

# ZORA: Open Access at the University of Zurich

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**The University of Zurich was the first Swiss university to sign the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities and to publish an Open Access policy. In the Zurich Open Repository and Archive (ZORA), researchers of the University of Zurich deposit metadata and full text of their scientific publications. We describe our experience focussing on 2008, the first year in which all publications of the University were collected in ZORA.**

The University of Zurich is the largest university in Switzerland and comprises seven Faculties ranging from Theology, Law, Economics, Medicine, Veterinary Medicine to Arts and Science.

To introduce Open Access (OA) at such a multidisciplinary, heterogeneous and by tradition federalistic institution is a big task. Publication cultures vary considerably between the Faculties. A bottom-up democratic pro-

cedure to anchor ZORA and OA would result in seven different directions requiring too many resources. Our strategy has been a mixture of top-down and bottom-up. University leaders show the way assisted by the Main Library and the IT services, and care for feedback of the Faculty members. ZORA is further anchored by a committee made up by representatives of each Faculty.

OA activities date back to 2002, when the University became a member of BioMed Central. A symposium on Open Access was held, and the Berlin Declaration was signed in 2004. In 2005, the University published an OA policy, which was revised in 2008.

## **Development of ZORA: technical hallmarks**

ZORA<sup>1</sup> is operated by the Main Library and the IT services and was outsourced for the first two years as an Open Repository Service by BioMed Central. This generated a jump start and allowed us to quickly gain practical experience. In October 2006, ZORA went public containing more than 1,100 publications. After evaluating several open source platforms, Eprints version 3 was installed and adapted. This software offered critical parameters such as metadata import from PubMed and DOI, embargoes and modulated visibilities of full text. In February 2008, metadata and full text migrated to the in-house ZORA.

## **Workflow, marketing and communication**

It became clear that the best workflow for ZORA is one in which researchers or their assistants (submitters) deposit their publications and the ZORA team acts as editors. The benefit of this approach is obvious. Authors become aware of ZORA, OA and their author rights. Previously they indicated their publications in the Annual Reports; now they deposit them in ZORA, and metadata are automatically transferred to the Annual Reports.

Starting in March 2006, we visited selected OA promoters and interested institutes of the University and implicated them in the submission process. Articles in the newsletter of the University informed about the current status. We produced a film about Open Access

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and showed it, together with public lectures, at the 175 year anniversary of the University in March 2008<sup>2</sup>. In parallel, ZORA was presented to the Deans of each Faculty and at plenary Faculty meetings. These and other sessions informed the researchers directly, led to discussions and created valuable feed-

1 ZORA: <http://www.zora.uzh.ch>

2 Open Access Film of the University of Zurich: <http://www.oai.uzh.ch/index.php?option=content&task=view&id=406&Itemid=282>

back for critical issues such as publication types, copyright, full text formats and effort in general. In mid-2008, an informative letter by the President was sent directly to all researchers of the University. In parallel, Controlling, responsible for the Annual Reports, announced the new procedure together with the Main Library.

Our Open Access Website has been online since October 2006 and contains information about OA in general and ZORA<sup>3</sup>. It also features a contact form and information about courses for ZORA.

### Open Access policy and accompanying measures

In May 2008 the Executive Board of the University published the following guidelines:

- The University of Zurich requires their researchers to deposit a copy of all their published scientific works in ZORA with Open Access, if there are no legal objections.
- The University of Zurich encourages and supports its authors to publish their research articles in Open Access journals where a suitable journal exists and provides the support to enable that to happen.

A link to the Annual Reports of the University was based on the following accompanying measures, the first of which in practice applies to metadata only:

- The Annual Reports of the University of Zurich are based on ZORA starting from 2008. In the Annual Reports publications are only considered if they have previously been deposited in ZORA.
- The Process Review determines which publications count as refereed or not refereed<sup>4</sup>. It is based on international directories such as Ulrichs Periodicals Directory and ERIH (European Reference Index for the Humanities). The ZORA team, together with the respective Faculties, examines questions and maintains a freely accessible reference database containing the rules agreed upon (White List).

This policy and the feedback from the Faculty members resulted in a Guide to ZORA<sup>5</sup>.

### Embedding ZORA in the researchers' environment

The vast majority of researchers do not know about their author rights and copyright law. Therefore the ZORA team controls the copyright situation for each deposited publication. As well as controlling and extending metadata, checking for duplicates and publication types, we verify whether a publication is refereed or not. We maintain a database to collect our insights, the Copyright Database & White List of the University of Zurich<sup>6</sup>. The goal is to supply data on copyright transfer agreements to SHERPA/RoMEO<sup>7</sup>.

Embedding of ZORA leads to further added value: simplified import with PubMed ID, DOI und XML; transfer to the Annual Reports; export possibilities to the Evaluation Office of the University; interface with websites of University of Zurich institutes (UniCMS); link of ZORA publications and search strings to other websites; search, display

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and export in various formats; statistics module; and harvesters such as OAIster and Google that result in increased visibility. The goal is that researchers enter a publication in ZORA once and can use it in many ways.

However, linking ZORA with other administrative tools of our University meant that the specific requirements of these tools had to be considered already when entering a publication in ZORA – and this led into unexpected side avenues. For example, the ZORA publications have to be marked as refereed or not refereed for inclusion in the Annual Reports, and some Faculties are less used to this principle than others.

### Depositing publications of 2008: challenges and differences between disciplines

2008 was a success in many ways – most importantly, virtually all scientific publications were entered by the researchers and their institutes in ZORA, at least on metadata level. Thus all re-

searchers took notice of ZORA and some learnt how to make the most of the added value. ZORA now contains 12,704 publications in total, 7,534 of which date from 2008<sup>8</sup>.

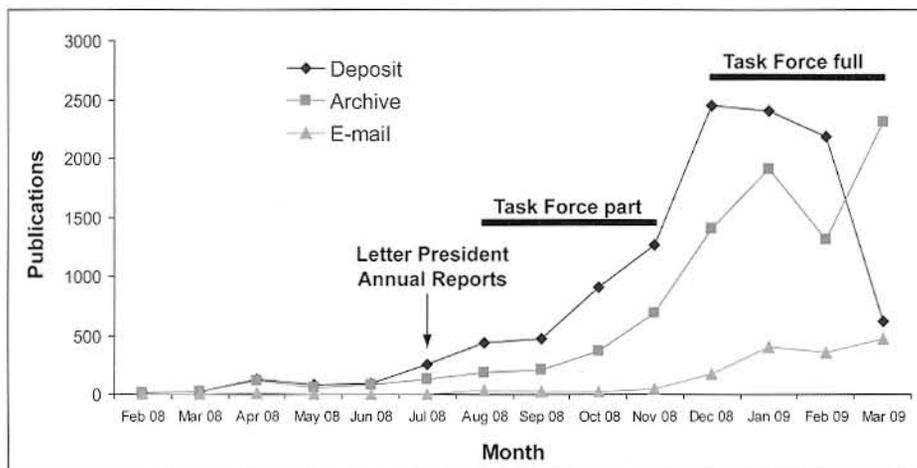
A key motivator is the transfer to the Annual Reports. Researchers deem them important and many of them entered their publications as used from the Annual Reports, i.e. at the end of 2008 and beginning of 2009.

This led to a peak, and a temporary ZORA Task Force enlarged and was trained by the editorial team and helped examining the entries of 2008. The challenge for the future is to encourage researchers to deposit their works in ZORA as soon as they are published, in order to avoid delays at the turn of the year (Figures 1 and 2).

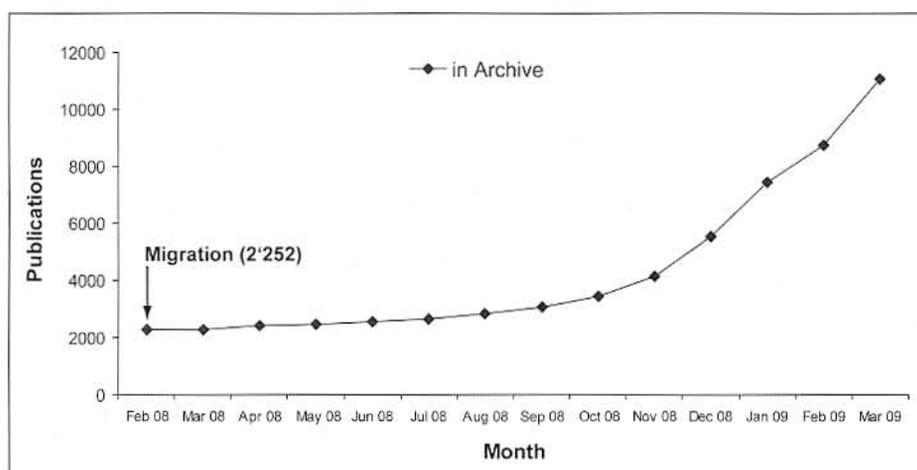
About 30% of all ZORA publications contain a freely accessible full text, and this is also the case for the publications of 2008 and the refereed journal articles of 2008. Most of these publications are accepted manuscripts (final author version). ZORA contains many links that lead to freely available full text hosted at publishers. Thus the percentage of ZORA publications with Open Access – available as direct download or link to publishers – is higher than 30%.

Life science, medicine and economics range higher in the percentage of free full text (e.g. 49% for publications 2008 in veterinary medicine, or 61% for refereed journal articles 2008 in economics), while social science, humanities, theology and law have lower percentages. These differences may originate from differences in the use of electronic resources as such and from

- 3 Open Access Website of the University of Zurich: <http://www.oai.uzh.ch>
- 4 Process Review: <http://www.oai.uzh.ch/index.php?option=content&task=view&id=418&Itemid=294>
- 5 Guide to ZORA: <http://www.oai.uzh.ch/index.php?option=content&task=view&id=410&Itemid=286>
- 6 Copyright Database & White List: [http://www.oai.uzh.ch/copyright\\_db.php](http://www.oai.uzh.ch/copyright_db.php)
- 7 SHERPA/RoMEO: <http://www.sherpa.ac.uk/romeo/>
- 8 Numbers of publications in ZORA are as of June 23, 2009



**Figure 1:** Depositing publications in ZORA. The graph shows how many publications were entered in ZORA per month from February 2008 to March 2009. Deposit: submitters deposit a publication in ZORA; Archive: the submitted publication is controlled by the ZORA team and moved to the repository; E-mail: in cases of questions or refusal the ZORA team returns the publication to the submitter including E-mail notification. The letter of the President, the announcement of the Annual Reports, and work periods of the Task Force are indicated.



**Figure 2:** Increase in the number of total publications in the ZORA archive. Migration to in-house ZORA took place in February 2008.

the copyright situation. For example, economists are used to reading and disseminating working papers – and the final version of these can be used as the accepted manuscript in ZORA. The Institute of Zoology has 61% OA in 2007, because the ZORA team contacted the authors each time they had deposited a publication for which the accepted manuscript would have been allowed but was missing. In 2008 we did not have the manpower to do this – and OA dropped to 37%.

### Reception of Open Access and ZORA by the researchers

All researchers want others to read their works and to quote them. Accessibility is a key parameter and therefore, in principle, researchers support the idea

of OA. However, the University of Zurich is still in a good position with licensed journals. Therefore it is difficult for researchers to understand that Open Access should be implemented now.

A main concern of researchers about the Gold Road to OA is that they feel obliged to stay with their favourite

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journals and books even if they do not want to. Simply, many OA journals are not yet established and have no impact factor, whereas the impact factor is a very critical aspect in evaluations. Pay-

ing author fees for single articles in established hybrid journals, on the other hand, is considered too expensive unless a policy shift at publishers' side can be integrated in a combination of pricing/licensing.

Concerns about depositing publications in ZORA arise because researchers are uncertain about copyright. And because most journals only allow the accepted manuscripts (final author version) to be freely accessible, not the publisher's official PDF. Accepted manuscripts are not what most researchers want to read and show. Instead they search the internet and often find publishers' PDFs on the websites of their colleagues who did not care about their contracts with publishers. Furthermore, even if it only took a single minute to archive a publication – for most researchers this is too much. In reality it takes longer, and accepted manuscripts first have to be created. Finally, solidarity of researchers with publishers, typically small ones, is seen in disciplines in which massive price increases have not (or not yet) occurred.

### Impact of the Open Access policy

The policy of the University of Zurich allows bringing ZORA and OA to the attention of all researchers of the University. However, the policy does not force researchers into providing OA, and the free choice of publication remains intact. Exclusive contracts with publishers count as legal objections, and there are no sanctions. So, to have a policy is better than having none, but to get researchers to comply with it is another big task.

Acceptance could be increased by making ZORA a tool that researchers want to use. Added value could provide help, such as import tools that make deposition easier, statistics at the item level, or calculations about the connection between free full text in ZORA and increased citation frequency. However, particularly with statistics and rankings, an institutional repository is at a disadvantage when compared to subject repositories that cover entire scientific fields – at least until individual institutional repositories are interoperating in very intelligent ways, which will take time to accomplish.

The University of Zurich is a federalistic university, built on individual research chairs, in a federalistic country. This is an entirely different cultural background compared to for example the circumstances of the National Institutes of Health in the United States. Biomedical researchers in the U.S. would do anything to get a grant from the NIH – even pay attention to their author rights and deposit their accepted manuscripts in PubMed Central, as required by the new NIH policy.

### What's next?

One of our goals is to increase the anchoring of OA and ZORA at the institutes by having local publication managers acting as editors. We also intend to provide more added value as de-

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scribed throughout this article. A final challenge is to increase the percentage of free full text in ZORA. We will re-

## ABSTRACT

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L'université de Zurich a été la première en Suisse à se positionner sur le terrain des publications scientifiques en accès libre. Sur la base d'une politique OA définie en 2005, est né le silo Zora (Zurich Open Repository and Archive). Les chercheurs ont ainsi l'occasion de faire connaître leurs travaux à la fois par une version électronique *full text* (environ 30% actuellement de l'offre) et des métadonnées. L'enjeu pour l'équipe Zora: encourager la communauté scientifique aux traditions multiples en matière d'édition, à enrichir le contenu du silo mis à leur disposition tout en respectant les conditions posées par les éditeurs. La communication interne et des mesures d'accompagnement (encouragement et support de la direction de l'université, élaboration des rapports annuels sur la base de Zora dès 2008, bibliométrie) s'avèrent prépondérantes pour gagner la bataille du libre accès. La contribution souligne notamment le peu de connaissances des scientifiques sur la question des droits d'auteur et de copyright. Il s'agit en fin de compte de faire en sorte que les chercheurs soient informés régulièrement de l'offre et aient envie d'utiliser cet outil. Les fonctionnalités doivent donc être d'un usage facile et rapide pour ne pas décourager les déposants.

mind researchers again and again about ZORA and OA using all communication channels possible. High potential is expected from systematically sending notes to authors when an accepted manuscript could be shown freely but has not been provided. This procedure anchors concepts of copyright and OA in a practical manner linked to real publications. This seems to be key: practical

measures to anchor OA with researchers.

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