

OPEN ACCESS JOURNALS IN SLOVENIA: AN EXPLORATORY STUDY

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Abstract

The advent of the Internet in the 1990s fostered the rapid growth of open access publishing, a literature that is digital, online, free of charge, and free of most copyright and licensing restrictions. Although open access publishing is a widely studied topic, there are only a few studies on open access publishing in Slovenia and there are no studies on the publishing practices of the Slovene open access journals. This exploratory study aimed to establish the extent of open access publishing in Slovenia and to explore some of the publishing practices used by the Slovene open access journals. By combining the data from different databases, the total number of Slovene open access journals was estimated to 150–200. The analyses of publishing practices of DOAJ-indexed Slovene open access journals revealed that 70% of these journals exercise peer-review quality control, while only 28% of them use Creative Commons licences. Surprisingly, no Slovene DOAJ-indexed open access journal is charging publications fees.

Keywords: open access, academic journals, publishing practices, Slovenia

1. INTRODUCTION

The first academic journals appeared in the 17th century, more exactly in 1665, when the Royal Society of London started to publish the *Philosophical Transactions*. The publication of the *Journal des sçavans* started in Paris actually a few of months before the *Philosophical Transactions*; however, while the Journal was news-oriented, the *Philosophical Transactions* “really aimed at creating a public record of original contributions of knowledge” (Guédon, 2001, p. 5). The publication of Journal des sçavans ceased in 1792, while the *Philosophical Transactions* are still being published (see <http://rstl.royalsocietypublishing.org>). It is not a coincidence that the first academic journals appeared in the 17th century – in that period the questions of intellectual property and of publication of scientific results became crucial, and the scientific results became valuable only when they were made public (Guédon, 2001, p. 7). Publication of a paper in a journal is a more effective way of publication of scientific results than the publishing of a book. Journals are published periodically and they have a wider readership; authors can publish the research results faster and make sure that they will not be attributed to someone else. In this way, the journals began to play a role »not unlike that of a patent office for scientific ideas« (Guédon, 2001, p. 5). Another important point in considering the beginnings of journal publishing is that from the very beginnings, the academic custom was to write research papers for impact rather than money. According to Suber (2013, p. 10), this »peculiar costume« insulates cutting-edge research from the market, supports academic freedom, and frees researchers to challenge conventional wisdom and defend unpopular ideas.

The journal publishing in the 17th century represented an innovative way of using a (than still relatively) new technology – the print – in a period when the roles of authors and publishers were not yet clearly defined. During the 18th and 19th centuries, the book and newspaper publishing became an important industry (cf. Chappell and Bringham, 1990), while the journal publishing remained the domain of learned societies and universities. It was only after the World War II that the journal publishing became big business and the domain of large (mostly European and North American) publishers.

In the post-war period, the fast growing number of universities, libraries, professors and students created a new market, which became dominated by the commercial publishers. Because of the inelasticity of this market, the prices rose and by the 1990s, the commercial publishers managed to monopolise the publication of the most important academic journals. According to McPherson (2003, p. 5), in the 1986 American libraries spent 56 percent of their budgets on journals, while in the 1997 the expenditures for academic journals rose to 72 percent (in this period the journal prices were actually rising four times faster than inflation).

Rising subscription prices led to the so-called »serials crisis« and the libraries began to cancel journal subscriptions. Commercial publishers responded to this threat by granting the libraries new economies of scale in the form of journal bundling (i.e. offering special prices for a bundle of journals) and granting discounts to library consortia; in this way, by 2004 the commercial publishers »essentially resolved the serials crisis« (Beall 2013, p. 79).

Important factors in the process of the transformation of the academic publishing were also the advent of desktop publishing and the widespread use of Internet in the 1990s. In the early 2000s, this technological change allowed the commercial publishers to begin to flip their publishing models from print to online (Beall, 2013, p. 80). By innovative use of a new technology, the commercial publishers not only managed to overcome the crises, but also to increase their profits. In 2010 British academic libraries were paying 65% of the money spent on content on journals (in 2000 they were paying half less), while the commercial publishers made substantial profits. Elsevier, for example, which is the biggest publisher of academic journals with almost 2,000 titles, in 2010 made an operating-profit margin of 36% on revenues of £2 billion (*The Economist*, 2011).

According to Odlyzko (2013, p. 1), “Big Deal” packages (i.e. journal bundling) are enabling a continuation of publisher profits and of what has been called “unsustainable journal price escalation.” Odlyzko also points out that the consequences of such publishing models are declining privacy, increasing price discrimination, increasing opaqueness in pricing, and increasing reliance on low-paid or unpaid work of others for profits. While the academics are still writing for impact rather than money, the commercial publishers are selling their work to the universities. The commercial publishers rely on unpaid or low paid work of the authors (frequently even charging the authors for the publication of their

papers), editors and reviewers, but they charge the readers for the access to the content of the academic journals.

Moreover, the price crisis was not the only consequence of the rising prices of academic journals. As Suber (2013, p. 31) points out, the high prices created also access gaps – in 2008 Harvard University subscribed to 98,900 serials and Yale University to 73,900, while the best-funded research library in India subscribed only to 10,600.

2. OPEN ACCESS PUBLISHING

However, the online publishing models, based on “toll access,” were not the sole innovative way of using the new technology. The advent of the Internet in the 1990s also facilitated the spread of the so-called “open access” publishing. Suber (2013, p. 4) defines open access literature as “digital, online, free of charge, and free of most copyright and licensing restrictions.” In this way the scholars, who customarily write without payment, are able to provide their work to their readers free of charge. Open access removes the price barrier and the permissions barrier, meaning that scholars are free to use or reuse literature for scholarly purposes (not only for reading and searching, but also for redistributing, text mining and long-term archiving) (Suber, 2013, pp. 4–6). According to Velterop (2003, p. 168), there are three main essentials of the open access: free accessibility, further distribution and proper archiving.

Open Access was defined by three declarations: the Budapest Open Access Initiative (February 2002, see <http://www.budapestopenaccessinitiative.org>), the Bethesda Statement on Open Access Publishing (June 2003, see http://dash.harvard.edu/bitstream/handle/1/4725199/suber_bethesda.htm?sequence=1), and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (October 2003, see <http://openaccess.mpg.de/Berlin-Declaration>). The Budapest Open Access Initiative declared that “An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet.” The same document defined in exact terms what is meant by open access: “By “open access” to this literature, we mean its 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 other than those inseparable from gaining access to the internet itself. 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.”

The two basic approaches to open access – the “golden road” and the “green road” were defined by the Berlin Declaration, the first meaning free access to materials in open repositories, while the later meaning publishing articles in freely available academic journals (Fabián, 2013, p. 212). The main difference between the “gold” and “green” open access is that open access journals perform their own peer review, just like conventional journals, while repositories generally do not perform peer review (although they host and disseminate articles peer-reviewed elsewhere) (Suber, 2013, p. 51).

In 2002 (the year of the Budapest Open Access Initiative) also the first open access database was created, the Directory of Open Access Journals (<http://doaj.org>). DOAJ defines itself as an “online directory that indexes and provides access to quality open access, peer-reviewed journals.” According to DOAJ, open access journals are defined as journals that use a funding model that does not charge readers or their institutions for access; the rights of users to “read, download, copy, distribute, print, search, or link to the full texts of these articles” are mandatory for a journal to be included in the directory. To be included, the journals must also exercise peer-review or editorial quality control. In 2002, there were only 32 journals included in DOAJ, today (April 2014) more than 9,700 journals are included.

Open access journals do not charge their readers for access, but the publication of open access journals is not free of costs. According to (Suber, 2013, p. 136), some open access journals have a subsidy from a university, library, foundation, society, or government agency, other charge a publication fee on accepted articles, to be paid by the author or the author’s sponsor. It is commonly assumed that the publishing costs of open access journals are mostly paid by the authors, but the

research by Crow (2009, p. 10) showed that only half of the open access journals charge a publication fee. By using the data published on the DOAJ website, Shieber (2009) calculated that as of May 26, 2009 less than a quarter (23%) of journals, included in DOAJ, charged a publication fee, 70% of journals were not charging any publication fee, while this information was missing for about 7% of journals.

Open access removes also the permissions barrier. As Suber (2013, pp. 126–132) points out, open access journals obtain the needed permission through a publishing contract with the author, just as conventional journals do, but they do not need prohibit copying and redistribution; they also request fewer rights from authors and allow more uses. Open access journals usually apply some kind of open licences; the best known and most widely used are those from Creative Commons (see <http://creativecommons.org>).

However, there are also negative counterparts of open access publishing. One of them is without doubt the fast growing number of so-called “predatory publishers” and “predatory journals”. “Predatory journals” do not meet the academic standards and do not exercise peer-review or editorial quality control. According to Beall (2013, 80), “the fatal flaw of the gold access model is the built-in conflict of interest: the more papers a journal accepts, the more money it makes.” A second very negative impact of the gold open access publishing is the “alarming increase in author misconduct” that involves piracy, plagiarism, self-plagiarism, ghost or honorary authorship, duplicate submission, and “salami slicing” (the practice of splitting up an article and submitting it as more than a single work) (Beall, 2013, 80–81).

3. OPEN ACCESS JOURNALS IN SLOVENIA

Although open access is a widely studied topic – Bailey (2010) lists over 1300 studies and publications on open access – there are only a few studies on open access publishing in Slovenia. Some researchers (Koler-Povh, Južnič, & Turk, 2013; Božič, 2013) studied the effect of open access on citation impact of Slovene journals, but there are no studies on the publishing practices of the Slovene open access journals.

This exploratory study on publishing practices of the Slovene open access journals aimed to address the following research questions:

1. How many open access journals are published in Slovenia? How the number of DOAJ-indexed open access journals published in Slovenia compares to the number of open access journals published in other countries?
2. Which publishing practices are applied by the Slovene DOAJ-indexed open access journals: Do they charge publication fees? What kind of quality control they exercise (peer-review or editorial)? Which licensing policies are adopted by Slovene open access journals?

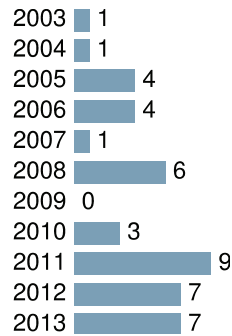
3.1. The Number of Open Access Journals Published in Slovenia

According to the data provided on the DOAJ website (<http://doaj.org>), the first Slovene journals started publishing open access content in 1998, while the first Slovene open access journal was included in DOAJ in 2003 (Figure 1). As of 31 December 2013, 43 Slovene open access journals were included in DOAJ, 23 of them were added in the last three years (Figure 2).

However, there are more than 43 open access journals published in Slovenia. The Slovenian Research Agency, which provides the subsidies to the Slovene academic journals from 2013, requires that all subsidized journals have to be submitted to the Digital Library of Slovenia (DLIB, <http://www.dlib.si>) and that this journals should be available at the DLIB web site free of charge (Javna agencija za raziskovalno dejavnost Republike Slovenije, 2013). Taking into account the requirements of the Slovenian Research Agency, all subsidized Slovene academic journals can be considered as open access journals. In 2014, 133 Slovene academic journals received the subsidy from the Slovenian Research Agency.

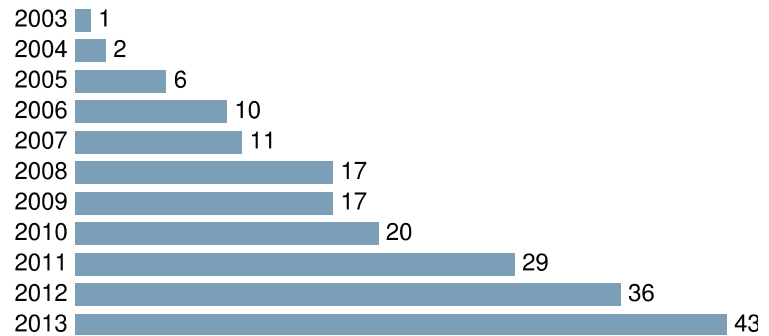
Moreover, according to the database maintained by the Slovene Institute of Information Science (http://home.izum.si/COBISS/bibliografije/seznami_za_mednarodne_baze/slo/SVNPUBL.ASP), there are more than 250 Slovene academic journals, included in international bibliographic databases. By analysing the web pages of 20 randomly selected journals from this database, which are not included in DOAJ and are not subsidized by the Slovenian Research Agency, we found that seven out of 20 analysed journals could be considered as open access journals. We can thus conclude that the number of Slovene open access journals is even higher than the number of journals subsidized by the Slovenian Research Agency and that the actual number of open access journals is between 150 and 200.

Figure 1: Annual Growth of Slovene Open Access Journals Included in DOAJ



Source: DOAJ (<http://doaj.org>)

Figure 2: Cumulative Number of Slovene Open Access Journals Included in DOAJ



Source: DOAJ (<http://doaj.org>)

Table 1 shows the number of open access journals, included in DOAJ, published in Slovenia and some other Central European countries. A higher number of DOAJ-registered open access journals are published in Croatia and Czech Republic, while Austria, Hungary and Slovakia publish a lower number of DOAJ-registered open access journals than Slovenia. Because most open access journals in selected countries are published by higher education institutions, the number of DOAJ-indexed open access journals was compared to the size of higher education system in these countries (taking the number of tertiary education students as a measure). In this comparison Croatia ranks as first and Slovenia as second, followed by Czech Republic, Slovakia, Austria and Hungary.

Table 1: Number of DOAJ-Indexed Open Access Journals, Published in Selected Central European Countries

Country	Number of open access journals (2013)*	Number of tertiary education students (2012)**	Number of students per OA journal
Austria	41	376.498	9182,88
Croatia	100	157.289	1572,89
Czech Republic	79	440.230	5572,53
Hungary	29	380.757	13129,55
Slovakia	36	221.227	6145,19
Slovenia	43	104.003	2418,67

Sources: *DOAJ (<http://doaj.org>), ** Eurostat (<http://epp.eurostat.ec.europa.eu>).

3.2. The Publishing Practices of the Slovene DOAJ-Indexed Open Access Journals

As noted before, it is commonly assumed that most open access journals charge publication fees, and researches by Crow (2009) and Shieber (2009) showed that the publication fees are charged by at least a part of open access journals. In this respect, the situation in Slovenia is different – the analysis of the data published on the DOAJ website (<http://doaj.org>) showed that as of April 2014 no Slovene open access journals actually charged the publication fees. One possible explanation of this fact is that the Slovenian Book Agency, which provided the subsidies to the Slovene academic journals in the period 2010–2012, explicitly stated that no subsidy could be given to the journals that charge publication fees (Javna agencija za knjigo Republike Slovenije, 2011).

DOAJ requires that the open access journals must exercise peer-review or editorial quality control to be included. When applying for inclusion in the DOAJ database, publishers must state what kind of quality control they exercise and does the journal have a policy of screening for plagiarism (see

<http://doaj.org/application/new>). However, this information is not available on the DOAJ website. By the journals' websites it was found that 30 journals (70%) exercise peer-review, three journals (7%) exercise editorial quality control, while no information on the type of quality control was found for 10 journals (23%).

Table 2: Number of Slovene Open Access Journals by Type of Quality Control

Type of quality control	No. of journals
Peer-review	30
Editorial review	3
No information	10

The licensing policies, adopted by Slovene open access journals, included in DOAJ, were also analysed. The vast majority of these journals (31 or 72%) use no CC licence, while CC licences are used by only 12 journals (Table 3).

Table 3: Number of Slovene Open Access Journals by Type of CC Licence

Type of licence	No. of journals
Attribution CC BY	4
Attribution-NoDerivs CC BY-ND	0
Attribution-ShareAlike CC BY-SA	1
Attribution-NonCommercial CC BY-NC	2
Attribution-NonCommercial-ShareAlike CC BY-NC-SA	0
Attribution-NonCommercial-NoDerivs CC BY-NC-ND	5
No licence	31

4. CONCLUSIONS AND FURTHER RESEARCH

In this exploratory study it was found that only limited information on Slovene open access journals is available on the DOAJ website and that even the journal's websites provide very limited information on peer-reviewing, journal licensing, publication fees and other publication practices adopted by the Slovene open access journals. Forty-three DOAJ-indexed open access journals are published in Slovenia, but the actual number of open-access journals, published in Slovenia is much higher, it was estimated to 150–200. Surprisingly, no Slovene DOAJ-indexed open access journal is charging publications fees. The majority (70%) of the Slovene DOAJ-indexed open access journals exercise peer-review quality control, while only 28% of these journals use CC licences. To provide more detailed information on Slovene open access journals and on publishing practices adopted by these journals, a survey questionnaire for journal editors will be prepared.

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