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Title: Globalisation and its impact on the journal collections of research libraries in Australia: a Health Library's perspective

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Abstract

Globalisation has a direct impact on the collection development budgets of Australian research libraries. Electronic journal subscriptions make up a significant proportion of these budgets and are influenced by factors such as: the value of the Australian dollar, the domination of multinational publishing companies and available library funding. Open access publishing has developed in response to the escalating costs and restricted access of subscription journals. This paper focuses on these issues from the perspective of the Northern Territory Department of Health Library. Research libraries require sustained financial support from federal, state and territory governments to maintain the electronic resources their clients need.

Implications for Practice

- Highlights the difficulties facing research libraries in Australia as a result of globalisation and declining budgets
- Library staff are encouraged to regularly assess the usage and cost of electronic journal collections to keep abreast of changes
- It is important that librarians develop the skills to lobby government funding bodies for sustained financial support to maintain up to date and relevant electronic resources

- Librarians can support researchers by making it a priority to develop an institutional repository and promoting open access publishing

Keywords:

Globalisation; research libraries; health libraries; electronic journals; multinational publishers; open access

Introduction

Globalisation as a concept is complex and multi-dimensional. It has changed the way nations work with each other and has become a part of life in a way no one could have imagined fifty years ago. Due to this complexity globalisation is not easily defined but it can broadly be described as the way in which all aspects of society have become interconnected and interrelated (Jones, 2010). The progress in technology has significantly influenced this evolution. There have been many changes which include: the development of the media industry and the internet, the movement of people between nations for work, study and leisure and commercial businesses easily having the ability to undertake global trading with the United States (US) dollar as the global currency (Scholte, 2008).

Research libraries in Australia are at the forefront of new technologies (Becker, 2006) and in recent times have worked in a globalised way. They have built high quality collections from across the world, created websites so information can be accessed anywhere and anytime, followed international models of best practice and worked with colleagues in other parts of the world through organisations such as the International Federation of Library Associations (IFLA). However, in the last few years the collection development policies of these libraries have been impacted by decreasing library funding and international factors such as the value of the Australian dollar, the domination of multinational publishing companies and the rise of open access journal publishing. The purpose of this paper is to discuss globalisation and the issues surrounding this topic in relation to the journal collections of research libraries. It is beneficial for librarians to have an awareness of global factors that ultimately affect their collections.

Multinational Publishing Companies

A globalised society has many advantages because of greater world trading, mobility of people and increased technological innovations (United Nations, 2002). This has positively influenced the flow of information and access to published research for libraries. However, increasing interdependency can mean domestic economies are heavily influenced or controlled from overseas and hence they surrender to the power of large corporations (Jeffrey, 2002).

Multinational publishing companies dominate the production of medical and scientific journals. These journals originated as a way of disseminating research among their professional societies in the seventeenth century. The industry grew exponentially in the latter part of the twentieth century with the thirst for information and it has not slowed down. In 2014 there were over 28,000 active scholarly peer-reviewed journals in the world that collectively published over two million articles that year (Ware and Mabe, 2015). This growth has been paralleled by the rise in research with the numbers of researchers reported to now be between seven and nine million worldwide (Ware and Mabe, 2015). Accessing these journals has become a large portion of a library's budget (Gregory, 2011). Elsevier and Springer are two of the largest publishers in the world (Beverungun, Bohm and Land, 2012). Elsevier's head office is in Amsterdam with additional offices located in many other countries. Fifty-five percent of their revenue is generated in the US (Ware and Mabe, 2015). Springer's head office is in New York. Both of these companies operate in US dollars when selling to Australian libraries. The exchange rate of the Australian dollar has a significant impact on purchasing power. In mid-2011 the Australian dollar value rose as high as US\$1.10. At the time of writing this paper, the Australian dollar is worth US\$0.79 (XE Currency Authority, 2018). The demand for and supply of electronic journals is affected by the economy and in recent years many Australian libraries have developed strategies to deal with these influences by forming cooperative ways of purchasing via consortia. Libraries work together to negotiate the best price for these electronic journals (Turner, 2014). This method of subscribing to resources has proved efficient for a number of Australian libraries and beneficial for their users (Maceviciute, 2014).

Research libraries purchase resources such as books and journals from publishers to support their institution's educational mission (Greco, 2015). For libraries to remain relevant they need to be open to change and regularly evaluate their resources. It is crucial for them to include major electronic journals in their collections and to provide remote access via their website (Gregory, 2011). The number of titles they can subscribe to is dependent on a collection development budget, which differs significantly between large university libraries and small government libraries. According to a recent Harvard Business Review article, one of the key complaints about globalisation today is that it has contributed to rising income inequality in nations with advanced economies (Ghemawat, 2017). Zajda (2014) supports this argument, saying that despite the progress, a new divide has been created between high and low socioeconomic statuses, increasing inequality. This divide can be seen in libraries as the large academic libraries with substantial budgets are more likely to be able to cope with publisher price increases.

The Northern Territory (NT) Health Library

One example of a small government library supporting the research and information needs of health professionals and other departmental staff is the Northern Territory (NT) Department of Health Library. This library service supports 6,800 NT Health staff across five hospitals as well as remote locations throughout the Territory (NT Health, 2016-17). It collects resources for these staff working in clinical areas as well as those undertaking research and policy writing. In order to achieve a valuable service, the library needs to subscribe to high quality resources, including key medical journals. The Health Library's collection development policy has been created to support the vision and strategic objective of the department. One of the selection priorities outlined in this policy is that the library acquires resources to assist departmental research activities by subscribing to Australian and international journals covering medical, nursing, allied health and other related fields (Lindberg, 2016). The policy also covers access to this information. The Health Library has five branches in hospitals throughout the NT, so there is a need for electronic access rather than print. Ninety percent of the collections budget is committed to subscription based resources (Lindberg, 2016). The impact of decreasing library

funding means pressure on the budget and having to decide which resources are kept and to also actively seek justification for price rises (Tillack, 2014). Globalisation was beneficial for the Health Library in the past when the Australian dollar had parity with the US dollar. This gave the ability to build a significant electronic journal collection which would not have been possible by working solely with Australian publishers. The majority of in-demand journals are produced by large multinational companies in the US or Europe. These companies raise their prices every year as the Australian dollar has weakened and the library's budget has declined.

Influence of the Australian Economy

The current Australian federal budget has had to be tightened because the economy has experienced minimal growth in the last few years (Morrison and Cormann, 2017). Consequently, the states and territories have been allocated less funding. This has directly affected the amount of money distributed to the NT public service. In addition to this, in March 2017 the Commonwealth Grants Commission (CGC), a federal body that distributes GST to the states and territories, cut Goods and Services Tax (GST) revenue to the NT by \$269 million (8.4%) for the next financial year (Commonwealth Grants Commission, 2017). The CGC claims this was due to low population growth and below average revenue raising capacity (Commonwealth Grants Commission, 2017). Subsequently, the NT's Treasurer, Nicole Manison announced that these cuts would severely affect the Territory's capacity to deliver services (Gunner and Manison, 2017). Since this announcement, all agencies have been directed by their chief executives to find savings over the next year, including the corporate division the library reports to. This has impacted the Health Library's current budget and collection development spending capability. The budget constraints will mean a significant reduction in purchasing capacity (Gregory, 2011). This is beginning to create uncertainty as to how much money can be allocated for current and new journal subscriptions. There is a loss of control as this content is not owned by the library. In future there will probably be more reliance on electronic document delivery (share agreements with other libraries) to access a journal article or book chapter, rather than purchasing or subscribing to the whole item (Gregory, 2011). If this scenario continues, users may eventually have to pay for these documents themselves.

The NT Health Library's budget has been steady the last five years. Despite this, there have been challenges with maintaining subscription access to all the major health and medical journals. A publisher raising their prices each year contributes significantly to this issue. In the last twenty years, journal publishers have used revenue-raising business models that have made it increasingly difficult for small research libraries to access the content. This has led to restricted availability and limited accessibility (Harzing and Adler, 2016). Libraries have been forced to cancel thousands of subscriptions to compensate and publishers have further increased prices to meet sales targets (Gregory, 2011).

Publisher Prices

Commercial publishers claim they make a significant contribution to academic society, but the larger companies record annual profit margins of 30-40% (Beverungen, Bohm and Land, 2012). In comparison for the same period, the profit margins of Australia's entire Information, Media and Telecommunications Industry was 9-11% (ABS, 2012-13). In the 1970s, the prices of scholarly journals increased along with the profits. One would have assumed that the move from print to electronic publishing should have brought down the costs (Lariviere, Haustein and Mongeon, 2015b). However, between 2007 and 2014 the price of health science journals increased by 90% (Greco, 2015). Elsevier is one of the multinational publishing companies that is benefitting from supplying not-for-profit libraries with their journals and electronic books. In 2013 Reed-Elsevier's profit from its Scientific, Technical and Medical (STM Division) was more than US\$2 billion (Lariviere, Haustein and Mongeon, 2015a). This is due to the unusual economics of article authors not getting paid and readers being charged. Also, each journal has total control over submitted papers that it publishes, so one title can't be substituted for another (Lariviere et al, 2015a). The journal publishing industry has limited competition, with a small number of large publishers dominating the market. It is very complex with journals changing publishers and mergers occurring regularly (Lariviere et al, 2015b). It is a paradox that researchers are still dependent on these companies that publish "prestigious" journals to secure their academic status, keep their funding and further their careers (Greco, 2015).

The creation of journal “bundles”

The next twelve months at the NT Health Library are going to prove challenging to maintain access to all the journals needed by their clients. A number of subscriptions will be cancelled but this has to be assessed and managed carefully. One factor that needs to be taken into account when assessing journal collections is the creation of “bundles”. As prices have increased there has been a lower circulation of individual titles, so publishers have responded by creating “bundles” of journals, providing “discounted” access. These publishers have strengthened “their monopoly position while driving out competition from independent journals” (Beverungen et al, 2012, p. 931). Libraries now have to pay for many titles they don’t want in order to access the few they do want. This lack of ability to cancel or keep individual titles is a concern (Strieb and Blixrud, 2013). There are dramatic differences in bundle prices. It is not a transparent process, so negotiation is difficult and many libraries make do with smaller collections (Bergstrom, Courant and McAfee, 2014). A variety of pricing models make it difficult for library staff to get the best value for money as well as the issue of perpetual access, where once a subscription is cancelled, that library no longer has access to past journal issues (Gregory, 2011). Price discrimination exists, with publishers quoting different prices depending on location and size of the requesting organisation (Greco, 2015). It is also a policy of some publishers to have libraries sign price confidentiality clauses (Bergstrom et al, 2014). As early as 2002, the United Kingdom (UK) Office of Fair Trading expressed concern about the profitability of these commercial publishing companies and the price increases above inflation. They questioned “bundling” as just a way of highly profitable journals supporting the less profitable ones (UK Office of Fair Trading, 2002).

The rise of Open Access publishing

As the digital age has developed along with the growing prices of journals, more researchers have turned to open access publishing (Maceviciute, 2014). The development of open access has occurred to counteract the escalating costs and restricted access of subscription journals.

Open Access (OA) was first promoted in the early 2000s by organisations such as the Budapest Open Access Initiative (BOAI). This group defined open access as creating free and unrestricted

online availability to peer-reviewed research articles that scholars and researchers have produced, permitting any user to read, download and distribute this literature for any lawful purpose (BOAI, 2002). The BOAI was a major defining event in the OA movement. Making research publicly and freely available supports the long term interest and investment society provides to publicly funded research through paying their taxes (Tennant, Waldner, Jacques, Masuzzo, Collister and Hartgerink, 2016). This century has seen a dramatic shift towards OA publishing where financial barriers to readership are not erected (Harzing and Adler, 2016). A number of different business models exist for OA publishing. One is where the author pays a fee on submission of a research paper to the journal that transfers production costs from the reader to the author, called an article processing charge. Another is where advertising is the main source of revenue. In the last ten years there has been increasing acceptance of OA as a paperless publishing business model due to the development of the Open Access Scholarly Publishers Association and the Directory of Open Access Journals (Bjork and Solomon, 2012; Laakso, Welling, Bukova, Nyman and Bjork, 2011).

However, OA has not been the perfect solution. An author having to pay an article processing charge is a barrier to submission in many research fields that do not have sufficient funding (Bjork and Solomon, 2012). In addition to this there is a growing concern in the industry of the rise in predatory OA publishing. This has evolved out of pressure on researchers to publish. These predatory publishers take advantage of this. The business model is to accept as many papers as possible and to target researchers with email requests for submissions (Eriksson and Helgesson, 2017). Hence, the quality of these journals is questionable (Beall, 2012).

Commercial publishers are very aware that researchers prefer the OA model, so are experimenting with this. In 2008 Springer purchased one of the largest OA platforms in the world, BioMed Central (Bjork and Solomon, 2012). Authors or their institution then needed to pay the article processing charge for publication. This played a large part in BioMed Central recording significant profits in the following years. Despite these profitable opportunities, OA remains a positive way of making research articles freely accessible. Nowadays, the funding

model is irrelevant to the quality of the journal. There are “large numbers of both subscription and OA journals that are high quality and widely cited” (Bjork and Solomon, 2012, p.9).

Libraries have taken a leading role in the OA movement. A noteworthy moment occurred in 2012 when Harvard University Library threatened to boycott the major publishers because of their costs. In addition to this they sent a memo to the University’s academics and researchers encouraging them to submit their work to OA journals (Sample, 2012). Creating and maintaining institutional repositories is another way libraries are supporting the OA movement (Maceviciute, 2014). The NT Health Library has a digital repository and is encouraging departmental researchers to inform the library when they have published OA research so it can be included in the repository. Staff have also commenced a PubMed harvesting project to capture departmental published research. Subject repositories such as PubMed Central have also evolved during this time (Ware and Mabe, 2015).

Traditionally, researchers may have been satisfied with print journals that were available locally. This has changed with the development of the internet (Gregory, 2011). The previously mentioned Harvard Business Review article suggests that it may not be globalisation that is the key contributor towards growing inequality, but it may in fact be because of the significant technological progress (Ghemawat, 2017). Initiatives such as OA have grown in an attempt to reduce this imbalance and because journal publishing constitutes such an important part of medical and scientific communication. Clients undertaking a search for research via the Health Library website are now linked through to either subscription based or OA articles using a link resolver. A number of publishers have conceded to pressure and now state on their websites that articles can be shared as a preprint at a conference or in an institutional repository (Greco, 2015). Currently, this move does not appear to have affected their profits.

Private publishing companies are always going to be driven by profit-making. Therefore, adequate funding for libraries is “essential to develop their mission of serving patrons and providing resources” (Sootheran, 2014, p. 109). It is also crucial for senior library staff to develop the skills and strategies to be comfortable lobbying for funding (Sootheran, 2014).

Conclusion

Despite the influence of global forces and declining budgets, research libraries in Australia are committed to providing access to the scholarly resources required by their research communities (Maceviciute, 2014). The NT Health Library still has control of its collection development policy, although some adjustments have been required in the last couple of years due to global influences. Research libraries rely on and require sustained financial support from the federal, state and territory governments to provide the resources their clients need. These libraries will continue to look for long term solutions to the cost and access to scholarly publishing (Gregory, 2011).

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