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OPEN ACCESS PUBLISHING IN AUSTRIA: DEVELOPMENT AND FUTURE PERSPECTIVES

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Abstract: *The following article provides an overview of Open Access Publishing in Austria in 2010. First of all, the participation of Austrian institutions in signing Open Access declarations and Open Access events in Austria are presented. Secondly, the article shows the development of both the Green Road to Open Access (repositories) as well as the Golden Road (Open Access Journals) in Austria. The article also describes the Open Access policies of the most important funding agency in Austria, the biggest university of the country as well as Universities Austria, the association of the 21 public universities in Austria. Finally, the paper raises the question of how Open Access is to be financed and explains the legal framework conditions for Open Access in Austria.*

Keywords: *open access, scholarly communication, open access repositories, open access journals, open access policies, open access financing models.*

1. Open Access Declarations & Events

"Join the revolution!" Using such drastic words Nobel Prize laureate Harold Varmus asked for a paradigm shift in scholarly publishing (Varmus 2003). Numerous Austrian scientists responded to this appeal by signing online declarations advocating Open Access.

211 Austrian scientists signed the open letter[1] of the Public Library of Sciences (PLoS) between October 2000 and September 2001. This initiative by PLoS was signed by 36,500 scientists from 242 different countries, among them 1,019 from Germany and 328 from Switzerland.

The Budapest Open Access Initiative (BOAI 2002)[2] can be signed individually by scientists as well as by institutions. The BOAI was signed by 526 institutions worldwide, among them 29 from Germany and 3 from Switzerland. In Austria only the editor of Suicidology Online[3] signed this important Open Access declaration. Among the 5,193 scientists who signed the BOAI are 32 scientists from Austria, 237 from Germany and 84 from Switzerland.

The Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities[4] (2004), a declaration that can only be signed by institutions, but not by individual scientists, was signed by 249 institutions, among them 36 from Germany and 13 from Switzerland. The following 3 Austrian institutions also signed the declaration:

* University Library of the Medical University Vienna, Austria.
** Central Head Office – Austrian Academic Consortium.

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- Austrian Science Fund (2003),
- Austrian Rectors' Conference - renamed Universities Austria in 2008 (2004),
- International Institute for Applied Systems Analysis (2007).

The Vienna Declaration: 10 Theses on Freedom of Information[5], which was presented at the Chaos Control congress in 2005, only reached significance at a regional level. The Vienna Declaration was signed by 786 scientists, among them 381 from Austria and 361 from Germany and by 11 institutions (9 Austrian and 2 German). Among the signatories of the Vienna Declaration are:

- Vienna University Library,
- Vienna University Computer Centre and ACONET (Austrian Academic Computer Network),
- Information Technology Services of Vienna University of Technology,
- Centre for Practice-Oriented Computer Sciences at Danube University Krems,
- Computer Centre (ARZ) of the Austrian Academy of Sciences,
- ISPA – Internet Service Providers Austria.

Conferences such as ODOK 2006[6], the Austrian Library Day in Bregenz in 2006[7], the Open Access symposium at the University of Linz in 2008[8], the 3. Open Access Days at Konstanz University in 2009[9] as well as the Open Access Information Day in 2010 at the University of Vienna[10] contributed substantially to raising awareness of Open Access publishing in Austria. Occasionally, open Access was also a topic in interviews in the important Austrian online forum futurezone@ORF.at (Bauer & Hack 2007; Kersting & Hack 2007; Reckling & Hack 2009; Oberhuemer, Kromp & Hack 2009).

The fact that Open Access is part of the curricula of the Master of Science in Library and Information Studies in Austria proves that Open Access has become an integral part in the Austrian library landscape.

2. The Golden Road to Open Access Publishing: Open Access Journals

The „Golden Road to Open Access" refers to the primary publication of a scientific or scholarly article in an Open Access journal. The Directory of Open Access Journals (DOAJ)[11] provides an overview of the currently 4,773 Open Access journals and comprises around 357,000 articles. The directory includes 33 Austrian journals which fulfill the Open Access criteria (compared to 183 Open Access journals from Germany and 67 Open Access journals from Switzerland). Of the 33 Austrian Open Access journals, 12 are published by Krause und Pachernegg[12]. The publishers of the remaining 21 Open Access journals in the following are mainly universities or scientific institutions and societies[13]:

- ASEAS: Österreichische Zeitschrift für Südostasienwissenschaften (since 2008),
- Austrian Studies in Social Anthropology (since 2005),
- E-Beratungsjournal (since 2005),
- E-Journal Philosophie der Psychologie (since 2005),
- European Integration Online Papers (since 1997),
- International Journal of Advanced Corporate Learning: iJAC (since 2008),
- International Journal of Computer and Network Security (since 2009),
- Joannea Botanik (since 1999),
- Joannea Geologie und Paläontologie (since 1999),
- Journal für Ernährungsmedizin (since 2001),
- Journal of Universal Computer Science (since 1994),
- Living Reviews in European Governance (since 2006),
- Magazin erwachsenenbildung.at: Das Fachmedium für Forschung, Praxis und Diskurs (since 2007),

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- Papers on Social Representations (since 1992),
- R News (since 2001),
- RhetOn (since 2004),
- Scientia Pharmaceutica (since 2006),
- tripleC: Open Access Journal for a Global Sustainable Information Society (since 2003),
- Vienna Yearbook of Population Research (since 2005),
- WEB-FU - Wiener elektronische Beiträge des Instituts für Finno-Ugristik (since 2001),
- Zeitschrift für Hochschulentwicklung (since 2004).

The success of the Golden Road to Open Access can also be measured by the number of memberships with BioMed Central[14], the most important Open Access publisher. BioMed Central publishes more than 180 Open Access journals in the field of biology and medicine. The publisher was taken over by Springer Science+Business Media in October 2008. BioMed Central has 303 institutional members in 38 countries, among them 4 from Austria[15], 34 from Germany and 11 from Switzerland.

Whereas Austria lags behind Germany and Switzerland in terms of BioMed Central memberships, the number of articles published by Austrian scientists in BioMed Central journals shows a different picture. So far Austrian scientists have published 1,079 articles in BioMed Central journals (Germany: 8,172 articles, Switzerland: 2,274 articles).

SCOAP3 (Sponsoring Consortium for Open Access Publishing in Particle Physics)[16] represents an international alternative strategy to Open Access Publishing in the field of high energy physics. SCOAP3 aims at developing the five most important journals in the field of high energy physics into Open Access journals. Between 5,000 and 7,000 articles are published in these five journals every year. The total costs of the journals, which are currently paid for by around 500 institutions worldwide through subscriptions and license fees, are estimated to amount to 10 million Euros. According to the SCOAP3 scheme, the costs are to be shared on the basis of the number of published articles by each country. Pursuant to the cost breakdown of SCOAP3, Austria has to cover 0.5 % of the total costs, which would have to be raised by the Central Library of Physics, a sub-library of Vienna University Library. Germany would have to cover 9.1 % and Switzerland 1.3% of the total cost; CERN would have to pay an additional 2.1%. Austria's official representative in the SCOAP3 consortium is the Institute of High Energy Physics of the Austrian Academy of Sciences.

Another possibility for scientists to make their articles freely available immediately to the scientific community worldwide is to publish in so-called hybrid journals. Hybrid business models are based partly on subscriptions and partly on publication fees. These journals are not Open Access journals, but authors are given the opportunity to make their articles Open Access in conventional scientific journals by paying a fee. This model has been adopted by nearly all international big publishing houses. Usually authors and funding agencies respectively cover the costs of making an article freely available. The sub-directory of SHERPA / ROMEO „Publishers with Paid Options for Open Access"[17] provides an overview of publishers which offer hybrid models as well as further information about the costs involved with publishing a scientific article open access in a conventional scientific journal. However, the hybrid model has to be analyzed critically, especially in the light of higher costs incurring in the short and medium term. Unfortunately, rising Open Access fees in conventional

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scientific journals have not yet led to a drop in subscription or license fees. In addition, the share of Open Access articles in hybrid journals is still a very small one. The portfolios of the 20 biggest publishers worldwide with around 10,000 journals include around 22 % hybrid journals. The share of Open Access articles in these journals amounts to just 2 %[18].

Unfortunately, no surveys on the hybrid model in Austria are available yet. First results of SOAP (Study on Open Access Publishing), a two-year project funded by the European Commission in the frame of the FP7 program, will be presented at the 14th International Conference on Electronic Publishing from June 16th to 18th 2010 in Helsinki[19].

3. The Green Road to Open Access Publishing: Repositories

The green road to Open Access refers to the self-archiving of scientific and scholarly articles in an openly accessible institutional or subject-based repository either in parallel with or after publication in a toll-access journal. Self-archiving in a repository under certain conditions is already permitted by most publishers. The directory SHERPA / RoMEO[20] provides information about the copyright and self-archiving policies of more than 700 publishers.

The Directory of Open Access Repositories (OpenDOAR[21]) lists the currently 1,586 existing repositories. Of these the following 9 repositories are located in Austria (compared to 139 in Germany and 9 in Switzerland). However, some of the Austrian repositories contain several hundreds of documents only:

- Architektur-Informatik (Arbeitskreis Architekturinformation, a German language repository on computer science),
- Repository of the LBI-HTA (Ludwig Boltzmann Institute for Health Technology Assessment),
- Sammelpunkt. Digital Theory Archive (University of Vienna),
- Epub-WU (Electronic Publications of the Vienna University of Economics and Business)
- epub.oeaw (The digital publication portal of the Austrian Academy of Sciences)
- ERPA: European Research Papers Archive,
- OTHES (University of Vienna),
- Phaidra: Permanent Hosting, Archiving and Indexing of Digital Resources and Assets (University of Vienna),
- textfeld (textfeld society for advancement of academic potential).

4. Open Access Policies

Signing Open Access declarations in Austria was a high-publicity event, but had hardly any effects on the realities of scientific publishing. In contrast, the voluntary commitment to self-archiving in most cases results in concrete measures to realize Open Access publishing. The directory Open Access Repository Material Archiving Policies (ROARMAP[22]) includes 206 institutions, with only one from Austria (Germany: 8, Switzerland: 5).

The Austrian Science Fund (FWF), as the first Austrian signatory of the Berlin Declaration, puts a strong emphasis on Open Access in its funding program (Reckling & Bauer 2009): „As a signatory to the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities, the FWF is committed to supporting and promoting sustained open access to scholarly publications and research data. To this end, the FWF requires all project leaders and workers to make their publications freely available through open access media on the Internet.

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Exceptions to the open access requirement can only be made in cases where it is not possible for legal reasons. In such cases, the FWF requires grant recipients to provide justification to this effect in their final project reports.“[23]

In order to promote self-archiving, the Austrian Science Fund has been cooperating with UK PubMed Central (UKPMC)[24], a free digital archive of biomedical and life sciences journal literature, since March 2010. The Austrian Science Fund has asked all project leaders in the life sciences to archive their publications in UKPMC. The project leaders of around 1,400 projects in the life sciences (including related scientific areas) funded by the Austrian Science Fund, which were not finished before April 1st, 2007, were asked in an email by UKPMC in March 2010 to make their publications freely available via a UKPMC project account. All new projects in the life sciences funded by the Austrian Science Fund will receive a UKPMC project account and project leaders will be asked to archive the respective publications in UKPMC. Similar to the National Institute of Health (NIH) and to British funding agencies like the Wellcome Trust, the Austrian Science Fund will make the policy of self-archiving FWF-funded publications in UKPMC mandatory as of 2011[25].

The Austrian Academy of Sciences, the University of Vienna and Universities Austria are not part of ROARMAP, but they nevertheless pursue a dedicated Open Access policy.

The Open Access policy of the Austrian Academy of Sciences is based on two options. Affiliated authors are able to archive their scientific articles in the institutional repository of the Austrian Academy of Sciences at no cost and make them freely available in the Intranet for two years. After two years, the author is entitled to make the respective article available Open Access in the Internet worldwide. Alternatively, the program Author’s Choice provides authors with the possibility to make an article freely available in the Internet simultaneously with publication in a conventional scientific journal in return for paying a fee[26].

Among Austrian universities, the University of Vienna is an Open Access pioneer and plays a groundbreaking role in this field in Austria: The University of Vienna runs an institutional repository (Phaidra), holds a membership with BioMed Central and has developed an ambitious information program on Open Access. The relevance attached to Open Access can also be seen in a statement on the university’s website: “The University of Vienna has understood the significance of the Open Access movement and has defined Open Access as strategic goal“[27]. Last but not least, the University of Vienna also participates in the project OpenAire – Open Access Infrastructure for Research in Europe, with 38 project partners from 27 European countries[28].

The Recommendations from the EUA Working Group on Open Access[29] issued by the European University Association (EUA) in 2008 formed the basis of and triggered the “Recommendations of Universities Austria on an Open Access Policy for the Austrian Universities“[30] published in January 2010. Issuing this statement was a logical consequence given the fact that the Austrian Rectors' Conference, the predecessor of Universities Austria, had signed the Berlin Declaration on Open Access in 2004.

5. Financing of & Legal Framework Conditions for Open Access

Compared to the currently established system of scientific publishing, also the Golden and the Green Road to Open

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Access publishing entail high costs, which would have to be borne by the universities in addition to subscription and license fees during the transition period from the conventional toll-access model to the Open Access model (Bauer 2009).

Except for the Open Access initiative of the Austrian Science Fund, there are no national funding programs for Open Access publishing in Austria. The 21 national universities in Austria were granted full autonomy in 2004 following the entry into force of the Universities Act 2002. The Austrian state is still the main funder of universities, but instead of playing an active and designing role, it rather has a controlling and monitoring function. Every year the Austrian universities have to submit a performance report to the Austrian Federal Ministry of Science and Research. One key indicator in this performance report is the number of scientific publications. „Primary publications in scientific journals ranked in the Social Sciences Citation Index (SSCI), the Science Citation Index (SCI) or the Arts & Humanities Citation Index (AHCI)“ have to be named explicitly in the performance reports, i.e. publishing in journals with impact factors is encouraged. However, many of the newly founded Open Access journals show considerably lower impact factors than established publisher journals. The number of scientific articles published in Open Access journals is not an indicator in the performance reports of universities, which means that incentives to publish Open Access and political regulations in favor of Open Access are missing. A survey on the Medical University of Vienna, the Vienna University of Technology and the University of Veterinary Medicine Vienna has shown that the Open Access model would entail considerably higher costs also in the long run for universities with a high publication output than the currently established model of license and subscriptions (Bauer 2006).

Most recently an important re-positioning took place on the state level when the Austrian Parliament passed the amendment 2009 to the Universities Act 2002, which indicates under section 85 that „a central database for scientific and artistic works” should be set up. Apart from metadata, this database is to include full texts as well, if possible. Section 85, Paragraph 1 refers to scientific and artistic diploma, master‘s and doctoral theses, while Paragraph 2 refers to scientific articles. Paragraph 2 explicitly says that in order to document the scientific output at Austrian Universities, a central database for the scientific publications of university affiliates is to be set up (digital repository), containing the metadata of the article and – if possible – also the full text. Universities Austria stated in this context that „the commitment to set up a digital repository should be seen in connection with current Open Access activities at universities.“[31]

6. Future Perspectives

Assessing the situation of Open Access publishing in Austria in 2010, it can be said that in spite of a lack of interest and insufficient support of Open Access by decision-makers over many years, the idea of Open Access publishing has nevertheless been spread thanks to initiatives by individual persons and institutions. However, as a consequence of the lack of central funding and the failure to implement Open Access publishing in the performance reports of the Austrian universities as criterion for the granting of funds, Open Access has not become as accepted among scientists in Austria as in other countries.

The declaration by Universities Austria on Open Access and the Amendment 2009 to the Universities Act 2002 (with the latter one including the development and implementation of a national repository) might be key documents on the way to the establishment of Open Access publishing

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in Austria as an alternative to the traditional publishing system.

In order to further promote Open Access in Austria several prerequisites have to be fulfilled. Austria needs a national survey on the publication behavior of Austrian scientists similar to the one that has been available for Germany already since 2005[32]. In addition, a national survey on the economic aspects of the conventional publishing industry and of Open Access publishing is needed for Austria, as the one published for Great Britain in 2009[33]. Based on these grounds, an "Austrian Alliance" must be created with the aim of developing a national Open Access strategy that receives adequate financial support, similar to the Alliance of German Science Organizations[34] in Germany.

Notes

[1]http://www.plos.org/about/letter.php
[2]http://www.soros.org/openaccess/read.shtml
[3]http://www.suizidforschung.at/sol/
[4]http://oa.mpg.de/openaccess-berlin/berlin_declaration.pdf [english]
[5] http://www.chaoscontrol.at/2005/we.htm
[6] ODOK 2006 is a joint conference of the Association of Austrian Librarians and the Austrian Society for Documentation and Information, which focused on the topic „Access to Information": http://www.uibk.ac.at/voeb/odok2005/programm.htm
[7]http://www.univie.ac.at/voeb/bibliothekartag/bibliotag2006/indexie.html
[8] http://www.iwp.jku.at/openaccess/#linz.
[9] http://open-access.net/de/aktivitaeten/openaccesstage/programm/ (cf. Bauer 2009).
[10] http://openaccess.univie.ac.at/oaday09/
[11] http://www.doaj.org/
[12] Krause und Pachernegg publishes medical journals. Its business model is based on print subscriptions that have to be paid for, whereas the corresponding online editions are made freely available according to Open Access criteria.
[13] Publishers of Austrian Open Access journals are among others Graz University of Technology, Johannes Kepler University Linz, University of Salzburg, University of Vienna, the Austrian Federal Ministry for Education, Arts and Culture, Joanneum (Provincial Museum of Styria), the Austrian Society for Academic Instruction, the Austrian Academy of Sciences Press and others.
[14] http://www.biomedcentral.com/
[15] University of Technology Graz, University of Vienna, University of Natural Resources and Applied Life Sciences Vienna, Research Institute of Molecular Pathology. Medical University of Vienna cancelled its membership at the end of 2008 for financial reasons (cf. Bauer & Dollfuß 2003).
[16] http://scoap3.org/
[17]http://www.sherpa.ac.uk/romeo/PaidOA.html
[18]https://fedora.phaidra.univie.ac.at/fedora/get/o:51548/bdef:Asset/view
[19] http://project-soap.eu/soap-elpub-2010/
[20] http://www.sherpa.ac.uk/romeo/
[21] http://www.opendoar.org/
[22]http://www.eprints.org/openaccess/policysignup/
[23]http://www.fwf.ac.at/de/public_relations/oai/index.html
[24] Cf. Reckling 2010.
[25]http://www.fwf.ac.at/de/aktuelles_detail.asp?N_ID=399
[26]http://verlag.oeaw.ac.at/content/Open-Access.html
[27] http://openaccess.univie.ac.at/
[28] http://www.openaire.eu/
[29]http://www.eua.be/fileadmin/user_upload/files/Policy_Positions/Recommendations_Open_Access_adopted_by_the_EUA_Council_on_26th_of_March_2008_final.pdf
[30] http://www.uniko.ac.at/upload/Uniko-Empfehlungen_Open_Access_01_2010.pdf
[31]http://www.uniko.ac.at/upload/Stellungnahme_UG-Novelle_2008_110708.pdf
[32] See Publikationsstrategien im Wandel? Ergebnisse einer Umfrage zum Publikations- und Rezeptionsverhalten DFG-geförderter Wissenschaftler unter besonderer Berücksichtigung von Open Access / Eds. Deutsche Forschungsgemeinschaft (DFG). - 1. Ed. – Weinheim: WILEY-VCH, 2005.
[33] See Houghton, John W.; et al.: Economic Implications of Alternative Scholarly Publishing Models: Exploring the Costs and Benefits, Report to The Joint Information Systems Committee (JISC) by Victoria University & Loughborough University. 2009. –http://ie-repository.jisc.ac.uk/278/3/EI-ASPM_Report.pdf.
[34]http://www.allianzinitiative.de/de/handlungsfelder/open_access/

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References

1. Bauer, Bruno; Dollfuß, Helmut: BioMed Central – The Open Access Publisher in Österreich. In: *Online Mitteilungen* Nr. 77 (Dezember 2003), 15-19. http://www.univie.ac.at/voeb/fileadmin/Dateien/Publikationen/ONLINE-Mitteilungen/om77.pdf
2. Bauer, Bruno: Kommerzielle Open Access Publishing-Geschäftsmodelle auf dem Prüfstand: ökonomische Zwischenbilanz der „Gold Road to Open Access“ an drei österreichischen Universitäten. In: GMS Medizin – Bibliothek – Information 6 (2006), H. 3, Doc32. http://www.egms.de/static/pdf/journals/mbi/2007-6/mbi000050.pdf
3. Bauer, Bruno; Hack, Günter: „Der Preis der freien Wissenschaft“. In: futurezone@ORF.at, 02.05.2007. http://futurezone.orf.at/stories/188665/
4. Bauer, Bruno: It’s economy stupid! Anmerkungen zu ökonomischen Aspekten des goldenen und des grünen Weges beim Open Access Publishing. In: Information – Wissenschaft und Praxis 60 (2009), H. 5, S. 271-278. http://www.b-i-t-online.de/pdf/IWP2009-5.pdf
5. Bauer, Bruno: Open Access im Dreiländereck Deutschland – Österreich – Schweiz: Bericht von den 3. Open Access Tagen an der Universität Konstanz, 7. und 8. Oktober 2009. In: Mitteilungen der VÖB 62 (2009), H. 4, S. 44-50. http://www.univie.ac.at/voeb/fileadmin/Dateien/Publikationen/VOB-Mitteilungen/vm6220094klein.pdf.
6. Kersting, Anja; Hack, Günter: Neue Plattform für Open Access. – In: futurezone@ORF.at, 12.05.2007. http://futurezone.orf.at/stories/191794/
7. Oberhuemer, Petra; Kromp, Brigitte; Hack, Günter: Open Access: „Bildung nicht nur für Eliten“. In: futurezone@ORF.at, 09.07.2009. http://futurezone.orf.at/stories/1612188/
8. Reckling, Falk; Bauer, Bruno: Repositorien: Der grüne Weg zu Open Access Publishing aus der Perspektive einer Forschungsförderungsorganisation. 10 Fragen von Bruno Bauer an Falk Reckling, Mitarbeiter des FWF Der Wissenschaftsfonds. In: GMS Medizin – Bibliothek – Information 9 (2009), H. 1, Doc11. http://www.egms.de/static/pdf/journals/mbi/2009-9/mbi000139.pdf
9. Reckling, Falk; Hack, Günter: Freier Zugang zu geförderter Forschung. In: futurezone@ORF.at, 12.05.2009. http://futurezone.orf.at/stories/1603114/
10. Reckling, Falk: Der FWF beteiligt sich an PubMed. 2010. http://www.fwf.ac.at/de/news/am20100302.html
11. Varmus, Harold. „Werdet Teil der Revolution. Digitale Bibliotheken und elektronische Zeitschriften sollen das wissenschaftliche Publizieren ändern. Ein Gespräch mit dem Nobelpreisträger Harold Varmus.“ In: Die Zeit, No. 26, 18.06.2003. http://www.zeit.de/2003/26/N-Interview-Varmus?page=all.

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