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BEYOND OPEN ACCESS – NEW THINKING FOR LIBRARIANS

[OPEN ACCESS – CO DALEJ?

NOWY MODEL MYŚLENIA DLA BIBLIOTEKARZY]

Abstract: Open Access is by no means a new issue, but rather a topic that has been quite extensively discussed over the last few years. There are mainly two strategies on the road to Open Access: the green road and the golden road. The article reveals the challenges and constraints of both strategies and concludes with an explanation of some of the solutions and interpretations that have been found for Open Access by us in the Central Library at Research Centre Jülich. Justified misgivings concerning the broad belief that Open Access is a matter of concern for the scientific community are outlined in terms of the need for a new scientific communication model if libraries are to establish themselves as a market power in the information marketplace, particularly when Open Access grants everyone access to information, even those who cannot afford subscription content. The article shows that it is the duty of responsible information specialists and librarians to demystify and de-ideologise the myth of Open Access.

DIGITAL ARCHIVE – OPEN ACCESS – SCIENTIFIC COMMUNICATION – SCIENTIFIC PUBLICATION MODEL – SCHOLARLY COMMUNICATION

Abstrakt: Zjawisko Open Access to temat bynajmniej nienowowy – dyskutuje się nad nim obszernie od kilku lat. Istnieją dwie główne strategie realizowania założeń OA: zielona droga i złota droga. W artykule omówiono wyzwania i ograniczenia, związane z obiema strategiami, przedstawiając w zakończeniu opis kilku rozwiązań opracowanych w tym zakresie w Central Library at Research Centre Jülich. Powszechne przeczcucie, że społeczność naukowa powinna interesować się OA, jest uzasadnione: jeżeli bowiem biblioteki chcą zyskać silną pozycję na rynku informacji, potrzebny jest nowy model komunikacji naukowej, tym bardziej, że OA zapewnia powszechny dostęp do informacji, także tym użytkownikom, któ-

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rzy nie mają środków, by korzystać z zasobów odpłatnych. Artykuł przekonuje, że obowiązkiem odpowiedzialnych bibliotekarzy i pracowników informacji jest demystyfikacja i odideologizowanie mitu Open Access.

OPEN ACCESS – KOMUNIKACJA NAUKOWA – ROZPOWSZECHNIANIE WYNIKÓW BADAŃ NAUKOWYCH – ELEKTRONICZNE ARCHIWA – MODEL PUBLIKOWANIA NAUKOWEGO

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Introduction

Open Access is by no means a new issue, but rather a topic that has been quite extensively discussed over the last few years. Whether Open Access is actually the road to hell, the green road leading to the ecological renewal of scientific communication or the all-holy golden road leading to the “seventh heaven of scientific publication,” will perhaps be revealed over the next few years* [Harnad 2004, online doc.].

It does however seem that everything relevant on Open Access has already been said.

In the following article, I will therefore present seven central theses often associated with this topic. I will explain them, outline relevant viewpoints and then refute all of them. At the end of the article, I will explain some of the solutions and interpretations that have been found for Open Access by us at Research Centre Jülich and by myself.

Whether we choose the golden road, the green road or whatever road, there are many ways of approaching this topic and many similar models on the same road, which are chosen for the same reasons. Many roads lead to Rome and certainly to Open Access. I, however, am not concerned with ideologizing the Open Access debate and the mystification of Open Access has been accomplished quite nicely by others [Harnad 2001; Lawrence 2001; Khan 2001]. The duty of responsible information specialists and librarians is to demystify the myth of Open Access.

Open Access is a matter of concern for the scientific community

Why should it be? Let me outline the history of the origins of Open Access in a few sentences [see also: *Berlin Declaration...* 2003, online doc.; *Budapest Open Access...* 2002, online doc.]. The initial situation is evident – the price of journal subscriptions was steadily increasing while library budgets were being cut or left unchanged. This produced the gap that we all love to illustrate in our PowerPoint presentations when budgets and the price of journal subscriptions are being discussed. We landed somewhere between necessity and

* The definition of green road: the provision by the author of his/her scientific article either on his/her own personal or departmental server (*individual self-archiving*), on the publications server of his/her scientific institution (*institutional self-archiving*) or on a scientifically oriented server (*central self-archiving*) [Dobratz 2005, online doc.]. “Golden road: publish your article in an OA journal” [Harnad et al. 2004, online doc.; see also: *Nature*, e-journal].

possibility and, as a money-maker, Open Access became the solution to the journal crisis for the librarian. Nobody from the library community intended to completely reform and restructure the publication process or the system of scientific communication. Open Access was nothing more than the solution to the journal crisis, closing the gap between the increasing price of journals and the decreasing budgets allocated to libraries.

Another reason behind the Open Access debate is author rights, irreversibly ceded to publishers in author contracts. We have all corrected author contracts, made recommendations on the Internet and we all advise authors in our universities and research centres (for details, see the website of Central Library of Research Centre Jülich: http://www.fz-juelich.de/zb/oa_model). Yet critical scrutiny of this argument only leads one to doubt this justification of Open Access. What author cares about author contracts? Who has worried about author contracts to date and what author has ever complained about the cession of rights? The debate on author rights first began with the digitalisation of scientific information in the last five to ten years. Only at this stage did it become possible for an author to reuse his/her document on a document server, on his/her own webpage or in another form. Only then was it possible to use documents a second time without great expenditure or effort. In this sense, Open Access serves as a legal fig leaf for disputes over author rights and not as a revolutionary new method of scientific communication. The established publication process is largely an accepted one (unfortunately, there are no empirical studies on this particular topic, but there is no fundamental counterevidence either). Scientists simply want to see the publication process optimised, for instance with regard to the speed of peer review or the layout of articles. They do not have any problem with the fundamental structure of scientific publishing. Value-adding and value creation by publishers through the publication of scientific findings have been almost unanimously accepted by the scientific community.

Even when it hurts to admit it, we must assume that Open Access is nothing more than a secondary area of conflict for scientists.

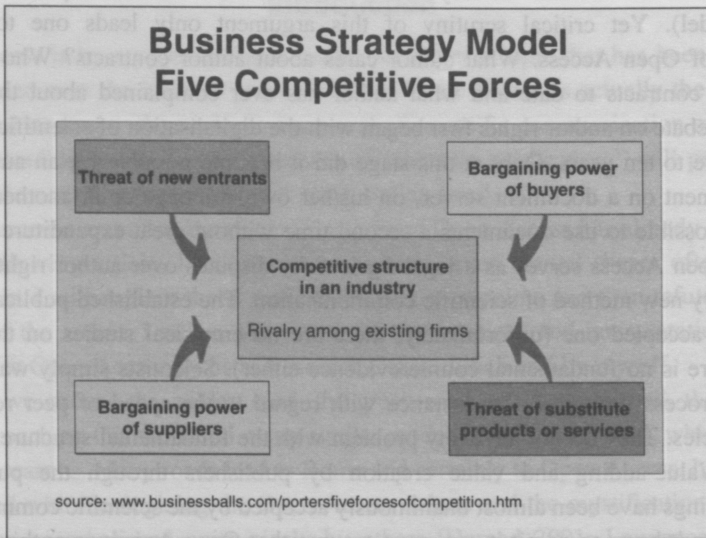
Why has the issue of Open Access become such an important topic for librarians? It was gratefully taken up because it looked as though librarians were about to run out of other topics! Ten years ago, the central issue for libraries, large and small, was the digitalisation of contents, the structuring of the electronic information environment [Schatz 1997; Griffin 1998; Buckley et al. 1999, online doc.; Bjørnshauge 1999; Ke, Ming-Jiu 2000]. The future suddenly looked rosy for libraries again and it was digital. The fact that the digital revolution not only ate its own children, but was also realised much faster than anybody had hoped or dreamed makes the librarian's job extremely complicated today. The digital and seamless provision of information has become a reality for library users almost everywhere. But where should all the staff be sent when everything is digital and electronic? What should we do with all the buildings and offices? Why bother with acquisitions of our own when licences for digital content can be easily acquired centrally by the Purchasing Department?

What is left is a certain emptiness, quickly filled with the never-ending story of Open Access.

Open Access is needed if libraries are to establish themselves as a market power in the information marketplace

Turning the information marketplace into an oligopoly is often mentioned in connection with Open Access. If we take Michael Porter's business strategy model, in which he describes the five forces acting on the market, it becomes obvious that there is no real competition in the information marketplace* (Fig. 1). It goes without saying that there are no substitute products for one particular journal; therefore there is no tangible competition.

Figure 1. Five Competitive Forces by Michael Porter



Even the power of the buyer is minimal: we can see the fragmentation of buyer power by federal systems in many European countries, which makes the joint, central purchasing of information impossible. This is supplemented by the non-uniform, decentralised structures of the scientific systems. Heterogeneous needs of individual higher education institutions, universities and research establishments mean that buyer power does not manifest itself.

Another element in Porter's business matrix is supplier power. The suppliers of scientific information and data are the scientists themselves. They receive no money as payment for their efforts and they do not want to either – image is their only currency. What they are interested in, and indeed dependent on, is that the high impact of their work be acknowledged, that they be published in journals that convey this impact, and that they can use this

* The concept of a business strategy model was developed by M.E. Porter, an American, in the eighties. It is an essential prerequisite for determining a competitive strategy, which can then be used to try to strengthen one's position within an industry, to extend it or to alter the structure of the industry itself. According to Porter's concept, profitability in an industry is dependent on five competitive forces: power of suppliers, threat of new entrants and substitute products, bargaining power of buyers and rivalry amongst competitors in the industry [Porter 1985].

system to further their own careers and improve the standing of their institutes and institutions. Thus it is rather difficult to see how the supplier power in Porter's business strategy model comes into play.

All of the above aspects demonstrate that the position of monopolists and oligopolists is very strong. This is a sorry situation and there is, in fact, every reason to establish true competition here.

The library community want to use Open Access to strengthen both the power of the buyer and the power of the supplier. However, we all know that this can only really be made possible by taking the golden road. Sensitising supplier power, which means getting publishers to recognise scientists as content suppliers, reviewers and editors, is perhaps a more practical solution than establishing new journals that would enable content producers to self-publish [Nötzelmann, Lorenz 2005].

Science needs a new model of scientific communication

An argument often heard in favour of the introduction of Open Access is the reshaping of the scientific publication process and of scientific communication in general. We are quick to talk about the end of the current publication chain and yet hope that it is not the libraries that will be called to the witness stand to defend their right to exist, but rather the agencies, vendors and publishers, who make a new system of scientific communication superfluous. While making due allowance for this viewpoint, there is nevertheless an entire website on the Internet devoted to so-called dead libraries (www.bibliothekssterben.de), but not one agency or publisher has yet fallen victim to the reshaping of the publication chain. Are these for-profit companies perhaps more flexible than libraries? Open Access is neither the symptom nor the cause of the reshaping of scientific communication.

Nobody needs or really wants a new system of scientific communication. The scientists are happy – as I have tried to explain above. If we look at the evolution of science from antiquity to today, it becomes clear that the period of institutionalised organisation and dissemination of knowledge (beginning with the first scientific journal, *Le journal de savants*, in 1645) is a very recent development [Hapke 1999; Kleinert 1997]. There already exists a functioning system for the structuring of knowledge and its dissemination, and as any IT specialist would say: “never change a running system!”

Open Access grants everyone access to information, even those who cannot afford subscription content

The fourth thesis plays on our social conscience. The message is that Open Access helps all of those who do not have access to scientific information, which brings our colleagues in developing countries to mind. They cannot afford subscriptions to expensive journals by commercial publishers and learned societies and therefore cannot meet their information requirements in this form. Nobody would refuse to accept a system that would allow these colleagues cheap and easy access to information. However, the real problem in these coun-

tries is not their literature budget, but rather the structure and financing of the complete system of higher education and universities, research institutions, schools and authorities. It is not that the publication avenues in these countries are restricted, but rather that the financial resources for knowledge acquisition, research and teaching, as well as the money for the necessary personnel and properly equipped facilities, simply are not there. Open Access cannot help resolve the structural problems inherent in the scientific system in developing countries. Therefore, the social argument is a spurious argument.

Open Access is an alternative to the established publication process

Regardless of the fact that a large majority of scientists do not want a new model of scientific communication, it could still be an interesting proposition to discuss and establish an alternative to the current system. Even if the arguments are a little shaky, the basic conditions under which Open Access is to be realised as the golden road reveal how nonsensical this task is.

Scientific institutions such as universities and research centres do not have a suitable infrastructure comparable to that built up by publishers with decades worth of know-how nor the not inconsiderable investments necessary for the development of digital platforms. The fact that every small institute now has a document server that runs on Open Source software is no proof that a functioning publication and publishing model is up and running.

Information producers (i.e. scientists) do not have the core competence for designing, producing and distributing a journal. Moreover, there are no additional resources available beyond existing research and development funds – unless we want to rob this money from the tight budgets that exist for research, teaching and development. In spite of this, it is evident that Open Access journals still cost money. There is an old saying that rings true for Open Access: “there is no such thing as a free lunch.” Without referring to specific cost models, it is clear that whoever publishes something or is published must make some financial resources available for this process. The golden road could quickly turn out to be a money-eating machine and this for semi-professional output alone.

In any case, the golden road of Open Access is a socialist unity model: state funds are spent on in-house production that could be done much better and much cheaper by a for-profit company. The overall control of the golden road journal publication servers is a task that falls to the public authorities and it is managed and centrally structured by bureaucrats. Golden road servers are state-owned Open Access enterprises and do not act on the market. Just how fragile such a system is became clear to all of us when Paul Ginsberg’s internationally respected Los Alamos preprint server was moved and nearly lost [Cornell University Physic Sciences Library website; Steele 2001, online doc.]. The basic assumption is an equitable input/benefit ratio: everyone should be able to publish online and everyone should be able to use everything.

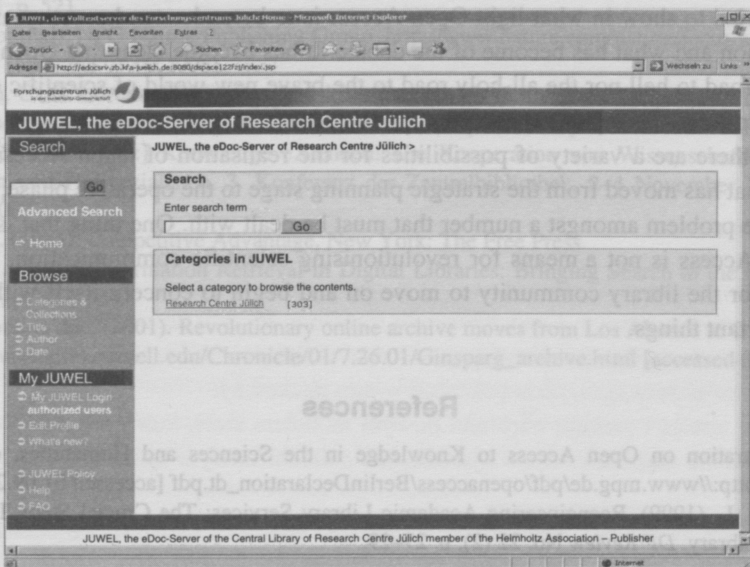
Furthermore, the value of publications on the document server drops dramatically. The currency in science is not money but image. A first publication on a document server in a university or research institution is worth just as much in the scientific community as an in-house IBM publication – namely nothing!

Open Access is a never-ending process

The fact that Open Access has become a long-running issue at library conferences should not be misinterpreted as a sign that Open Access is essentially a never-ending process. Although librarians do love to discuss topics with a certain stubbornness, Open Access can also be regarded as a phenomenon that is to be put on the agenda, discussed, dealt with and brought to a close.

While many realise that the *golden road* is nothing more than a passing fancy even if it is the engine driving the battle of words, the *green road* has already been taken by many as *Open Access Lite*. We at the Central Library of Research Centre Jülich opened the Open Access discussion in 2004 and have just brought it to a close at the end of 2005. The solution for Open Access at Research Centre Jülich is JUWEL (Fig. 2), and it takes the green road, enabling a second publication of the Jülich output on a document server with dSPACE (open source software for document repositories, developed by the MIT, see at: <https://dspace.mit.edu/index.jsp>). We have, of course, also offered our authors advice and put improvements for author contracts online (for further details, please see our webpage at: http://www.fz-juelich.de/zb/publishing_house). The strategic planning and implementation phase is now complete. The operative phase will simply be a matter of loading documents onto the server, updating them and maintaining them.

Figure 2. Jülich Document Server



Open Access is therefore by no means a never-ending process for us at the Central Library of the Research Centre. We discussed it, planned it, implemented it and brought it to a close in transparent terms.

It is now time that the library community began to think of what will happen “beyond Open Access.”

Everyone’s a winner with Open Access

Although the idea behind Open Access is that those who are disadvantaged can gain additional access to information along freedom-of-information lines, it is doubtful that library budgets in universities and publicly funded institutions will actually profit from Open Access. Only one user group, who have been suspiciously silent on the topic of Open Access up until now, will actually profit from free access to scientific information. Whereas applied and basic research in the publicly financed scientific sector assumes that there will be a cooperative input into Open Access systems, the only real free access profiteers will be industry and its R&D departments. Industrial research only supplies the market with a minimum input in the form of scientific publications. And yet it still profits quite considerably from publicly financed research via the indirect channels of scientific communication. Until now, industry has been a good customer of publishers and agencies, but Open Access is now making this information readily available free of charge. Whereas publishers were denounced for receiving subsidies from the public sector in the traditional publication model, Open Access is shifting these subsidies to research-intensive industry, which can then use the output from publicly financed research free of charge.

Summary

I have tried to show in what light Open Access is to be understood seven years after its first definition and what has become of the debate. It has become clear that Open Access is neither the road to hell nor the all-holy road to the brave new world of scientific communication. Open Access is a phenomenon that can be dealt with and must be brought to a close. Of course, there are a variety of possibilities for the realisation of Open Access – a phenomenon that has moved from the strategic planning stage to the operative phase, but it still remains one problem amongst a number that must be dealt with. One thing that is certain is that Open Access is not a means for revolutionising scientific communication. It is time, therefore, for the library community to move on and begin to concern itself with new and more important things.

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