities and which were for the most part ignorant of what was happening, this meant falling subscriptions and marginalization. Chances of being renewed by financially strapped academic libraries anywhere were uncertain. Canadian academic book publishers, whose print runs were often under one thousand, were also squeezed as more and more academic libraries had to make choices between scientific and international digital journals and small-run national information products.

Following these changes was the advent of the "big deal." The major science and medical publishers offered university library consortia literally thousands of digital journals at heavily discounted prices, provided they bought the entire collection and they bought them in

digital form. Libraries were eager to move to this model not only because of the increased number of titles it offered, but also because of the enthusiastic acceptance of electronic journals by researchers.

To finance this, Canada's academic libraries successfully applied to the Canadian Foundation for Innovation, the major federal government science research foundation, for \$20 million (of a \$50 million project) to support the acquisition of digital scientific journals for sixty-four of their number. The balance of the monies came from provincial sources. While on the surface it may appear a reasonable strategy to reduce costs, after four years of support many libraries will need to pick up the full cost of these journals. Science and medical faculty have enjoyed the new acquisitions, and further pressure to continue these subscriptions in an environment of continual cost-cutting will further erode already fragile Canadian scholarly book and journal publishers, which are generally based in the social sciences and humanities. Simply put, many libraries will more likely cut the weakened social science and humanities products than the science products required by the competitive science units on their campuses. Smaller Canadian social science and humanities journals are of little interest to major journal aggregators who have been purchasing the majority of reputable science journals, or contracting to represent them. There is no doubt these small publishers will be increasingly marginalized.

However, the blame for the problems facing Canadian social science and humanities book and journal publishers cannot be laid entirely at the feet of the academic library community. These publishers have failed to pay attention to the new digital technologies and the new market place, preferring the modest profits derived from Social Science and Humanities Federation grants, which unintentionally discourage on-line no-charge journals. For example, a no-charge digital journal was recently denied support because it did not have a demonstrable subscription base, although it certainly had a very strong on-line readership and excellent citation rating. As well, Canada's small academic publishing industry has also been occupied surviving the Chapters/Indigo fiasco, which destroyed their bottom lines (Toller 2000).

Academic libraries, driven by the cost of scholarly communication rather than the new opportunities for learning and exchanging ideas offered by digital environments, have supported international attempts to mitigate costs by supporting various open-access initiatives, such as the Budapest Open Access Initiative,<sup>i</sup> the Scholarly Publishing and Academic Resources Coalition (SPARC – the initiative of the Association of Research Libraries, an American assemblage of the research libraries with fourteen Canadian members, meant to foster less costly counter-journals), and BioMed Central, an open-access publisher that generates its revenues through page charges to authors or their institutions.<sup>ii</sup> Canadian academic libraries are enthusiastic supporters of international endeavours to cut subscription costs, but they have yet to explore digital environments which might evidence Canadian leadership in scholarly communication and knowledge mobilization.

Where Canadian scholarly presses can directly influence Canadian journal production and behaviour they tend to see the future in international and economic terms and not in terms of national need or the transformation of communication. For example, the University of Toronto Press has allied its journals with the American aggregator Project Muse at Johns Hopkins rather than contributing to a national collaborative that would have seen a collection of large and small journals creating a truly national product.<sup>iii</sup> As well, many Canadian presses, including the University of Calgary Press have shaped relationships with American-based NetLibrary.

This means that smaller Canadian journals that would benefit from association with more significant journals in a Canadian aggregator package now have to find different solutions, perhaps aggregating with American "disciplinary" packages. For example, there might be North American history, communications, political science, or literature packages. Another option will be to join third-party generalized aggregators. However, the dominant journals will be American with their larger markets, and the aggregation will be subject to American law and regulation.

There has been active discussion amongst Canadian librarians, the Canadian Association of Learned Journals, and most recently the Social Sciences and Humanities Research Council of Canada of the need for an information infrastructure that will encourage scholarly communication directly relevant to Canadian social, political, cultural, and economic issues through a digital environment. The hoped-for outcome was the mobilization of research-based knowledge to inform regional and national decisions.

While that discussion was leading edge several years ago, Canada's failure to mobilize this interest has led to frustration and further marginalization. The research environment in Canada is increasingly dependent on access to digital information hosted and controlled in Europe and the United States. Despite this, Canadian researchers and information professionals show little concern for developing national platforms for hosting, archiving, and disseminating information. Indeed, in the 2005 Canadian Foundation for Innovation grant cycle, Synergies, a multi-university project led by the University of Montreal and the University of Calgary involving over twenty universities as well as the Canadian Association of Learned Journals, that would have seen the transformation of Canadian scholarly discourse in the social sciences and humanities from print to on line, was considered not essential to Canada's research infrastructure. It has been re submitted in 2006 admit hopeful signs that there has been a change of perspective. Instead, except for French-language journals being disseminated through *Erudit*, the innovative and visionary French-language project in Quebec, Canadian journals are moving to being part of the suites of journals assembled by American aggregators (Boismenu and Beaudry 2004). It is interesting to note that the French government has taken the Synergies proposal and is using it as a model for a similar French project. The loss of the leading journals in Canada to American aggregators, and their likely omission from any Canadian national aggregation means it will be all the more difficult for smaller Canadian journals to flourish in a digitally aggregated environment.

On the surface, this reliance on a foreign information infrastructure would appear to have served Canadians quite well. The Canadian National Site Licensing Project (CNSLP) saw sixty-four research libraries across Canada invest \$50 million for access to 750 full-text journals and indexing sources, and most Canadian researchers now have access to a robust collection of information resources. However, none of these funds were used to build a local infrastructure or archive for disseminating this information. Instead, access is based on publisher-owned servers in the United States and Europe. While this means that funds were used to buy the greatest amount of information content possible, it also means that Canada will have no way to assure long-term access to this information. Since it has so committed resources to acquisition of foreign material, there is little left to support a discourse based on national interests.

### **Why a Canadian information and scholarly communication infrastructure?**

We must have a national information and scholarly communication infrastructure for three key reasons. First, Canadian social science and humanities research will be marginalized and not inform our national decisions. Second, not owning the means of distribution of information puts Canada at the mercy of other national agendas. Third, it makes Canada a peripheral player in the new initiatives on knowledge mobilization and scholarly communication.

Canada's general approach – leasing rather than owning information and the means of distribution – has created an incredibly fragile information and scholarly communication environment. CNSLP developed a ground-breaking national licence, one that is widely used in Canada as a litmus test for what information sellers are expected to deliver. This licence includes rights to access information paid for during the subscription period, even if the subscription should later cease. Since that licence was developed, this has become a standard element in most licences between libraries and commercial suppliers. However, with the ironic exception of the University of Toronto, which is increasingly tying itself to the American marketplace, there is little evidence that universities are concerned about this dependence on external non-Canadian sites for this long-term access.

If Canada can maximize access to resources by relying on the infrastructure of other countries, rather than investing in its own system of hosting, archiving, and distributing, then why is this not a wise use of scarce public funds? After all, this information doesn't represent national heritage or security, it is the product of work done by scholars internationally, including Canadian scholars and most commercial publishers have developed means to securely archive their products.

The need for a national infrastructure to support hosting, archiving, and communication of commercial scholarly information arises from an information environment that has deeply changed from 1996 when CNSLP was first envisioned, a time when the "serials crisis" was the

most high profile challenge facing academic libraries. The serials crisis saw the erosion of library journal collections because of the run-away inflation in subscription prices.

This serials crisis remains with us but in a radically changed environment with aggregator packages that offer increased title content for far less than equivalent print subscriptions, but which libraries have funded through cancelling print and losing the archival access they represented. The move to electronic information sources means that the current environment is distinguished by, a dependence on electronic means for finding and sharing information, the primacy of licensed over owning information resources, and the evolution of the ability to create personal electronic spaces for scholars. Scholars at every university now have an extremely high expectation that they should be able to access to all digital resources and that they should have the ability to share information with colleagues (De Rosa et al. 2003).

Relying on licensed resources hosted in other countries threatens long-term preservation of access and memory for Canadian researchers. Scholars depend on stability in information resources equivalent to that provided by a library's print collection. Academic libraries are committed to preserving the scientific, cultural, and intellectual memory of society (Thomas 2002). Yet, relying on commercial publishers for long-term access to information is problematic. Most commercial academic publishers will ultimately be challenged by problems ranging from financial failure to changes in national policy.

Another risk in a dependence on non-Canadian commercial scholarly vendors is the compromised ability of Canadian scientists to share information with colleagues abroad. Unfettered communication is critical to modern research and it is a significant factor in allowing national and institutional partnerships to flow across borders. Canadian universities establish productive partnerships with institutions in other countries including exchange of resources and researchers. However, there is evidence that our dependence on licensed access to information under the control of other nations and commercial interests will limit our ability to develop partnerships and maximize those already established. Recent international events have demonstrated how quickly national policies to information exchange can change.

Another particularly troublesome development is the evolution of digital rights management tools. These tools have the potential to trace the use of digital information including articles and books by individuals regardless of location. Individual or institutional access can be removed without warning. This means that, unless licences stipulate otherwise, Canadian institutions cannot offer Canadians the basic protection or guidance offered by Canadian law. Most certainly this weakens the autonomy of the national debate on the balance between the benefits of copyright ownership and the public good of free exchange of information.

How serious limits on scholarly communication may become as dependence on technology grows is illustrated by examining commercial products that allow individuals to remotely store reading lists, notes, and tables of contents. For example, Furl, a free software program hosted in the United States, allows users to store links to web resources. As well, most commercial information services now provide alerting services tied to the individual users. Customization abilities are extending to the information discovery tools – catalogues, linking software, meta-searching applications – that libraries provide their users. The impact of this is that user privacy and confidentiality cannot be protected under a single set of agreed standards, in this case Canadian law. Foreign laws, such as the U.S. Patriot Act, can be used to retrieve information on Canadian citizens working in Canada. Canadian communication amongst academics flowing through American servers is at risk under the U.S. Patriot Act.

Together these developments mean that not only are the original sources of information such as electronic journals and texts no longer controlled by the institutions who lease them, but also that the work and communications of individual researchers is open to interference from other nations and commercial entities. These reflections are not hypothetical.

## **Scholarly Communication with Embargoed Countries**

On September 30, 2003, the United States Treasury Department's Office of Foreign Assets Control (OFAC)<sup>iv</sup> issued a ruling that required American publishers to seek a licence in order to edit and publish material from authors in countries under interdict.<sup>v</sup> Even collaboration with these authors required a licence. The work of scholars from embargoed nations could only be published

without a licence if no substantial enhancement had occurred. This meant that a journal publisher could accept and publish an article from a researcher in an embargoed country, but it could not be refereed or edited, since that would be adding value. In essence, given the blind peer-reviewing practices of scholarly journals, little research from “banned” states could appear in U.S.-based scholarly journals, which make up the bulk of the journal literature. The same situation held true for monograph publishers.

This violated the basic tenants of open scholarly communication. After considerable pressure, particularly from academic libraries, a number of American publishers took action to have the OFAC regulations revoked. The Institute of Electrical and Electronics Engineers (IEEE), which, based on OFAC regulations, had informed members in Cuba, Iran, Libya, and Sudan in January 2002 that they would not be able to take advantage of any member benefits and services, save for print journal subscriptions,<sup>vi</sup> appealed to OFAC on October 6, 2003, to exempt the peer-review process and style and copy editing. In a letter sent to IEEE on April 2, 2004,<sup>vii</sup> OFAC did exempt peer review and style and copy editing, provided that these activities did not result in “substantive or artistic alterations or enhancements”<sup>viii</sup> of manuscripts. The ban on collaboration with researchers in proscribed countries (North Korea, Cuba, Iran, Libya, for example) remained. When the Canadian Association of Research Libraries sought to file a protest, their counterpart in the United States, the Association of Research Libraries, of which at least fourteen Canadian libraries are members, declined to allow Canadian intervention, arguing that they would be a sufficiently effective representative. The Canadian Association acquiesced, although they may not have had any choice.

Others took up the fight. On September 27, 2004, a coalition of the American Publisher Professional and Scholarly Publishing Division (AAP/PSP), the Association of American University Presses (AAUP), PEN American Center, and Arcade Publishing filed suit against OFAC asking the United States federal court to strike down the OFAC regulations.<sup>ix</sup>

Then something somewhat unexpected occurred; the OFAC position changed, although only partially. On December 15, 2004, OFAC issued a new ruling which allowed “U.S. persons to freely engage in most ordinary publishing activities with persons in Cuba, Iran and Sudan.”<sup>x</sup> The details of the ruling indicated that most aspects of the academic publishing enterprise, including collaboration, were now permitted. The decision to make this change was apparently based on the feeling that earlier rulings were being seen as discouraging the expression of dissent in these countries. Many restrictions still remained in place, however, such as contact with the governments of the embargoed nations and travel to these countries.

It is worth noting that the OFAC regulations are interpretations of American legislation. Two pieces of legislation passed by Congress, the Berman Amendment (1989) and the Free Trade in Ideas Amendment (1994), state that “informational materials” are specifically excluded from any trade sanctions.<sup>xi</sup> The OFAC regulations are simply very narrow interpretations of these amendments. This demonstrates the risks of relying on other jurisdictions for access to information resources, especially when the rules governing this access are subject to debate and multiple interpretations within those jurisdictions. The impact of the OFAC rules and interpretations on Canadian researchers are not obscure. Even with the December 2004 change, the situation could always swing in the reverse at some point in the future. Academics at Canadian universities who work cooperatively with counterparts in countries under United States interdiction, might well find that the results of their research can not be published by American or by American-owned publishers, even if the publisher is located in or has offices in Canada.

## **Information to Embargoed Countries**

As alluded to earlier, the flipside to the OFAC regulations involves the provision of information licensed by Canadian universities to their programs in proscribed countries. This emerged as an issue in 2003 and, so far, has been mostly faced by schools with medical and engineering programs.

In the fall of 2003, the American Medical Association (AMA), publisher of the highly regarded *Journal of the American Medical Association* (JAMA) and the several other top-level scholarly health science journals, sent a new site licence to subscribers of the AMA’s online

journal content. Subscribers were supposed to sign and return the new licence as part of the renewal for the 2004 subscription year. The new AMA site licence included a startling new clause:

[The] Licensee agrees that it shall not make the Licensed Materials available in such countries as advised in writing by AMA where such availability may be prohibited by U.S. law

...  
xii

This section had serious implications for non-U.S. subscribers. Essentially, even if someone is an authorized user of the licensed content (faculty, staff, and students of the licensee institution), if they are resident in a nation under American embargo, once notice is given from the AMA, they should not be granted access to the AMA journal content.

From a Canadian perspective, the problems were serious. Many Canadian universities have established distance education programs and other cooperative ventures in countries that fall under or might fall under U.S. embargo. Many Canadian academics have colleagues in these countries and teach and conduct research in these nations. Obviously, if a Canadian institution signed a licence with this clause, they could be legally bound, at least by American law, to refuse to provide content. Adherence to American law might violate other agreements a Canadian university signed with foreign universities or with the Canadian federal government agencies, which might require Canada to manage both a scholarly communication process or access to scholarly information. The American control of scholarly communications has become so pervasive and insidious that it may well limit Canadian foreign policy initiatives well as the international work of its universities.

Some university libraries have attempted to remove the contentious clause from the AMA site licence. Although AMA staff has been helpful in changing other sections in the licence, they have steadfastly refused to remove the clause in question. It is not clear whether the AMA restriction is a self-imposed one, or one imposed by American authorities. It is very likely that the American Medical Association has included the restriction based of legal advice. What would have happened if Elsevier Science had been headquartered in the United States and was subject to the Patriot Act rather than in the more liberal Netherlands?

The situation involving the restriction of the provision of licensed information to embargoed countries has continued. The 2005 renewal of the AMA e-journal package was accompanied by yet another revision of the AMA site licence. Changes from the 2003 version were minimal but the contentious clause remains intact. In addition, similar clauses and wording have begun appearing in other licences. At the less blatant end, many American publishers of electronic content are now incorporating a "catch-all" clause in the "force majeure" sections of their licences, which note "government restrictions" as something for which they will not be responsible (along with natural disaster, war, etc.). At the other end of the spectrum, the 2005 version of the licence for SPIE Digital Library, a fulltext collection of technical reports and journals published by the Society of Photo-Optical Instrumentation Engineers (SPIE), included this very straightforward clause:

SPIE shall not be required to distribute, and Client shall not redistribute, the licensed material or any article therein to a country to which export is prohibited by U.S. law or regulation.<sup>xiii</sup>

## The Patriot Act

Even more insidious than the control of collaboration, communication, and publishing is the enhanced ability of American law enforcement agencies under the Patriot Act<sup>xiv</sup> to retrieve private and personal information held on American servers regardless of its national origin. A situation could arise where personal information about Canadians, such as the search histories of Canadian university faculty and students in a particular database is taken by American authorities despite Canadian objections and without our knowledge. It is also entirely possible that, if these records were seized, Canadian institutions would no longer have access to their records on deposit in American servers. Should offending Canadians enter the United States they might find themselves subject to prosecution and persecution.

Canadian institutions could deal with such a scenario by local loading of database content. The majority of online databases are produced by American publishers, loaded on computers in the United States, and accessed at distance by Canadian subscribers. Mirror sites sometimes exist but these are often not located in Canada. Local loading would ensure that Canadian-connected data and associated patron use information did not reside in the United States. However, the practice is not yet widely considered other than in British Columbia. There, the Information and Privacy Commissioner, David Loukidelis, initiated a major study of the implications of the Patriot Act on outsourcing by the British Columbian government.<sup>xv</sup> He received over five hundred submissions, a number of which were from library associations. He agreed that, if British Columbia contracted with an American company for goods and services of any kind, that data on British Columbians might well be inappropriately housed on American servers. This would expose British Columbians to an invasion of their privacy by a foreign power. However, rather than preventing government contracts with American companies, he determined that changes to the province's privacy legislation would offer sufficient protection. Personal information would have to be housed on Canadian servers and be subject to Canadian law. The amendments to British Columbia's privacy legislation as a result of the report are complex, but the end result will be that in that province Canadian information will have to be located on servers in Canada. To give teeth to the amendments, the Commissioner recommended a fine of \$1 million for violation. It will be interesting to determine whether the Canadian federal government and the other provinces will follow suit.

In part Ontario has done so. In Canadian academic circles, the most well-known local loading initiative is the Scholar's Portal in Ontario. A primary purpose of this project is to ensure that the licensed information will be available in the future. A project of the Ontario Council of University Libraries (OCUL), funded by the Provincial government, the Scholar's Portal was established in 2002 and was designed to provide a consistent interface to the suite of electronic journals licensed by OCUL member libraries. These journals are locally loaded at the University of Toronto, retaining the journal content and all the related data (usage statistics, search histories, etc.) in a Canadian setting, providing a "north of the border" solution.<sup>xvi</sup>

## **Lack of a National Debate**

While Canadian libraries and universities have an ongoing national dialogue concerning the importance of preserving Canada's digital heritage, a discussion of the risks in depending on commercial and other nations for scholarly communication and its preservation has not had a public forum. The Canadian National Site Licensing Project (CNSLP) illustrates the point. CNSLP argued passionately for the importance of access to information in creating a competitive Canadian research community. But it remains removed from any debate on long-term access. In its most recent incarnation as the Canadian Research Knowledge Network (CRKN), it still views the primary problem to be solved as access not preservation or the freedom and rights of individual researchers.<sup>xvii</sup> As a key licensing agency, it might be in a position to marshal support, but like the Canadian Association of Research Libraries it failed to do so.

The Canadian Council of Prairie and University Libraries (COPPUL), a consortium made up primarily of western Canadian libraries, has embarked on an ambitious project to independently develop a technological infrastructure that would fully support users' interaction with digital commercial resources. This project, called reSearcher, is planned, like a number of its American counterparts, to include a link resolver to link from databases to full-text resources, a interlibrary loan system, a citation manager for storing and organizing citations for individual users, and a cross-database searching tool.<sup>xviii</sup> However, it remains silent on the question of archiving, stability, and the threats to open scholarly discourse. While it offers at least one tool for helping individual users manage information, nowhere does it discuss how this might provide users more stability and privacy than competing non-Canadian tools.

The Canadian Institute for Scientific and Technical Information (CISTI), which serves as Canada's de facto national science library, provides researchers with reasonably priced, rapid access to a world-class collection of science journals and conference proceedings. Many university libraries depend on CISTI for access to expensive or specialized titles that they cannot afford. In its strategic plan, CISTI acknowledges this role; however, the nature of this role or how

it can be achieved is not elaborated.<sup>xix</sup> CISTI's parent organization, the National Research Council, publishes a number of journals itself and signs a significant number of licences, but it has been silent on issues emerging from the Patriot Act. In summary there has been no national debate or even acknowledgment of this problem.

## International Discussion

A review of the 2003 bibliography on preservation of digital resources, compiled by Kathleen Shearer for the Canadian Association of Research Libraries, provides little evidence that other countries are more advanced in discussions of national preservation strategies for commercial information (Shearer 2003).<sup>xx</sup> A major breakthrough has been the agreement between Elsevier and the Royal Dutch Library. Elsevier has agreed to keep a copy of its retrospective digital collections in escrow in the royal library, although it remains at the moment a "dark" archive available only to authorized subscribers.

The United Kingdom is something of an exception. The Joint Information Services Committee (JISC) of the United Kingdom provides a central group for planning and implementing a shared information infrastructure. In its 2002 strategy document,<sup>xxi</sup> JISC recognized the importance of preserving commercial and institutionally created digital information: "The needs of researchers, students, staff and institutions will often require ongoing availability and confidence in the future accessibility of these materials."<sup>xxii</sup> The strategy included a recommendation for the development of a national repository of e-journals.

NESTOR, a German national preservation project for digital resources was founded in 2003. While still very much in a start-up phase, it seems to cross over from the standard national interest in heritage materials into commercial products. It is actively investigating issues for the preservation of electronic journals and the impact digital rights management and copyright law could have on a preservation program (Dobratz and Neuroth 2004).

Other discussions of archiving electronic resources consistently make two points: that commercial publishers are unreliable archives and that archiving requires deep resources often at a national level. Taken together, these observations reinforce the importance of developing national information infrastructures that include commercial products in their planning.

As an international issue, digital rights management has received some attention as libraries try to understand the implication of the new technology. Intellectual property rights are becoming subject to international trade laws, specifically the World Trade Organization. This may lead to the domination of the economic concerns of richer nations over the social benefit of information exchange. Digital Rights Management systems are a technology that may enable commercial or national controls that are in contradiction to local needs and laws (May 2003).

Laura J. Murray in "Protecting Ourselves to Death: Canada, Copyright, and the Internet" reinforces this view (Murray 2004). In discussing the rhetoric that surrounds Canadian discussions of copyright, she argues that Canadians often conflate the protection of copyright holders with protecting national culture. In her criticism, Murray describes the fair use doctrine as it is applied in Canada and how this differs from the application in other jurisdictions, namely the United States. She demonstrates that copyright is not only an international issue of property, it is also a reflection of cultural views and norms as they evolve through consensus in national debate. Much the same could be said of norms of privacy and confidentiality of information. Digital rights management systems have great potential to subvert the autonomy of this debate, imposing externally derived controls that override national laws or even international conventions. Canada and Canadians must control both the hosting and use of content to protect citizens and resources from external control.

## Further Implications

On the surface, the impact of the above discussions on Canada's other memory institutions and publishers would seem minimal. Except for occasional Canadian publisher, archives' and museums' information offerings are rarely part of international aggregator packages. Yet the same issues of marginalization, preservation, ownership, and control apply, although perhaps in a more subtle and insidious way.



Canadian digital information generated by its archives and museums is free. It is housed for the most part on Canadian servers. However, the fact that it is free makes it often virtually inaccessible and inconsistently indexed by university libraries. The fact is that academic information found in commercial aggregator packages is treated more seriously by academic libraries than free information generated by its memory institutions. Academic libraries may well argue for open access and for the liberation of scholarly discourse, but their own indexing and preservation habits testify to a more schizophrenic behaviour. This has meant that some key Canadian cultural information is not included in the material validated by the library acquisition process.

While this may not matter where there is an incredible density of cultural material, it does matter where cultural memory is fragile. It also suggests that open access outside aggregator packages or outside the commercial framework is not yet an accepted form of scholarly communication. What is free would appear to be of less value. Rich archival collections of primary materials are critical to research, to the questioning of decisions, and to a healthy ever-inquiring community. While American, British, and European collections are aggressively present in pay-for-view digital environments, like those of Alexander Street Press, Canadian materials are not generally present in these packages except as add-ons and are not easily identifiable on the Web. This means that free information informed by Canadian content is marginalized.

There are several reasons for this. First while Canadian academic libraries purchase information, they rarely harvest free information and include it in their primary access points – catalogues. This means, for example, in Canadian universities, products like “Our Roots,” “Our Future Our Past,” and “Early Canadiana On-line” are not obviously accessible to students. Free full-text Canadian materials available through leading Canadian archives like the National Library and Archives Canada are also not consistently identified. Libraries and archives argue for free, open, and unfettered access, but unless there is an exchange of money, it would appear that access is not taken as seriously. While academic librarians and archivists might well rail at “Google,” often it is an equally reliable guide for free national information.

Examining access to four key Canadian primary source and archival data bases at the three largest Canadian university libraries, the University of Alberta, the University of British Columbia, and the University of Toronto, is instructive. “Early Canadiana On Line,” “Our Roots/Nos Racines,” “The Alberta Heritage Digitization Project,” also known as “Our Future Our Past,” and the *Indian Affairs Annual Reports* produced by the Library and Archives of Canada were searched on the library catalogues of these institutions. “Early Canadiana On Line” was selected both because it has the support of the library community and because it is a pay for view as well as free site. “The Alberta Heritage Digitization Project” was selected because it is a regional primary and secondary source site built on solid academic principles of peer review, but free of charge. “Our Roots/Nos Racines,” the pre-eminent local history site in Canada, reflected a cross-national bilingual product developed under a university press and an academic library and is available at no charge. The *Indian Affairs Annual Reports* reflect a key free searchable data base for both Canadian and aboriginal studies.

A Google search for “Canadian local history” immediately brings up “Our Roots/Nos Racines” as number one. Remote access to the University of Alberta’s library catalogue indicates its availability, but no access without authentication is allowed. Searching the same product through The Alberta Library, a consolidated catalogue of all post-secondary and public libraries in Alberta, including the University Alberta, again suggests only one location in Alberta – the University of Alberta, but direct click-through access is allowed. The University of British Columbia library had no apparent reference to “Our Roots” in its catalogue.

The University of Toronto catalogue is of particular interest because it is transparent in what it catalogues.<sup>xxiii</sup> They identify products that they subscribe to, but not those that are free, other than through indexes generated by American librarians or their institutions – in which Canada is rarely identified. “Our Roots” could not be retrieved using the general catalogue search or their general electronic resources search tool. While it can be found through intermediary sites, few students and faculty and fewer non-academic Canadians would have the information literacy skills to make this retrieval.

The case of “The Alberta Heritage Digitization Project/Our Future Our Past,” which has approximately 500,000 pages of text, is equally instructive. An imprint of the University of Calgary

Press, it is not identified in the University of Alberta library catalogue. It can be retrieved in The Alberta Library Catalogue with a holding identified in the Short Grass public library system. It is no surprise that it is not identified at the University of Toronto, the fourth ranking library in North America, since the Canadian West is hardly relevant in Eastern Canada. What is interesting is that the terms “Alberta and history” confined to e-resources did return licensed western Canadian titles published by western Canadian university presses that make digital product available through the American based netLibrary. To be to the University of Toronto is to be aggregated by an American information corporation.

The conclusions might be that, if academic products are not pay for view or are not part of wider aggregated digital collections, they are marginalized. Aggregated free digital resources rarely emerge in Canadian academic library catalogues. It should be no surprise, however, that toll-gated digital collections can be accessed through university library catalogues with considerable ease. “Early Canadiana On Line” or ECO is always clearly indexed both in the library catalogues as well as separately in their digital resource listings. The collection is available on line for free, although with less functionality. None of the catalogues link to the “free version” – all link to the toll-gated version. Even The Alberta Library, which provides some links to digital data that is free, links to the toll-gated version. Perhaps toll-gated products provide greater service and stability. But more likely, the toll-gated product follows existing identification, purchasing, and cataloguing flows within academic libraries. Harvesting and preservation systems are yet poorly developed within academic libraries, and little thought has been given to the need for systems review. A cynic might conclude that academic libraries are primarily serving as cash aggregators for commercial publishers.

A final e-collection that was examined was the Library and Archives of Canada’s *Annual Indian Affairs Reports*. These were selected because they are government documents, which in the past have generally been free. However, while the print versions are available at all academic libraries, the electronic references were not readily accessible. At the University of Toronto Libraries, they were not linked, although they were at the University of Alberta libraries and at those of the University of British Columbia. The point is not to be critical of the information-seeking behaviours of researchers, students, and citizens, but rather to observe the inconsistency of academic archives and libraries in their support of scholarly communication.

While the above proves little other than government documents on-line and purchased information are more likely to be catalogued, the implications for Canadian journals who want to pursue an open access model must be carefully considered. So must the implications for the movement to find new structures for scholarly discourse that might or might not replace the journal. Currently the scholarly communication food chain includes scholar/creator, publisher, referees, and buyers (one of which might be a library). The new digital medium allows the creator/scholar to determine whether the publisher, the referee, or the buyer/memory institution adds value. Academic libraries argue that they have a role to play in the facilitation of the new scholarly discourse. But the vendor/librarian relationship rather than the scholar/librarian relationship remains the key one. Academic librarians still prefer to be masters of the “toll gate.”

This suggests that, without a fundamental shift in the internal operations of libraries, academic library activities to facilitate scholarly communication will likely be limited. Many academic libraries for example have adopted digital repositories to house faculty scholarly production, many using DSpace software from the Massachusetts Institute of Technology. However, libraries have complained that take-up by faculty has been limited.<sup>xxiv</sup> Without full integration into a single search engine, which incorporates all information types, DSpace will be a marginal scholarly communication strategy. It will remain a marginally accessible “add on.” Should Goggle integrate DSpace, there might well begin to be traction. But if DSpace is protected behind individual university library authentication processes, the only impact will be to tease – not to create access.

If part of the failure of open digital communication lies with academic libraries and their librarians and administrators who are unwilling to live up to the promises of their rhetoric, the floundering of the open access movement for scholarly communication lies with scholars themselves. Most recently, in a discussion in the Budapest Open Access Initiative forum, several scholars debated the impact of self-published literature and where digital objects would best be housed? The consensus by some was that it would be best housed at the departmental level

within universities. While some argued that this would minimize impact of the research, it was equally argued that the “invisible” college would know where to find what it needed. The option of the university library or university archives facilitating and housing this kind of discourse did not immediately come to their minds.

This was curious given the connection of the Budapest Open Access Initiative with the Directory of Open Access Journals (DOAJ). DOAJ aims to create a comprehensive directory of open access journals searchable at the article level. The initiative originated at the First Nordic Conference on Scholarly Communication at Lund (<http://www.lub.lu.se/ncsc2002>), funded by SPARC and the Open Society Initiative in Budapest. This is possibly one of the most positive steps in the creation of open discourse within the context of tradition. Because the journals are aggregated and available with professional indexing standards, Canadian academic libraries are including the journals in their catalogues. However, at the moment there are only about a dozen Canadian journals amongst the 1,362 journals (only 334 are searchable at the article level) and most of these are in the medical fields.<sup>xxv</sup> Will this initiative housed at Lund University gain traction? Will it stall? Will Canadian journals drift to European aggregation? If the Nordic universities deposit the collection at OCLC, will it too eventually fall under the Patriot Act?

The open source initiative appears to be sufficiently distributed and supported by smaller national scholarly activity that it will survive. But how many journals are still based on an inflexible government support systems like that offered by the Social Sciences and Humanities Research Council, which demands paid subscriptions rather than readership? Can Canadian systems for scholarly communication change?

## Conclusion

The digital world offered incredible opportunity for open communication that could ignore international and disciplinary boundaries. The initiatives in the digital world by Canada's memory institutions, however, has not been driven by the opportunities offered by the new technologies; rather their innovations have initially been driven almost entirely by serials pricing issues. This myopic perspective means that innovation has only happened as a reaction to journal price increases. If anything, the division amongst memory institutions and fragmentation within the scholarly communication community (really the academy as a whole) has increased. The failure lies squarely with the academic libraries and their failure to identify the elements of the problem, their failure to look at their own systemic dysfunctions, and in the end their failure in exercising appropriate leadership. Academic libraries have argued that they are the bulwarks of intellectual freedom and that they are the keepers and the access providers for intellectual memory. In Canada, their behaviour has not evidenced that role. Their pleas to the Canadian Foundation for Innovation to acquire international toll-gated products were successful, but their support for a profound transformation of scholarly communication remains tempered. CFI sees it as an interesting but not a critical issue that could have been argued as eligible for their emergency funding.

Their relations with the Canadian journals and publishing community remain tangential. While they are the primary consumers of Canadian scholarship, they have done little to understand or to nurture Canadian scholarly communication. They have failed to engage the Canadian scholarly community and its journal community, choosing rather to support American academic library initiatives to fight the international aggregators. But in so doing they ignored the crisis in their own back yard. Canadian publishers were going bankrupt as Canadiana and American libraries were focusing on the Elsevier-generated crisis. Licenses were being signed with few complaints about the impacts for Canadian intellectual freedom. Free intellectually sound products are not being indexed to ensure uniform access.

If the academic libraries are failing as agents of change in an increasingly complex information communication environment, it is because they lack the national conviction and will to develop their own independent leadership within the international context. How can it be otherwise when over half of the members of Canada's leading academic library association, the Canadian Association of Research Libraries, are also members of the Association of Research Libraries, a conservative organization of leading American large academic institutions who are members of a system that preserves (whether intentionally or not) American hegemony over

scholarly communication? They will tamper at the edges but will be very slow to change traditional practice and assumptions. The glacial pace of change could leave the senior academic libraries marginalized – it is up to the younger and more nimble to be the leaders of tomorrow.

## Notes

- i Open Access Initiative, <http://www.soros.org/openaccess/>.
- ii BioMed Central: The Open Access Publisher, <http://www.biomedcentral.com/>.
- iii Note some of the key University of Toronto journals at <http://muse.jhu.edu/journals/index.html>.
- iv OFAC “administers and enforces economic and trade sanctions based on US foreign policy and national security goals against targeted foreign countries, terrorists, international narcotics traffickers, and those engaged in activities related to the proliferation of weapons of mass destruction.” [www.treas.gov/offices/enforcement/ofac/](http://www.treas.gov/offices/enforcement/ofac/) (accessed October 20, 2004).
- v OFAC ruling 031002-FACRL-IA-11. <http://www.treas.gov/offices/enforcement/ofac/rulings/ia100203.pdf> (accessed October 20, 2004).
- vi [http://www.ieee.org/portal/site/mainsite/menuitem.818c0c39e85ef176fb2275875bac26c8/index.jsp?&pName=corp\\_level1&path=about&file=ofac.xml&xsl=generic.xsl](http://www.ieee.org/portal/site/mainsite/menuitem.818c0c39e85ef176fb2275875bac26c8/index.jsp?&pName=corp_level1&path=about&file=ofac.xml&xsl=generic.xsl) (accessed October 20, 2004).
- vii OFAC ruling 040405-FACRL-IA-15. <http://www.treas.gov/offices/enforcement/ofac/rulings/ia040504.pdf> (accessed October 20, 2004).
- viii Ibid.
- ix See <http://www.aaupnet.org/ofac/> and <http://www.aaupnet.org/ofac/release.html> (both accessed October 20, 2004).
- x <http://www.treasury.gov/press/releases/js2152.htm> (accessed March 22, 2005). This is the press release for the new ruling. The new ruling in full can be accessed at <http://www.treasury.gov/press/releases/reports/office%20foreign.pdf>.
- xi There is a good timeline incorporating the Berman Amendment and the Free Trade in Ideas Amendment at <http://aaupnet.org/ofac/background.html>.
- xii AMA site licence, 2003.
- xiii SPIE site licence, 2005.
- xiv Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA Patriot Act) of 2001 (Public Law 107-56, 115 STAT.272, H.R 3162).
- xv <http://www.oipcbc.org/index.htm> for a full text of the report and subsequent legislation.
- xvi Ontario Scholars Portal at <http://library.queensu.ca/libguides/databases/scholarsportal.htm>.
- xvii Savoir: monthly communiqué for members and stakeholders. Vol. 1 (October 2004). <http://www.cnsip.ca/wiki-files/savoir/October2004.pdf>.
- xvii About reSearcher products. Canadian Council of Prairie and Pacific University Libraries. [http://www.theresearcher.ca/product\\_about.html](http://www.theresearcher.ca/product_about.html).
- xix Bridging the innovation gap: strategic plan 2000 to 2005. Canadian Institute for Scientific and Technical Information. September 04, 2003. [http://cisti-icist.nrc-cnrc.gc.ca/about\\_cisti/stratplan\\_e.shtml](http://cisti-icist.nrc-cnrc.gc.ca/about_cisti/stratplan_e.shtml).
- xx Kathleen Shearer, Preservation of Digital Resources: Selected and Annotated reading list CARL/ARBC Backgrounders Series, Canadian Association of Research Libraries. <http://www.carl-abrc.ca/projects/preservation/2003Backgrounder.PDF>.
- xxi A continual access and digital preservation strategy for the Joint Information Systems Committee (JISC) 2002–2005. Joint Information Systems Committee. Neil Beagrie, January 10, 2002. [http://www.jisc.ac.uk/index.cfm?name=pres\\_continuing](http://www.jisc.ac.uk/index.cfm?name=pres_continuing).
- xxii Ibid., A4.
- xxiii <http://link.library.utoronto.ca/MyUTL/guides/index.cfm?guide=iqs>.
- xxiv <http://dspace.org/news/dspace-news.html>,
- xxv Directory of Open Access Journals at <http://www.doaj.org/>.

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- vi [http://www.ieee.org/portal/site/mainsite/menuitem.818c0c39e85ef176fb2275875bac26c8/index.jsp?&pName=corp\\_level1&path=about&file=ofac.xml&xsl=generic.xsl](http://www.ieee.org/portal/site/mainsite/menuitem.818c0c39e85ef176fb2275875bac26c8/index.jsp?&pName=corp_level1&path=about&file=ofac.xml&xsl=generic.xsl) (accessed October 20, 2004).
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- xxii Ibid., A4.
- xxiii <http://link.library.utoronto.ca/MyUTL/guides/index.cfm?guide=iqs>.
- xxiv <http://dspace.org/news/dspace-news.html>,
- xxv Directory of Open Access Journals at <http://www.doaj.org/>.