

Journal collection management and Open Access – relationship status: it's complicated

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Abstract:

A lot of different factors had an impact on journal management in the last years. The exhaustive discussions about new license models and the need to provide all kind of data, will cause further changes in the future. One of the actual challenges is the Open Access movement. It has been developed since slightly more than ten years, partly in order to redistribute academic funds and to reduce libraries' license costs.

But it has not yet been examined if and how Open Access has influenced journal management processes and how journal management might influence the distribution of Open Access. The purpose of this study is to analyze how journal management in academic libraries (selection, cost organization and allocation) changes through the influence of Open Access and in what form the Open Access movement could be supported by established structures and processes of journal management. In the empirical part, the hypotheses will be verified through an international survey (Germany, Europe (mainly Great Britain), North America (mainly US)) of libraries' journal management staff in March and April 2014. The specific legal, political and economic regulations related to Open Access in every country are providing the possibility to identify major factors of handling Open Access in libraries. The questionnaire includes questions about present processes of journal collection management and Open Access as well as future plans and expected changes. In this article, the first results of the survey will be presented and we will try to find out of how Open Access and journal collection management can be in a stable relationship and what challenges harmonic processes.

Keywords: Journal management, Open Access, International survey, Academic libraries

Background

As far back as 1995, mathematician Martin Grötschel and librarian Joachim Lügger (Grötschel, Lügger, 1995) identified an alarming, growing 'schism' between scientists and libraries, which was mainly due to the novel technical possibilities: Although a majority of materials, data, articles and ideas, were already available to them electronically, only a minor part of it could be found in scientific information systems. They considered the prevention from (budget-related) crises in libraries and the consequential optimization of information

distribution to scientists as the central building bricks of a modern scholarly communication. In a seven step model, they suggest a transfer of scholarly publications and the related copyrights from the responsibility of commercial publishers to libraries and associations, from paper to electronic access, from local storage to network structures.

A foundation for this is to establish new forms of organizations and cooperation with libraries in order to specifically position libraries in the middle of scholarly communication through journal management and organization.

In the German-speaking area, journal management as a term is currently almost solely used in headlines or serves as a synonym for the term *Bestandsmanagement* (Stein-Arsic et al., 2003), as a collective term in the context of user behavior (Tannhof, 1995), cost and collection (Obst, 1999) as well as bibliometric evaluation (Mittermaier, 2009). The English-speaking literature shows a broader understanding of the term, including activities like marketing, indexing, or solving technical problems (Reitz, 2004). In some rare cases, the term is also used to describe production processes of journals in publishing houses.

This paper perceives journal management as the collection of all processes in which individuals or groups try to handle journals as effective and efficient as possible. It focuses on journal management from the perspective of academic libraries. The theoretical considerations are illustrated in the following model of scholarly communication by commercial journals. The model will be further developed based on the results of the survey.

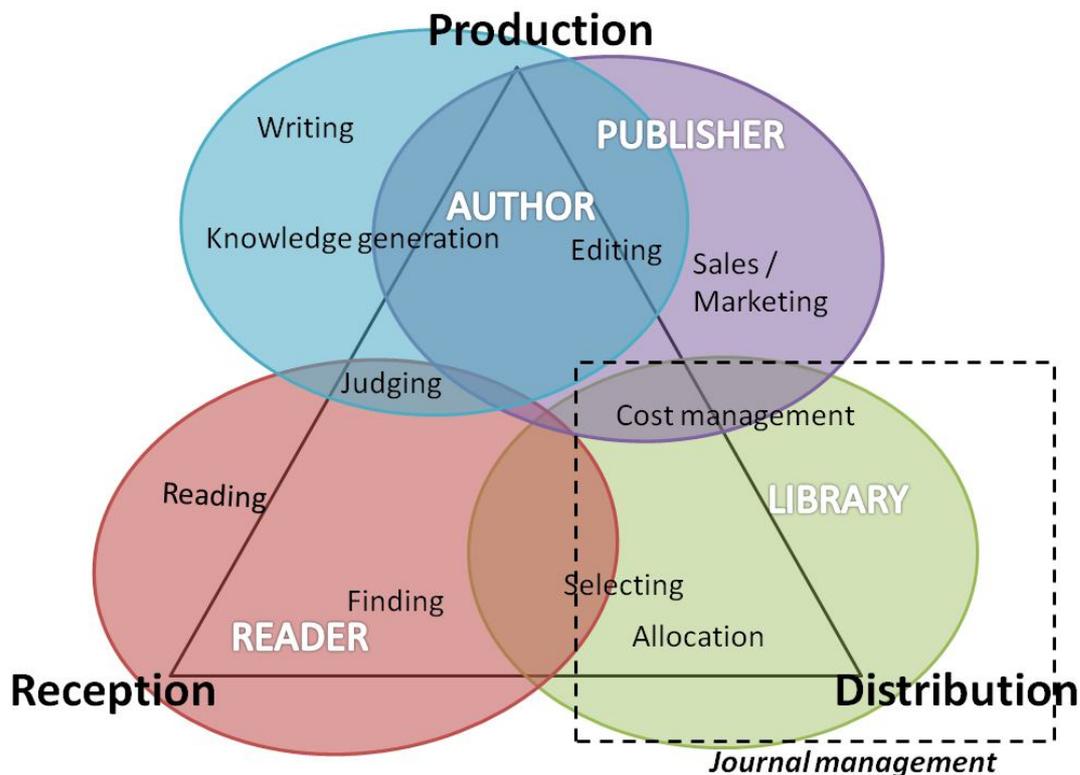


Figure 1: Scholarly communication by commercial journals: relationships and activities

This model illustrates the main interconnections of actors and their activities, that are influenced by numerous external impact factors. These factors operate in two dimensions: On one hand, academic cultures and associations, the political, economic and legal parameters

and, above all, the country-specific information architecture have a continuous impact on journal management. On the other hand, the exhaustive technical developments of the past two decades (network distribution, mobile devices, etc.) played an important role.

The Open Access movement combines almost all aforementioned impact factors: Almost 20 years after the invention of the model by Grötschel and Lügger, the Open Access movement has come up with license models that are very close to the initially illustrated model. Open Access as a concept of free access to electronic information emerged – without specifically calling it Open Access – along the development of the internet and, more significantly, the world wide web in the beginning of the 1990's (Müller, 2008). As a fixed term, the Open Access movement has been established approximately 10 years ago, at that time following a (maybe too) idealistic vision of redistributing academic funds and reducing libraries' license costs. Apart from these substantial financial considerations, motivations for Open Access based distribution models were grounded in societal considerations, like the public right to access science and the consequential freedom of research, and in a general desire for global social equity. Induced by economic necessities and supported by technical possibilities of the world wide web, the Open Access business models were initially promoted politically in order to gain currency. Consequently, they were spread to different degrees depending on the academic discipline, and made their way into the legislation of some, but not all countries. In this paper, Open Access refers to all scholarly papers which are accessible free of costs to the general public:

- peer reviewed and published in an Open Access journal, if necessary with paying a publication fee, i.e. via 'gold Open Access',
- by secondary publication in a repository / via a platform, i.e. via 'green Open Access' or
- as a hybrid publication, i.e. the paper is published in a licensed journal by paying an extra fee.

In 2007, Grötschel und Lügger conclude rather disillusioned:

„Irgendwie funktioniert diese einfache Idee nicht so richtig, obwohl viele Anstrengungen von den verschiedensten Einrichtungen und Individuen unternommen werden [...]“ (Grötschel, Lügger, 2007: 1)

Five years later, in 2012, according to a - in parts controversially discussed - study commissioned by the European Commission, the tipping point for publications from the year 2008 was reached, i.e. there were more papers being published on Open Access platforms than in licensed journals (Archambault et al., 2013). Up to now, studies promoting the distribution of Open Access have dealt nearly exclusively with scientists in their respective roles as authors or readers. There are only few studies focusing on how Open Access has affected the roles of other participants in journal management, like publishers and libraries. In journal management of commercial journals, fund flows are analyzed exclusively with regard to extreme scenarios, i.e. costs for “total Open Access” vs. costs for “total licensing”.

It has not yet been examined how or even if Open Access has influenced journal management processes and how journal management might influence the propagation of Open Access.

The research question is thus to be phrased as follows:

How does Open Access influence processes and structures in academic libraries' journal management, and are there any interdependencies generated concerning the propagation of Open Access?

The purpose of the study is to analyze how journal management (selection, cost management and allocation for libraries; sales and marketing for publishers) changes through the influence of Open Access and in what form the propagation of Open Access could be supported by the established structures and processes of journal management. In the empirical part, the hypotheses developed will be verified by an international survey (Germany, Great Britain, USA) of libraries' journal management staff, as well as of publishing companies' representatives in a later step.

Method

The study consists of a two-step survey design to cover the perspective of two target groups: librarians and publishers. Because even though both actors support scientists and scholarly communication and are part of journal management, they have very different perspectives due to their mission and self-conception. Whereas libraries in the broadest sense are commissioned to provide access to information and hence target readers as a main focus group, publishers focus on earning money with information, exaggeratedly spoken. They are hence closer to the producer (author) than to the reader.

In a first step, the aforementioned research question shall be answered with help of the following objectives, which form the basis for the subsequent online questionnaire of persons employed in journal management of academic libraries in Germany, Europe (mainly Great Britain) and North America (mainly USA):

- Identifying the impact factors for journal management
- Describing (possible) process changes in journal management by open access.
- Identifying the possible role of and the scenarios for using journal management in the propagation of open access.

Based on these objectives, workable hypotheses have been developed, e.g. about the distribution of Open Access processes, the awareness of budget situations or the role-making of certain actors.

This survey focuses on countries in which Open Access is already widespread in different institutions, and which use journal management intensively. Via surveying librarians in different countries, the transformations in journal management through Open Access and the dependencies on infrastructural, legal, political and economic circumstances of single institutions shall become apparent. Whilst taking into account the feedback of eleven international journal management experts (4 German, 5 UK, 2 US), a questionnaire with 23 questions in four parts was developed: the status quo of journal management (ten questions plus one initial question), Open Access in the library (four questions), future prospects (five questions) and demographic information (three questions).

The results of the first questionnaire will be presented in the following, and will serve as a foundation for the subsequently scheduled survey of publisher representatives; these shall be top managers of international publishing houses and journal agencies. The publishing questionnaire shall be comprised of three types of questions: questions that have previously been posed to librarians, dedicated, publishing-specific questions and a confrontation with results from the previous questionnaire. The questionnaire is scheduled for August / September 2014.¹

¹ If you are interested in taking the questionnaire, please contact miriam.lorenz@fh-koeln.de.

Conducting and Response Rate

The survey was conducted online and was propagated via country-specific and worldwide mailing lists for academic libraries, ideally targeting decision-makers in journal management. The questionnaire was open from end of March to middle of April and was sent to twelve different discussion lists. More specifically, this means:

- in Germany: propagation of the survey via mailing lists of the national and alliance licenses and the mailing list of the GASCO
- in the UK: propagation of the survey via the mailing list of the JISC Collections participants and E Resources (also subscribers from outside UK)
- in the US and worldwide: propagation of the survey via the discussion lists LibLicense-L, ALA (alcts-eres and scholcomm), NASIG-L, SERIALST, ERIL-L and Coll-Asses

Since several participants are members of more than one of these mailing lists, the deduction of a statistical population and – thereupon – a response rate is not legitimate. The sum of all mailing lists comprises 8.000 email addresses, but the number of unique individuals is presumably much smaller. The questionnaire hyperlink has been clicked 1.217 times; of these initial volunteers, 706 persons answered the first question, and 551 participants reached the second page. After data cleansing, 358 completed questionnaires remained for interpretation. Of these, the countries of origin were segmented as shown in figure 2.

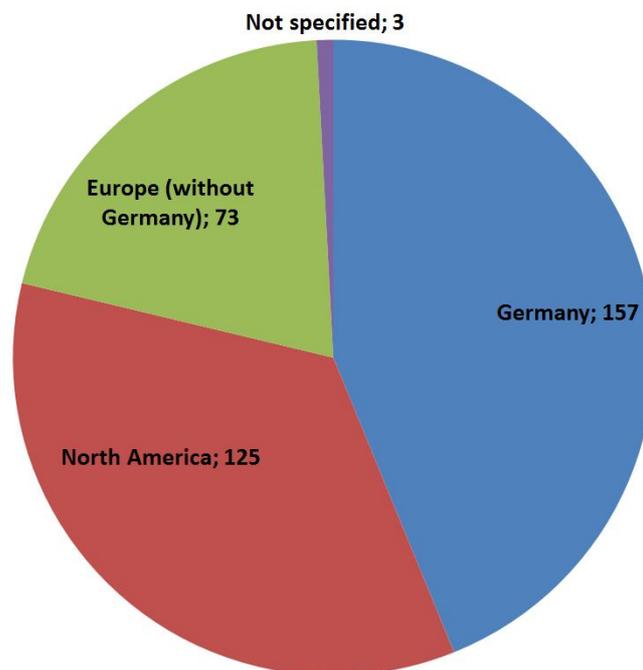


Figure 2: Respondents by country group

The average of all participants – independently from their country of origin – works in the library sector since 18-20 years. A majority of them is employed in a university library (68 %) and holds a leading position (25 % library directors, 30% head of department).

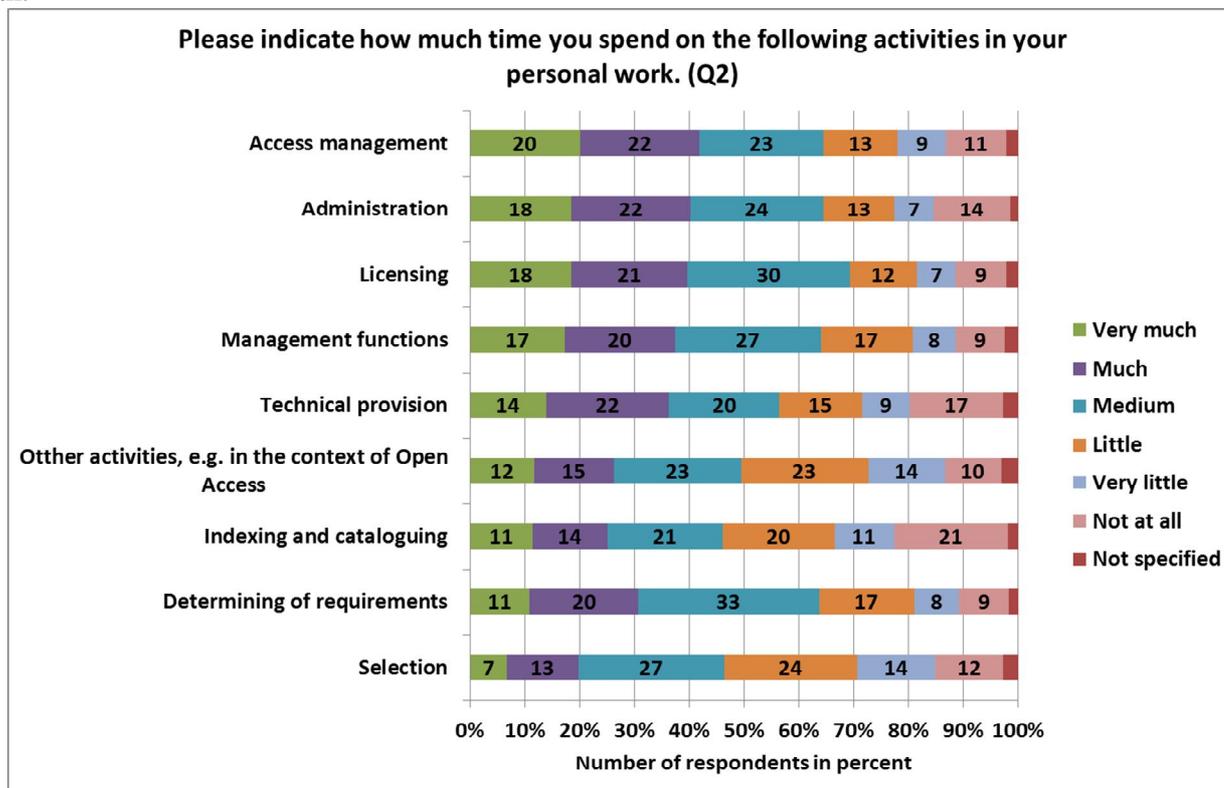
First results

As already implied by the title of this paper, the impact of Open Access on journal management and their interconnections are multi-layered; this assumption could already be confirmed during the first part of analysis. The reasons for that may not only be searched in the challenges of tailoring existing organizations to changing paradigms, but also in structural differences and inconsistencies in process logics. Consequently, the following sections contain some results concerning the structure of journal management, the propagation of Open Access and, concluding, the prospective development of both systems, as anticipated by librarians.

Actual situation in journal management:

In a first step, the participants were asked for what they perceive the most dominant tasks in their daily work. This allows for an evaluation of whether the tasks in journal management that have been derived from literature are comparable to the actual tasks in reality. Subsequently, the data will be used to test the influence of working priorities on the valuation of Open Access.

In principle, the activities correspond with the definition of journal management as described above. Operational job routines like access management, administration or licensing predominate in the results. Selection, determining of requirements and indexing are less common; with indexing being the least executed activity that was often stated to be done not at all.



With help of the next question, the general activities of the institution in the context of journal management were collected. A set of twelve core activities, which are done in at least 67% of all institutions, could be identified.

The other six tasks are more of a supplementary nature. This includes checking reference lists and providing metadata, but also user surveys and market observations. Very remarkable is that conducting user surveys is in the lower midfield, even though the participants answered in another part of the questionnaire (question 9: ‘Which of the following factors are indicators of a well-managed journal collection?’) that the satisfaction of users and their usage of journals is by far the most important indicator for the quality of journal management. Since monitoring usage statistics is most common, it seems at this point of analysis as if usage statistics equal user satisfaction (high usage = high satisfaction). The mentioned Open Access activities (Consulting in the selection of adequate publication sources, checking compliance with (research funders’) publication mandates) are part of the less spread services. While publication support is in the lower midfield, the checking of funders’ guidelines is a quite rare activity.

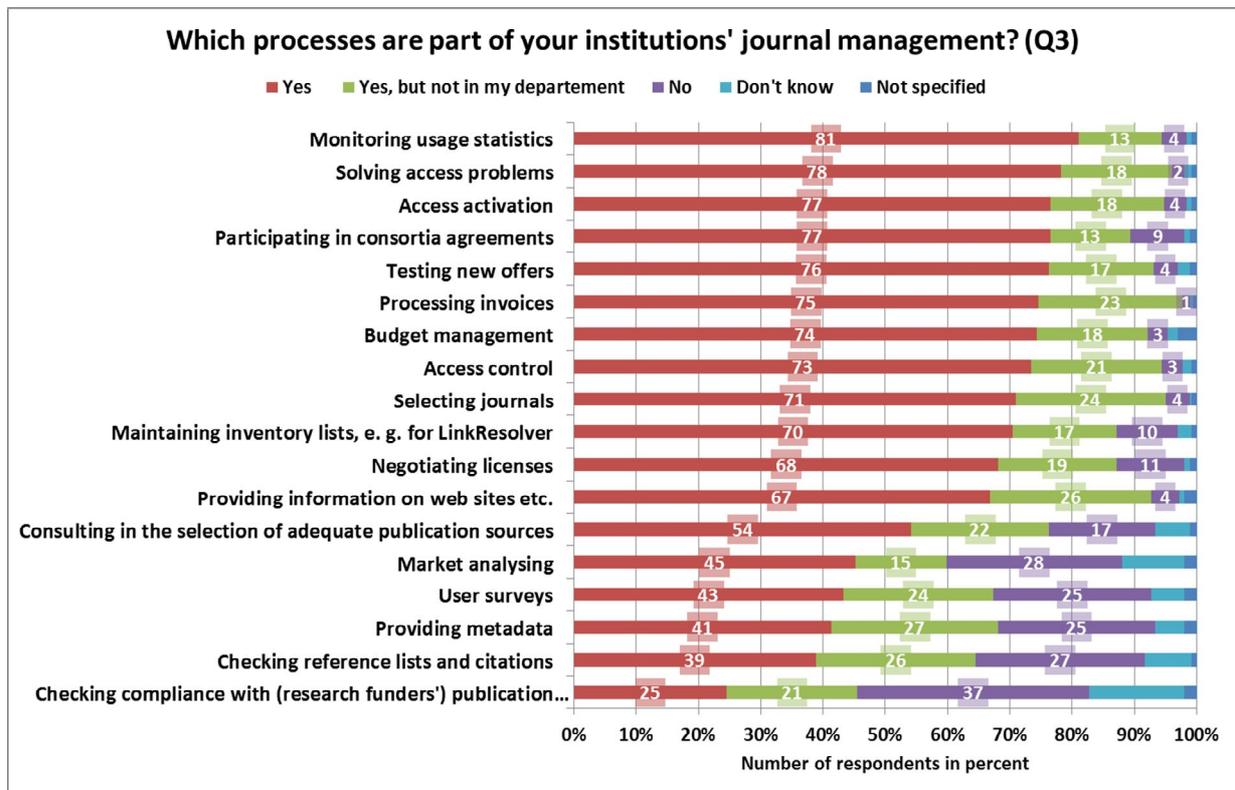


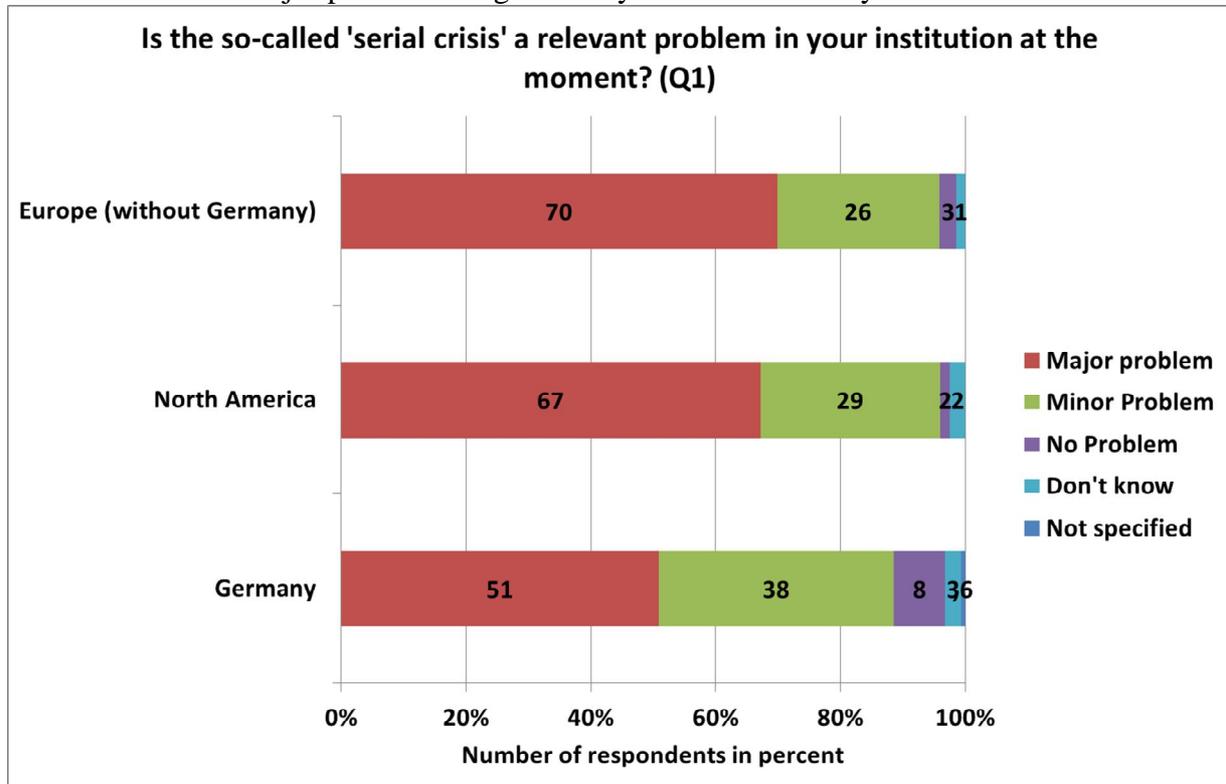
Figure 4: Activities of the respondents’ departements and institutions (question 3)

Organization of costs

Solving budget problems of libraries were one of the motivations behind the development of the Open Access movement. Therefore, the questionnaire contains two questions to validate whether the budget is still, after the broad distribution of Open Access, perceived as too low. The first question was whether the so-called ‘Serial crisis’ was still an actual problem for the institutions. The term ‘Serial crisis’ refers to the establishment of monopolistic structures in scholarly publications and the resulting immoderate price increases in contrast to (at best) moderately increasing library budgets. This phenomenon, which causes an unsatisfactory literature provision in many universities and research societies, is described since the 1970th

(Roth 1990). In the past few years, several publications announced the end of the ‘Serial crisis’ because of Open Access or the ‘Big Deal’².

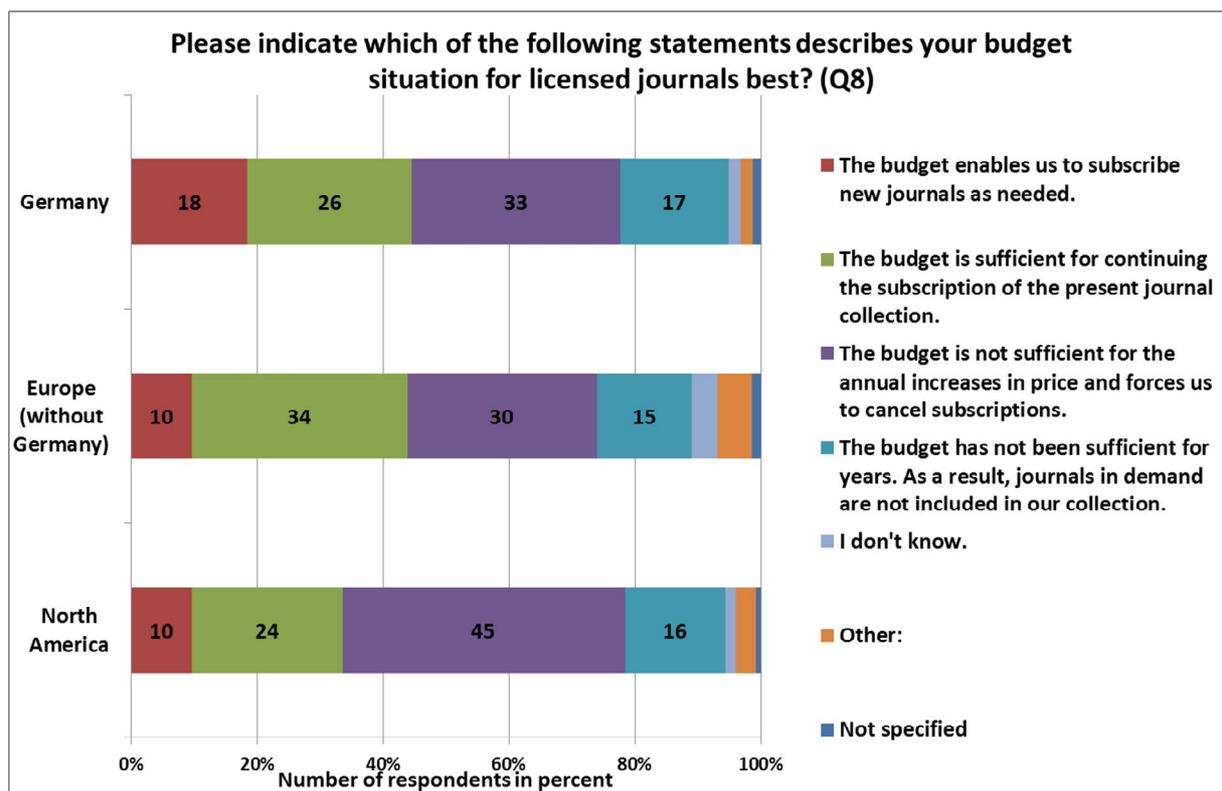
For 92,7% of all participants, the ‘serial crisis’ is still at least a minor problem, for more than 60% a major problem and only for a minority of 5% no problem. The perception of the ‘Serial crisis’ as a major problem is significantly lower in Germany.



Asked more specifically in question eight, budget limitations force 30-45% of the participants (dependent on the country group) to cancel subscriptions. This validates the results of the first question.

Only a few libraries (10 - 18%) are still able to react flexible to new needs. At the same time, costs are only in the midfield of the indicators of good journal management; it is i.e. not the prior aim of the institutions to control the budget, but to satisfy the needs of their users.

² “Big Deal is an online aggregation of journals that publishers offer as a one-price, one size fits all package. In the Big Deal, libraries agree to buy electronic access to all of a commercial publisher's journals for a price based on current payments to that publisher, plus some increment. Under the terms of the contract, annual price increases are capped for a number of years.” (Frazier, 2001)



However, even if budgets are not perceived as a main interest, it is still a fact that library budgets are generally not perceived as sufficient. It seems hence that the devolvement of Open Access during the last 10 years did not reduce the budget crisis significantly.

Concerning Germany, there are some indicators for a slightly more relaxed budget situation. Additional results show that the whole license behavior (less package, more via consortia) in Germany differs from the other countries and that unique structure of federated national licenses might have a significantly higher importance for the journal collection.

Open Access

Previous to conducting the study, it was totally unclear what state of information about Open Access could be expected from the participants. Is Open Access taken for granted or completely unknown in journal management? Already the first question concerning Open Access shows that Open Access is part of the everyday work and communication of librarians in journal management; almost everyone uses some resources to receive information about Open Access. Personal communication is most important in all countries (cf. figure 7); colleagues are hence the most relevant of these resources (in Germany slightly less), followed by newsletters / blogs (in Germany significantly less), professional journals and conferences. In Europe, committee work (43,8%) and infrastructural organizations (49,3%)

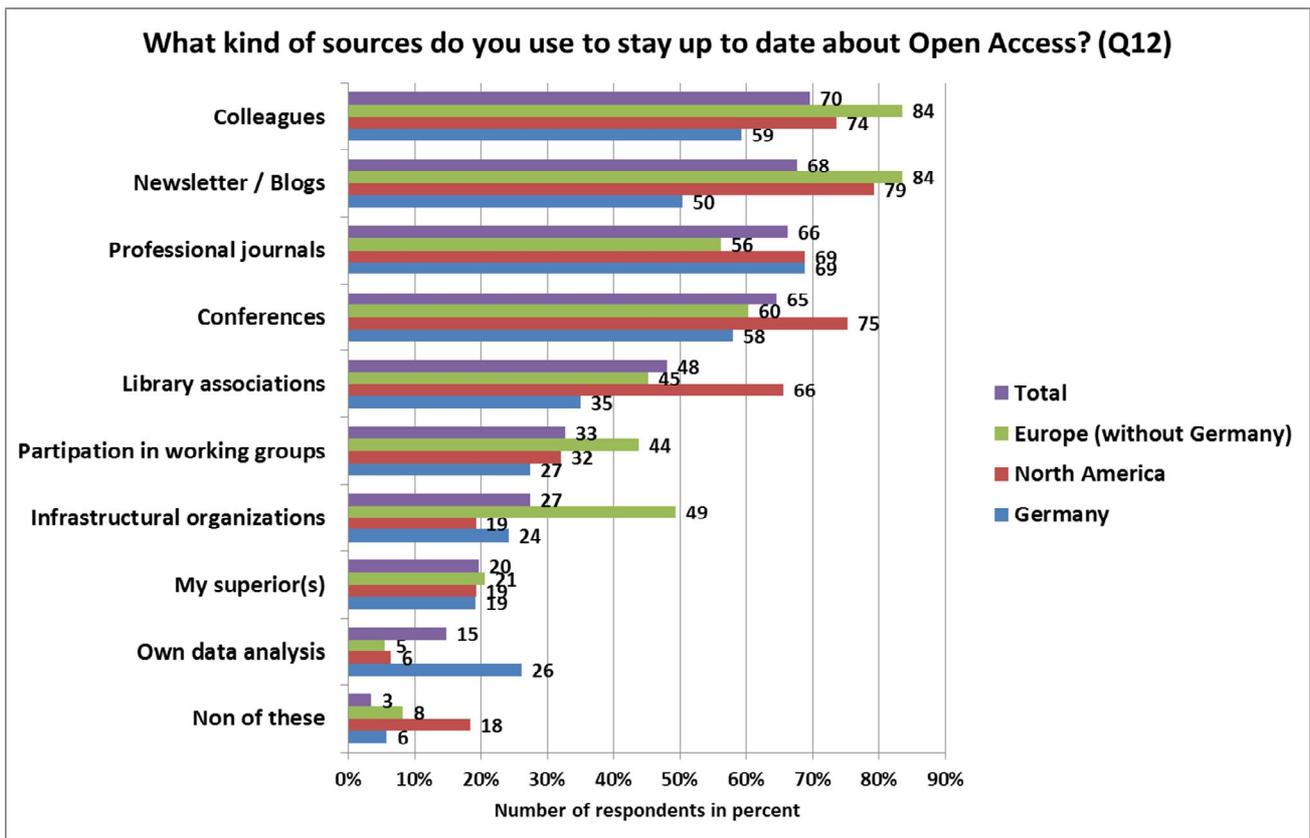


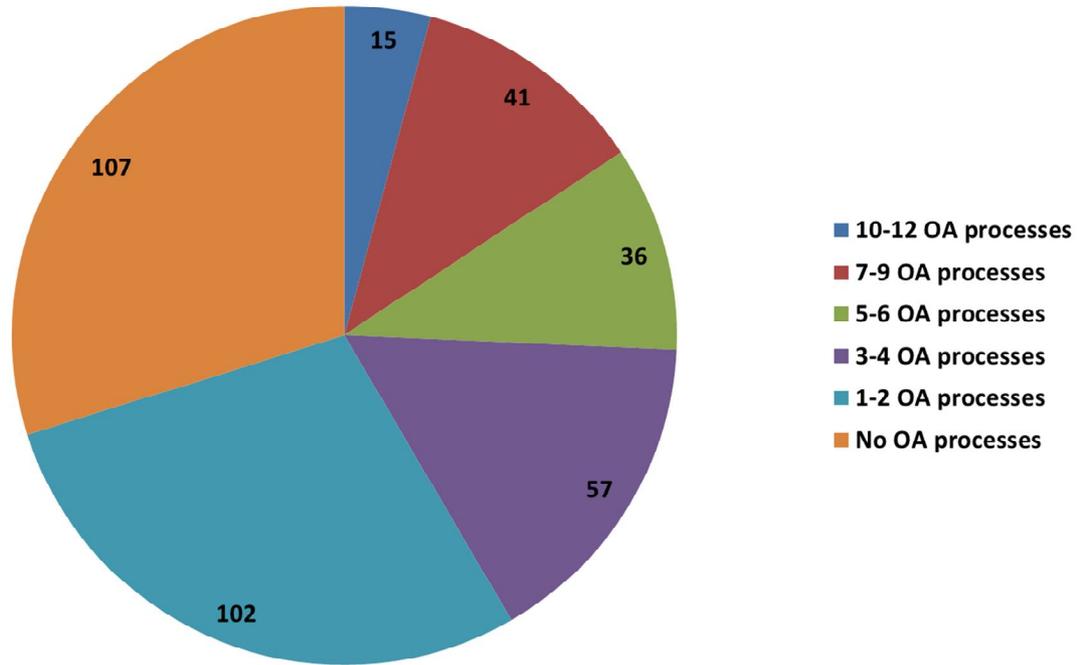
Figure 7: Resources for information about Open Access (question 12)

are obviously higher. In North America, more people use information provided by library associations. As opposed, in Germany, independent and own data analysis is more common (26%).

One could assume that country-specific differences in communication cultures also have consequences for the distribution and transparency of Open Access. In Germany, only few people receive information from official organizations; maybe this is a hint that Open Access is perceived differently than in every country.

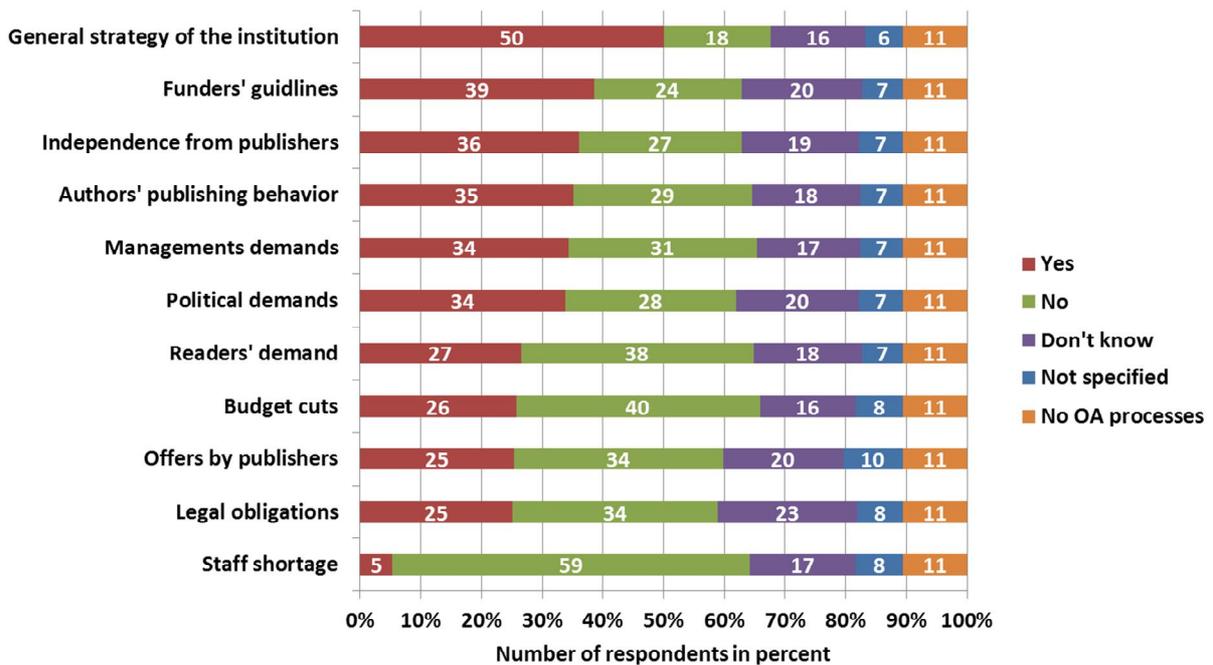
Although most of the respondents are informed about Open Access, a little more than half of the institutions established no or only one or two Open Access processes. 10% of the participants (thereof 58% from Germany) state that they have no Open Access processes in their or any other department of the institution and that there are no processes planned for the future. At the same time, some further results (which are not part of this paper) underline the importance and acceptance of Open Access for journal management. There hence seems to be a significant gap between theoretical knowledge about Open Access and its practical application. Libraries ‘consume’ Open Access publications rather passive than promoting them actively.

Which processes and aspects of Open Access are part of journal management in your library? (Q13)



The main reason behind an implementation of Open Access processes is – above all and equally for all countries – the general strategy of the institution. Funders’ guidelines are in second place in total, but in Europe (without Germany) notably higher. The demands of authors and readers are following far behind in the midfield. Legal obligations are a surprisingly rare motivation for Open Access processes.

For which reasons did your institution (or is your institution planning to) include the processes of Open Access? (Q14)



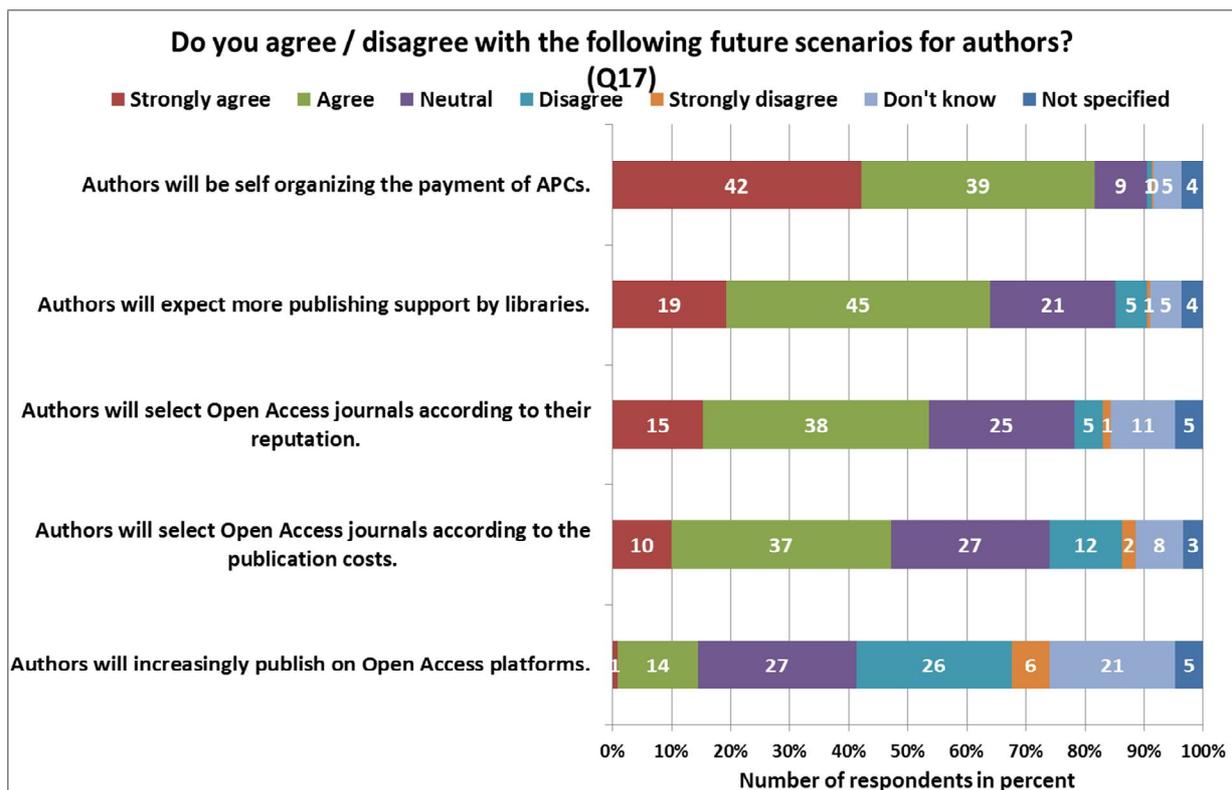
If strategy is much more important than legal obligations, the trial to propagate Open Access through copyright changes couldn't be successful; it must be a more promising approach to change educational and university policies.

It is also remarkable that the publishing behavior of authors isn't one of the most important reasons for the implementation of Open Access processes. It almost seems like the funding actors have more influence on the service profile of libraries than their users.

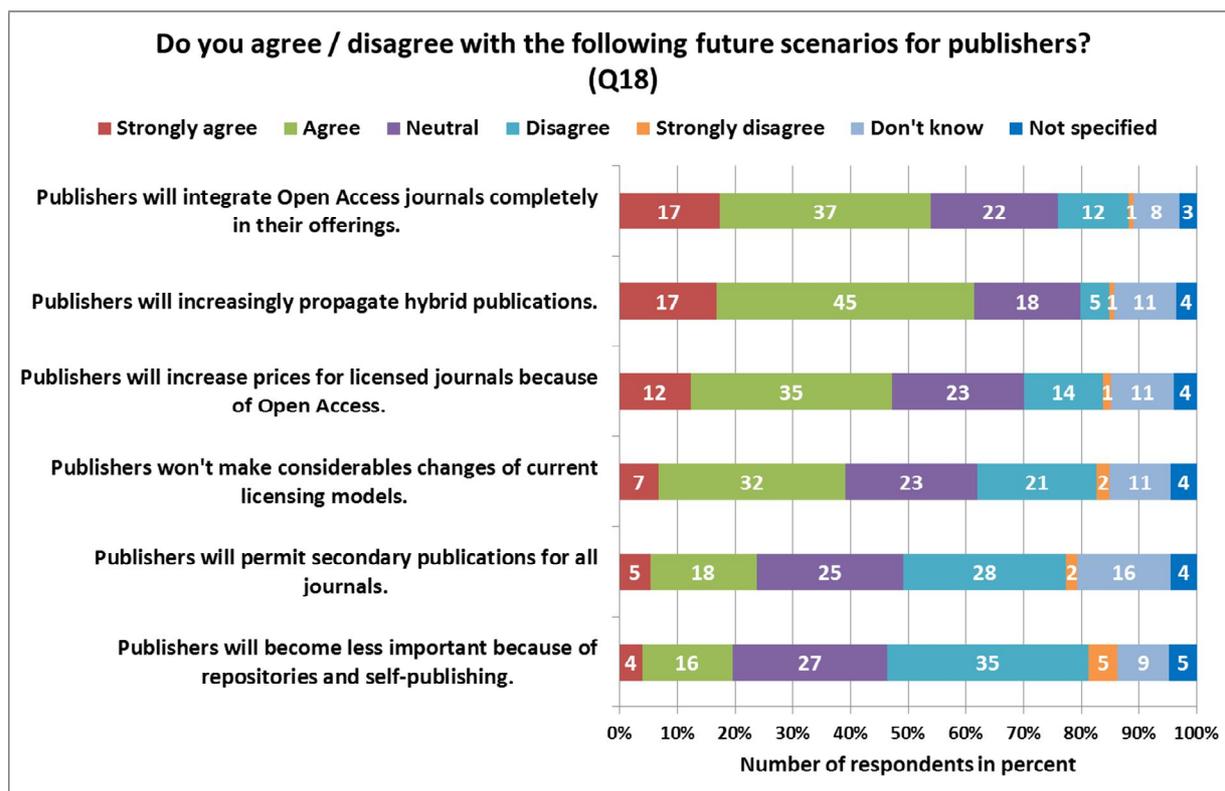
Future prospects

The survey sample was also asked to judge different statements about the future of authors, publishers and librarians. The positive and negative phrases covered various sectors, but were focused on activities concerning the interconnections of the different actors.

The respondents expect for authors to release more Open Access publications and to prefer Open Access journals with a high reputation (see figure 10). The cost for each particular publication is anticipated as only of secondary importance. They also perceive authors to not feel responsible for the organization of the payment for publishing fees (APCs). At the same time, only a narrow majority believes that authors will expect support from libraries. For all these prognoses, the agreement rate of people from North America was higher than in any other country. So one question for further analysis will be: Who will support authors? Who will organize the payment of publishing fees? And why shouldn't authors expect this service from libraries? How could libraries connect better with the needs of authors?



While the participants expect authors to change their behavior in some way, they don't believe that publishers will change their habits in any way.



In sum, publishers will continue with current license models and with propagating a monolateral publishing policy in the future. That means (cf. figure 11):

- no change of license models
- increased costs due to Open Access
- propagation of hybrid publications
- no general rights for secondary publication
- no loss of importance of the role of publishers in the scholarly communication.

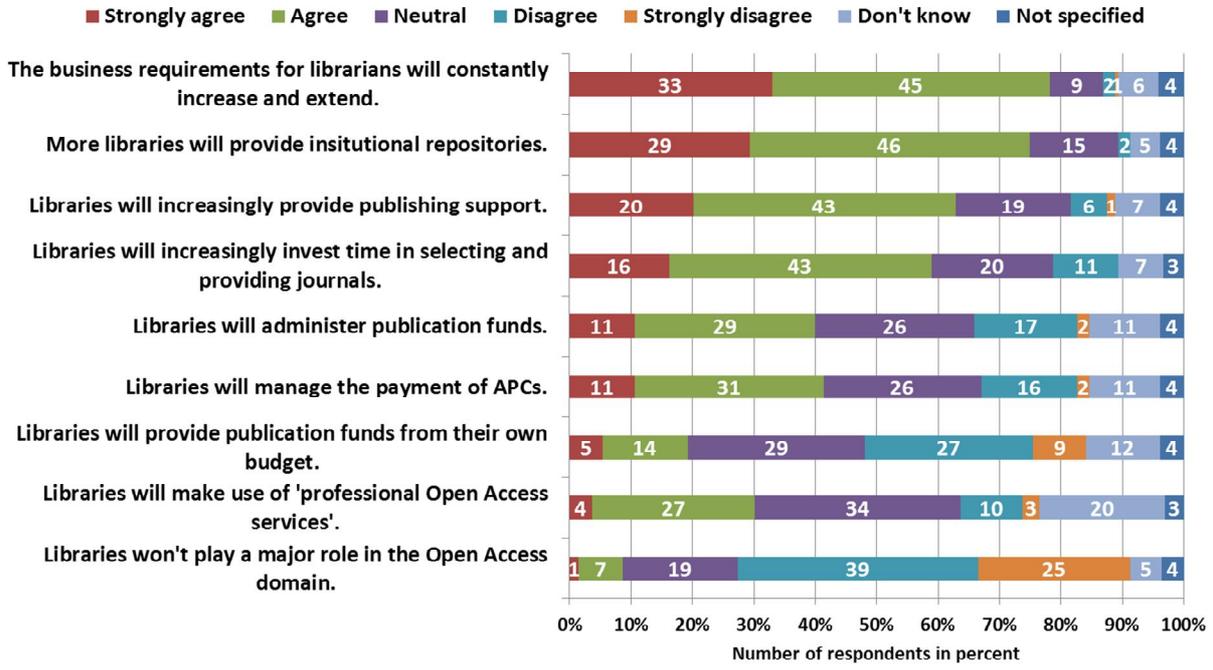
As a consequence of these results, a new question arose: Will the publisher market and the interconnections of publishers and librarians change at all in the future? This question will be interesting to discuss with the representatives of publishers.

In summary, the librarians assign themselves a more passive, quite small and – despite Open Access – a mostly unaltered role in the future of authors and publishers. Despite the general acceptance of Open Access and its importance, the participants believe that the actual behavior of librarians towards scientists and publishers will stay the same.

Asked directly what their role will be in the future, the previously stated perceptions become more nuanced and less absolute. All participants of all countries unsurprisingly agree that prospective requirements for librarians will increase and extend constantly.

Although librarians don't anticipate that authors will expect more support, they are sure that librarians will offer services like repositories and publishing support. So, willingness and confidence to play an important role in the Open Access movement exist. Yet the biggest and most important limitation are the publishing fees; the fear of budget restrictions seems to be overwhelming.

**Do you agree / disagree with the following future scenarios for libraries?
(Q19)**



Concluding, questions for the prospective further analysis will be: Who is going to guide these new services? And is it really possible for libraries to play a major role in Open Access even though the topic of costs remains unattended so far? If even libraries and authors will not pay for Open Access – who will do it? Are libraries missing a chance to position themselves as irreplaceable?

Conclusion and Outlook

This first analysis of the present results demonstrates that the interdependencies of Open Access and journal management follow no general rules, and aren't even easy to identify. The provided answers draw a complex and fragmented picture that needs to be assembled little by little for comprehension.

In the end, does Open Access influence journal management at all? A summary of the first results indicates that *yes* would only partly be a valid statement. Open Access is for example well known to people working in journal management, and Open Access publications are considered to be very important for information provision. But at the same time, Open Access processes are not common in libraries, and their implementation (or propagation) stays abstract and determined by the fear of additional costs.

The perception of Open Access seem to be partly similar to the perception of the users' role in journal management: on one hand, the user is the central focus, but on the other hand, this position is not transcribed in every structure or activity. Therefore, a faint suspicion based on the first impression is that user orientation as well as Open Access propagation are implemented in journal management rather as a passive thought than as a systematic realization.

Not only the impact of Open Access on journal management remains unclear at this point, but also the opposite question of how journal management can support Open Access. Currently, Open Access is not fully integrated in libraries' structures, and the cooperation with authors, that Open Access requires, is not yet natural.

Simultaneously, librarians think that the degree of support would not make a difference for authors when choosing an Open Access license model for their publications. Will libraries have an influence on Open Access at all? Looking at the present results, there seems to be an organizational gap for the payment of publishing fees, and libraries might be able to play an important role in the propagation of Open Access if they became responsible for these tasks. Especially in the light of accessibility and the availability of Open Access license models, this would most probably match the interests of readers. In general, Open Access processes would potentially become more interesting for libraries if the Open Access movement featured advantages for readers more distinctly.

A major part of the results reveals only small differences between countries, which – if existent – are caused by the varieties of the specific information infrastructures. Apparently, neither political nor economic nor legal standards matter for the perception of journal management, but rather the dimensions of public support and the centralized organization of the library sector.

Noticeable is the significantly better rating of the budget situation in Germany, compared to any other participating region. It appears not far-fetched to seek the reason in the unique system of the German governmental funding of national licenses³ (mainly archives). All together it seem, that the relationship between Open Access and journal management is in fact complicated, but – as holds true for any other relationship – above all because those involved have not yet straightened things out with themselves.

³ www.nationallizenzen.de

Acknowledgments

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