The LIBER Workshops on the "Open Archives Initiative" at CERN, Geneva

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LIBER TAKES THE INITIATIVE

In 2000 the Open Archives Initiative (OAI) was still in its early stages. It was often still called the Santa Fe Convention, which refers to a meeting in October 1999 of representatives from a number of institutions that maintained or planned e-print archives for open access, and from organizations interested in providing services on the data in those archives (such as search interfaces). This convention was an initiative of Paul Ginsparg, Rick Luce and Herbert Van de Sompel (all three working at that time at the Los Alamos National Laboratory) and it resulted in an agreement about a technical and organizational framework for achieving interoperability among e-print archives. The first European meeting on OAI took place in September 2000 in Lisbon, in conjunction with a meeting of the European Computer Driving Licence Foundation (ECDL), and therefore more oriented to computer specialists than to librarians.

During LIBER's Annual General Conference at the Royal Library in Copenhagen in July 2000, the Professional Division on Access suggested to organize a workshop on the Open Archives Initiative (OAI).[1] This suggestion received great moral support from LIBER's Executive Board and from its president Elmar Mittler. They immediately grasped the great importance of the OAI and its possible impact on the processes of scholarly communication, and therefore indirectly also on our research libraries. Nevertheless, it was obvious that the financial possibilities of LIBER for supporting this idea were very limited. A series of lucky coincidences and the right contact persons, however, were very helpful as well for the preparation of an interesting workshop programme as for finding the necessary financial support to bring the whole enterprise to a successful end.

The first coincidence was my acquaintance and friendship with Herbert Van de Sompel, who had been the library information specialist at the University of Gent. We had a long talk about the workshop proposal during his family visit in Belgium between his first period at Los Alamos and his stay at Cornell. He was very enthusiastic about this possibility to introduce OAI in the European libraries, he knew all the important people in this field, and he was very instrumental in working out an interesting programme and in convincing the invited speakers to come over to Europe. We agreed that the main topics in the programme had to be as follows:

- Technical aspects of the preprint server; formats; metadata.

- Management aspects: procedure for acceptance, financial management.

- Public relations, i.e. awareness building towards the scientific community (both for publishing and reading).

- Setting up of mechanisms for peer review in order to guarantee academic recognition.

After composing an interesting programme, finding the right venue for such a meeting was the next challenge. From my previous life as a physicist I knew the excellent conference facilities at CERN, Geneva, where I had helped in organizing a workshop on physics and environmental problems. Furthermore, the CERN Document Server (CDS) was (and still is) the world's second largest Open Access archive, which made this place uniquely suited for an OAI initiative. The CERN librarian, Corrado Pettenati, immediately agreed and found it "a wonderful idea", and he soon obtained the green light from his superiors for allowing us to use their facilities free of charge.

The problem of finding some sponsoring to enable participants to come over to the meeting without having to pay a too high contribution proved to be somewhat more complicated. Fortunately, CERN disposes of a large number of rather cheap rooms at its hostel and a self-service restaurant for its numerous visitors. It was decided that all participants and European speakers would have to pay their own expenses. We were very happy to receive generous sponsoring from SPARC (for the travel expenses of some U.S. speakers) and from EBSCO Publishing (for the coffee breaks). Hoping to give the initiative also some credibility in the European research circles, I contacted the European Science Foundation (ESF), where I had been a member of one of their standing committee's during some years). Our initiative was greeted with quite some interest, but also with some scepticism about the feasibility of the whole Open Access movement. A long conference call among Tony Mayer (Head of Secretariat at ESF), prof. Ian Butterworth (from the Academia Europaea), David Williams (CERN coordinator with European Union) and myself finally led to a positive decision, with ESF sponsoring the welcome reception and buffet dinner of the first evening*.*

THE FIRST WORKSHOP

In the meantime, the workshop was announced through different channels, including the LIBER website, where it was formulated as follows:

Workshop on the Open Archives Initiative (OAI) and Peer Review Journals in Europe

The purpose of this call is to mobilize a group of European scientists and librarians who want to play an active role in organizing a self-managed system for electronic scholarly communication as a means to address the serials crisis. Such a system should be compliant to the technical standards proposed by the Open Archives Initiative (OAI). In order to prepare for and promote the launch of Open Archives centres, we organize a workshop, to be held at CERN in Geneva from 22 till 24 March 2001.

Objectives of the meeting

The meeting has both a concrete and an exploratory objective:

The concrete objective is to actually assemble a group that wants to take immediate collaborative action leading to the deployment of OAI compatible preprint repositories that must become nodes in the envisioned electronic scholarly communication system Issues to be addressed in the light of this objective include:

- *Should archives be organized on an institutional or on a discipline-oriented basis?*

- *Who should be the parties taking the responsibility of launching, managing and ensuring a long-term archival function for the archives? Are these parties the universities, the scholarly societies, the international research centres, the publishers?*

- *Which parties are willing to deploy prototype archives?*

The exploratory objective of the meeting relates to the certification of writings submitted to archives. Since there is broad consensus that certification of scientific writings is an essential function that must be provided by any acceptable system for scholarly communication, the question of how it can be implemented in a novel infrastructure cannot remain unanswered.

Therefore, the exploratory objective of the workshop is to try and identify and discuss the crucial properties required to augment Open Archives of non-peer reviewed material into true building blocks of a novel scientific communication mechanism addressing the needs of science, the scientific community and the public in general.

Originally we had hoped that it would be possible to limit the workshop to a small group of maximum 30 well-selected participants, in order to optimize the discussions and achieve tangible results. From the beginning of November 2000, applications were streaming in through the CERN web tools, and it soon became obvious that we had to relax on our limit. The final count was 68 participants from 14 different countries. The schedule of the first workshop, which was to be repeated in the succeeding ones, ran from Thursday till Saturday.[2] During the opening session Elmar Mittler brought a word of welcome to the participants on behalf of LIBER.

The first afternoon was rather technical and started with an overview of the OAI metadata harvesting specifications by Herbert Van de Sompel, followed by a series of examples of archive systems and their status with respect to scientific certification (the Los Alamos arXiv, the CERN Document Server, TIPS, RePEc, Eprints, E-BioSci, the (since defunct) Chemistry Preprint Server, the Electronic Library of Mathematics, MPRESS and the Roquade Project. The Friday morning started with a short panel discussion about possible actions for making progress towards a European network of e-print servers, whereas the rest of the day was mainly devoted to the problem of peer review in a world of open archives. The peer review process was discussed from many angles since there were contributions, e.g., from a publisher, from physicists and from information specialists. Let me cite some of the highlights:

- After analyzing the weaknesses of present peer review, William Arms proposed to separate peer review from the publication of a paper and to include quality metadata in the OAI protocol, allowing in a simple way the construction of overlay journals.

- Simon Buckingham Shum described the conversational open peer review practices at the *Journal of Interactive Media in Education* (JIME).

- Ronald Schmidt argued strongly for the involvement of university librarians in the development of new e-journals and other alternative approaches to scholarly communication.

- Stevan Harnad warned about combining untested empirical conjectures about peer review modifications with the Open Access movement, whereas some tested web-based optimizations would be obvious improvements of the present system.

- Very enlightening was the talk by Mark Doyle from the American Physical Society about the relation between their journals and the physics *arXiv*. A publisher is confronted with editorial costs, production costs and distribution costs. The last two can be greatly reduced with e-journals, but the editorial costs, mainly due to the organization of peer review, are largely inelastic and estimated to be between 500 and 700$ per article.

CONCLUSIONS OF THE FIRST WORKSHOP

The second day finished with a long discussion session in different groups, each assigned with a specific topic. Reports of the discussions were then presented to the plenary meeting on Saturday afternoon, followed by a general discussion. The main results can be summarized as follows:

Peer review

- The participants were unanimous in their belief that the certification of scholarly work remains a fundamental part of a system for scholarly communication. While Stevan Harnad insisted that the existing peer review mechanism fulfils certification in an appropriate way, other participants believed that the electronic environment allows for novel approaches to accord quality stamps to scholarly works.

- Some ideas were brought forward regarding new metrics that could be extracted from a fully electronic communication system, the combination of which could be used to obtain quality assessments for scholarly works.

- Further suggestions concerned the role of the learned societies (which should be convinced to take up their responsibility regarding peer review), the importance of obtaining funding for experiments in the area of certification of works in an electronic environment, and the rewarding of peer reviewers as a means to encourage scholars to take part in the quality assessment process (e.g. through publishing their name...)

Economical aspects

- Preprint servers storing uncertified material introduce marginal costs. The uncertified material submitted to such servers can be paid for by the author, the research institutions and/or by the public, as has generally been the case in the paper-based communication system. As such, it seems possible to offer free access to uncertified materials. However, there was a consensus about the fact that a cost element that could not be reduced by moving to a fully electronic scholarly communication system was the cost of the peer review process, as it is currently conducted.

- Again, there seemed to be consensus that the author of the uncertified work should cover these peer reviewing costs. Several arguments were given in favour of such an approach:

  - It is the author who gets the intellectual reward for the publication;

  - covering the costs should make the author more aware of the publication cost;

  - the dissemination of scholarly work should be considered to be an essential part of the process of publicly funded research.

- It was also noted that there is a need for an inventory of current business models for electronic journals. There should be case studies investigating successful and non-successful models. Here, the notion of success itself would have to be defined, since it is a matter of perspective.

Protocol for certification

There was strong support for the extension of the usage of the OAI protocol beyond discovery-related metadata, as proposed by Herbert Van de Sompel. Given the focus of the workshop on peer review, concrete actions were suggested to address the exchange of certification-related metadata using the OAI protocol in a trusted environment. The representatives from the American Physical Society and the Los Alamos arXiv volunteered to participate in a prototype exploring the concepts brought forward during the discussion session on the topic. Concrete actions will be taken by the OAI to facilitate such a prototype and to involve technical experts from the US and Europe.

The role of the libraries

The participants assigned two different roles to the libraries:

- A technical role with respect to the metadata. Especially LIBER, as research library organization in Europe, should take some responsibility. LIBER could determine the required metadata standards for efficient interoperability of the archives. The ongoing work regarding the Dublin Core should be taken into account when doing so. LIBER could also

be of help in creating an integrated environment for the use of classification schemes. Furthermore, LIBER could organize some concerted action for supporting the technical framework brought forward by the OAI.

- A PR role with respect to the academic community. LIBER and the individual libraries should also be more active in raising awareness regarding the OAI and how the OAI framework can play a role in the reform of scholarly communication. This activity can be performed in collaboration with other organizations, like SPARC(-Europe?) or ICOLC.

Organizational structure

A lot of distributed activity is going on in the realm of e-print servers and the OAI. Therefore, there may be a need for a co-ordinating organization at the European level.

- SPARC(-Europe) could play a facilitating role in the promotion of e-print centred systems.

- Currently, it is not evident that a new co-ordinating organization should be created.

- The desired co-ordination could be a new task for LIBER. It is important that LIBER, as library organization, maintains good communication channels with the other stakeholders (researchers, learned societies, funding agencies, informaticians ...)

The OAI itself will seriously look into having a broader European involvement both in its Steering Committee and in its Technical Committee.

Final recommendations:

Challenged to name the three most urgent recommendations, the audience suggested the following:

- Conduct work in the area of using the OAI protocol for certification-related metadata. Create certification schemes building on existing efforts, where possible.

- Some credible library organizations should get in touch with publishers to promote the concept of exposing item-level metadata via the OAI protocol.

- Increase the amount of institutional and/or departmental OAI-compatible e-print servers and take actions to promote submission of scholarly work to those servers.

The closing remarks were, appropriately, for Elmar Mittler, who said:

Dear colleagues,

After two and a half days of a wide-ranging program, a diversity of themes, and intense discussion, I would like to thank all the speakers, contributors and participants and especially the organizers of this conference.

For me the main results of our common activity can be summarised in three points:

- *We can see that the developers of OAI can be left to do a good job and we have good reason to support their activities*

- *The goal of interoperability through OAI-servers can be achieved using the normal investment in IT-infrastructure in our institutions.*

- *A suitable structure for information and communication interchange is essential for the development of digital universities, research institutions and libraries.*

The real imperative is to use OAI standards in all our developments. If we wish to build a functioning web-based information and communication system for the international research community, we do not, perhaps, need one server in every institution, but as many document-servers as possible should be OAI-servers, for research material as well as for dissertations and journals from publishers and learned societies.

LIBER as the leading European association of research libraries will

- *promote the development of the OAI at the European as well as at the national level*

- *spread promotional material devised by the OAI steering group or with their help*

- *apply for grants for awareness-raising and training activities from the European Commission.*

LIBER will act not as a management group but as an intermediary for the communication process between the different players. This is why we will try to get finance for a follow-up conference in the spring of 2002.

I hope that our host and our organizers are willing to do the hard work of arranging a conference once again for us. In this sense I would like to thank you all again and say good-bye, au revoir and Auf Wiedersehen.

Elmar Mittler, president of LIBER

Corrado Pettenati, the CERN librarian immediately replied to this by saying

The CERN Library is happy and proud to accept the proposal. It will be a privilege to welcome all those interested in the OAI to Geneva in 2002. See you soon at CERN again!

THE SECOND WORKSHOP

The preparation for a follow-up workshop did not start immediately, and therefore we did not succeed in organizing it in the spring of 2002 as was anticipated. LIBER's interest in the Open Archives Initiative, however, did not wane as can be seen from the programme of its Annual General Conference in July 2001 at the British Library in London: Bas Savenije reported on the first workshop in a contribution titled *"The Open Archives Initiative: weaving information assets into the fabric of the Web"* and Herbert Van de Sompel presented a *"Technical report on the Open Archives Initiative and the 'Harvesting Framework Specifications'"*.[3] In the meantime, the discussions for the founding of SPARC Europe under the umbrella of LIBER were also coming to a successful end.

Precisely at a meeting of the preliminary committee for SPARC Europe the suggestion was formulated to organize in the fall of 2002 a new OAI workshop. The suggested title *"Gaining independence with e-prints archives and OAI"* was inspired by a recent initiative, launched by SPARC: "*Gaining Independence*" (SPARC, 2002). This was to be a follow-up of their *"Declaring Independence"* action, where now they wanted to help universities and research institutes with setting up preprint servers. The suggestion was to organize a workshop (eventually with this title: "Gaining Independence"), where we would invite organizations interested in starting with such an archive in order to discuss with them the problems that might arise and to help them. The Executive Board of LIBER accepted this suggestion, and the OAI Task Force, which had been founded in the meantime within LIBER's Access Division, was charged with helping the preparation of the programme.

The direct contact that had now been established with SPARC not only led to the help of Alison Buckholtz as an additional and very active member of the workshop programme committee, but it also brought the commitment of the Open Society Institute (OSI) for financial support and Melissa Hagemann's contribution to the committee. A similar support came from the UK Joint Information Systems Committee (JISC). In order to be somewhat more comfortable in our organizational setup, we furthermore decided to ask a small registration fee from the participants.

We contacted again ESF, not only for financial support, but also because we considered the involvement of this umbrella organization for European research funding agencies to be very important for future developments. Their reaction was a real surprise: they offered to sponsor us on the condition that we produced after the workshop a comprehensive text about the two workshops that could be used as a *Policy Briefing Document* for ESF. Although ESF did not want to take a definite stance in the problems surrounding Open Access (leaving this to their individual member organizations), they judged that the subject was of sufficient importance to offer their members an in-depth study of the situation. Needless to say that we accepted this offer, considering it not as an infringing condition but as an extra occasion for disseminating the results of our workshops.

The discussion about the programme started around the end of 2001, and they went on and on through a long series of e-mail exchanges that did not easily lead to final conclusions. In order to speed up this problem, we decided to organise a programme committee meeting in London in the beginning of May 2002. The workshop was finally announced with the following text:

Second Workshop on the Open Archives Initiative (OAI): Gaining Independence with e-Prints Archives and OAI (Cern, 17-19 October 2002)

Online scholarly publishing is revolutionizing scholarly communication. The Open Archives Initiative (OAI), the Budapest Open Access Initiative, and SPARC's "Gaining Independence" document are leading the way in this transformation process. There is ample opportunity for others to enter as the momentum gathers pace. At this historical moment, LIBER and SPARC-Europe are organizing a workshop in order to guide individuals and institutions interested in joining the momentum.

This conference will guide individuals and institutions interested in pursuing open-access solutions for scholarly communication initiatives through the process of conceiving, implementing and maintaining an e-print archive or OAI-compliant repository. Both institutional archives and discipline-based aggregators will be covered; the conference will address equally the technical and

organizational aspects of creating and maintaining such repositories. In addition to a general introduction to the open-access concept, there will be presentations of case studies and an extensive discussion section.

The audience for this conference includes: university administrators, department heads and faculty; academic and scientific society officials and publishing chairs; academic journal editors and editorial board members; publishers; government bureaucrats responsible for innovation in scholarship and publishing; librarians; technical services staff; and others with an interest in open access for scholarly communication.

The Open Archives Initiative and SPARC's Gaining Independence initiative are closely related, and are both rooted in the notion that community-controlled scholarship best serves academia. Gaining Independence is an on-line manual for planning the launch of an on-line journal or repository, and it guides readers step-by-step through the process of creating a viable, competitive electronic publishing project. The conference will explore how both the Gaining Independence document and the OAI technical framework could contribute to new community-controlled scholarly communication patterns.

Attendees will leave the conference with a solid technical knowledge for creating and maintaining OAI-compliant repositories of scholarly documents There will also be a focus on the "political" side of implementation: introducing the concept of a repository into an institution, and negotiating with various groups within the community to assure its success. Attendees will also be exposed to related initiatives aimed at reforming scholarly communications, such as SPARC and the Budapest Open Access Initiative.

The second workshop again started with a technical communication by Herbert Van de Sompel about the developments in the OAI software since the previous workshop.[4] In accordance with the announcement, the programme furthermore contained a large number of case studies, reporting on existing realizations and ongoing projects: MathDoc, the California Digital Library, SHERPA, some European projects (the Open Archives Forum, SciX, Figaro), institutional archives at Lund University, the Max Planck Gesellschaft, CalTech and MIT…, and even the management of a community-owned Open Access journal (Documenta Mathematica). Other talks discussed more technical aspects: repository software from e-prints and from CERN, a general overview of the possibilities of service providers based on OAI, large-scale archives networks, OAI and a large-scale digital library, Elsevier's SCIRUS search engine. Added to this were also some more strategic communications about SPARC and the Budapest Open Access Initiative (BOAI), and a visionary contribution about "Independence from an academic point of view" by Jean-Claude Guédon. On Friday afternoon participants were, as in the first workshop, divided in small discussion groups about various topics with reports from these groups and a final plenary discussion on Saturday morning.

After the conclusion of the workshop, the programme committee met on Saturday afternoon and decided not to publish separate conclusions from this workshop, but instead to concentrate on the document requested by the ESF, which could act as a joint conclusion statement from the two workshops up to then. A small working group was appointed, and they produced - after some months of intensive exchanges of text proposals - the document "European Science Policy Briefing 21: Open Access: Restoring Scientific communication to its rightful owners" (ESF, 2003). Independent reports on this second workshop were published in D-Lib Magazine (Nelson, Van de Sompel & Lagoze, 2002), Ariadne (Nixon & Simpson, 2003) and Bibliotime (De Robbio, 2002).

THE THIRD WORKSHOP

In view of the success of the first two workshops, it was clear that we had to continue. From a small enquiry among the participants of the second one, we learned that many people would appreciate the possibility to attend one or more tutorial sessions related to the workshop, and we have followed up on that suggestion.

The preparation of the third workshop started late spring 2003, after obtaining the repeated support from CERN, SPARC, OSI and JISC. Having learnt from past experiences, we decided to first collect among the committee members all possible suggestions for items on the programme, but to organize right away a meeting of the committee to come to quick decisions. This meeting was held during LIBER's Annual General Conference in Rome. One of the main objectives of the third workshop was to make sure that the technical results from OAI, as discussed in the previous workshops, would lead to positive changes in our scholarly communication system. This workshop was therefore announced with the following *Mission statement:*

Third Workshop on the Open Archives Initiative (OAI3): Implementing the Benefits of OAI (Cern 12-14 February 2004)

The Open Archives Initiative (OAI) was founded in 2000 to bring the benefits of open archives-compliant software to the research community and launch an international network of institutional repositories. Since OAI's founding, there have been many successful applications of the technology, and a simultaneous, widespread understanding that open archives technology is the foundation for the future of research. In the field of scholarly communication there has also been a remarkable evolution: open access journals have achieved respectability through the activities of BioMed Central and PLoS and the number of such journals is rising; scholarly societies are becoming interested in the open access model, and we have seen some society publishers adopt the open access model. The foremost granting agencies in the U.S. and the U.K. have both issued statements supporting open access.

However, libraries have not yet reaped large benefits from the OAI's success. Through publishers' "big deals," more commercial journal titles than ever before are accessible, and library budgets are tightly bound to them in long-term contracts. Library customers are growing accustomed to the enormous comfort offered by the databases of those publishers and, as a consequence, switching to alternative models for scientific communication has become less and less acceptable. We want to change this. The third CERN workshop will bring together librarians and information specialists, publishers, scientists and university managers who want to bring the benefits of open archives technology and open access publishing to libraries. The conference's action-focused agenda will prioritize initiatives to be undertaken, in order to increase the impact of OAI on the process of scientific publishing.

The practical organization was soon confronted with the unfortunate coincidence of our meeting with a meeting in copyright problems in Zwolle, The Netherlands, resulting in the unavailability of some of the proposed speakers. On the other hand, a group of 15 Australian librarians happened to make a tour of Europe and they asked permission to include our full workshop in their tour programme; this gave us an interesting down-under communication by Colin Steele.

The programme [5] started on Thursday morning with 4 optional parallel tutorials:

- OAI and OAI-PMH for absolute beginners - a non-technical introduction.

- Institutional Repository Software Options: questions and answers with the experts with representatives from ARNO, CDSware, DSpace, Fedora, GNU Eprints, i-Tor, MPG eDoc and MyCoRe.

- Implementing the OAI-PMH - an introduction.

- A fourth tutorial was organized on Saturday afternoon about "Harvesting and Resolution Methods for Building OAI-based Services".

The facilities at CERN allowed only for a limited number of participants in these tutorials, and all of them were fully booked in spite of the extra registration fee that was asked for these activities.

The actual programme consisted as usual of a mix of contributions of different types: on Thursday afternoon we had an update on the status of the OAI-PMH and the activities of the OAI by Carl Lagoze, a strategic contribution by Diann Rusch-Feja, reports on local initiatives (FAIR, DARE, DINI, Max Planck Gesellschaft, OLAC, SciX). Friday morning was devoted to different aspects of publishing and scholarly communication, such as aspects of copyright, the different roads to Open Access, the DOAJ project, OAI-PMH applications at JSTOR, whereas a special session on Friday afternoon was focused on practical steps to promote usage by encouraging the academics. This afternoon was also the by now traditional breakout session with group discussions on a wide range of topics (see the programme for the full list) with a plenary reporting session on Saturday morning. The programme finished with an extensive panel discussion, with a variety of panel members: two scientists, a publisher, a librarian, an information specialist and two "activists" in the Open Access movement. Since the video webcasting of CERN was no longer available for this panel discussion, it may be interesting to read Peter Suber's text about it in *SPARC Open Access Newsletter*, issue 71, March 2 2004.[6] Some reports on the third workshop wer published in *D-Lib Magazine (*Awre, 2004), *Library Hi Tech News* (Comba, 2004) and in Open Access repositories such as E-LIS (Lagoze, 2004). In the meantime the preparations have started for the organization of a fourth workshop in the fall of 2005.

CONCLUSIONS

The series of OAI workshops offer us clearly a success story about what a small initiative by LIBER can bring about. It has created a real forum on the European level, where all people involved in the creation and implementation of e-print archives can meet, exchange ideas and experiences and obtain first-hand support from the specialists in the field. The number of participants has increased from 68 (OAI1) to 150 (OAI2) and 190 (OAI3), whereas the number of represented countries was respectively 14, 18 and 31. The enthusiasm of the participants was often overwhelming, and the social activities during each workshop (an opening buffet dinner to get to know each other, and a wine-sharing evening where every participant brings from home his favourite bottle…) resulted in a true atmosphere of friendship.

A very important factor in the success of the workshop was certainly the support of the CERN library. Not only could we use the CERN conference facilities free of charge, but we also received professional administrative support by Catharine Havard (OAI1), Jean-Philippe Schmitt (OAI2) and by Joanne Yeomans and Lamia Djerbi (OAI3).

In the meantime, Paul Ayris has taken over as chairman of the organizing committee, and the series has been continued with a fourth workshop in October 2005.[7] Preparations for the next one are already under way, while an agreement has been reached with the organizers of the *Nordic Conferences on Scholarly Communication* at Lund for alternating the two series of activities.

It may turn out to be difficult to measure the long-term impact of these workshops. The Open Access movement is increasingly gaining respectability, but it would be presumptuous to believe that these workshops were the primary drivers behind this success.

Initiatives like the *Berlin Declaration* will turn out to be much more important on a historical scale. Nevertheless, we believe that this series of workshops is playing an modest but irreplaceable role, supporting and strengthening the activities of the European librarians and information specialists, who try to contribute to the deployment of OAI-compatible archives.

NOTES

1. During this conference I reported about the OAI development in my contribution "Scientific information: a partnership between the library and the academic community". LIBER Quarterly, 10(2000)3 291-311. http://webdoc.gwdg.de/edoc/aw/liber/lq-3-00/lq-3-00-s291b311.pdf).

2. The full programme, including links to pictures and documents of all communications are still available at the CERN website http://indico.cern.ch/conferenceDisplay.py?confId=a01193

3. Unfortunately, neither contributed led to a publication in LIBER Quarterly.

4. The full programme, including now even the video webcasts of most of the talks, are again available at the CERN website http://indico.cern.ch/conferenceDisplay.py?confId=a02333

5. The programme is available at: http://indico.cern.ch/conferenceDisplay.py?confId=a035925.

6. See: http://www.earlham.edu/~peters/fos/newsletter/03-02-04.htm

7. See: http://indico.cern.ch/conferenceDisplay.py?confId=0514

REFERENCES

Awre, Chris: "Report on the 3rd OAI Workshop". D-Lib Magazine, 10(2004)4. http://www.dlib.org/dlib/april04/awre/04awre.html

Comba, Valentina: "Open Archives Initiative (OAI) 3 Workshop". Library Hi Tech News, 21(2004)3, 6-7. http://www.emeraldinsight.com/10.1108/07419050410537590

De Robbio, Antonella: "Gaining independence with e-prints archives and OAI: secondo workshop OAI in Europa". Bibliotime, 5(2002)3. http://didattica.spbo.unibo.it/bibliotime/num-v-3/derobbio.htm

ESF: European Science Policy Briefing 21: Open Access: Restoring Scientific communication to its rightful owners.ESF, April 2003. http://www.esf.org/publication/157/ESPB21.pdf

Lagoze, Carl. "Breakout session reports". E-LIS, 28 February 2004. http://eprints.rclis.org/archive/00001012/

Nelson, Michael L., Herbert Van de Sompel and Carl Lagoze: "Report on the 2nd Workshop on the Open Archives Initiative, Gaining Independence with e-Print Archives and OAI". D-Lib Magazine, 8(2002)11. http://www.dlib.org/dlib/november02/vandesompel/11vandesompel.html

Nixon, William J. and Pauline Simpson. "2nd Workshop on the Open Archives Initiative (OAI)", Ariadne (Jan. 2003)34. http://www.ariadne.ac.uk/issue34/geneva/.

SPARC: Gaining Independence: A Manual for Planningthe Launch of a Nonprofit ElectronicPublishing Venture. SPARC, April 2002. http://www.arl.org/sparc/GI/

WEB SITES REFERRED TO IN THE TEXT

BOAI - Budapest Open Access Initiative. http://www.soros.org/openaccess/

CDS - CERN Document Server. http://cds.cern.ch/

CERN - The European Organization for Nuclear Research. http://public.web.cern.ch/public/

EBSCO Publishing. http://www.epnet.com/

ECDL - European Computer Driving Licence Foundation. http://www.ecdl.com/main/index.php

ESF - European Science Foundation. http://www.esf.org/

ICOLC - International Coalition of Library Consortia. http://www.library.yale.edu/consortia/

JISC - Joint Information Systems Committee. http://www.jisc.ac.uk/

OAI - Open Archives Initiative. http://www.openarchives.org/

OSI - Open Society Institute. http://www.soros.org/

Santa Fe Convention. http://www.openarchives.org/meetings/SantaFe1999/sfc_entry.htm

SPARC - Scholarly Publishing and Academic Resources. http://www.arl.org/sparc/

SPARC Europe. http://www.sparceurope.org/