
Oxford Research Archive (ORA) – a preliminary peek into the archive

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OVER the past few years HE libraries in the UK and across the world have become actively and enthusiastically engaged in the creation of what are commonly (and rather unattractively) called institutional repositories (IRs). Such repositories may support several purposes – a preservation archive of research products, open access provision of scholarly materials, or a managed collection of digital assets. In short, they provide an easy means for academics to store and disseminate their own research and to find and obtain the research materials of others.

Such repositories are becoming commonplace within HE institutions. Their development in the UK is supported by key national bodies. The House of Commons Science & Technology Select Committee 10th Report (2004), “*Scientific Publications: Free for all?*”¹ states that “repositories have the potential to yield benefits for the institutions that house them by making their research more visible¹” and goes on to recommend that means should be put in place to enable institutions to build and maintain institutional repositories. Following publication of the RCUK policy² on access to research, some of the UK Research Councils now mandate that research publications produced as a result of their funding be made freely available using a medium such as ORA or another open access³ vehicle. UK Universities with IRs include Imperial College, Cambridge, LSE, Edinburgh... and Oxford⁴. It is important to note at this point that the new Oxford repository is in its infancy: we are currently in a period of testing and development in readiness for a major launch at a later date.

In Oxford there are several current repository activities associated with the organisation and preservation of digital material. All this activity will be coordinated through the Oxford Digital Repositories Group⁵ which will ensure that the repositories are linked and that there is seamless interoperability. The Oxford Research Archive is one of these repositories and is being managed by OULS. The development of such a service is firmly supported by the ELISO report⁶ which not only recommended added investment in the purchase of electronic resources but also stated that “a *university-wide repository should be established for all material generated by authors in Oxford as a way of archiving academic output, rather than as an alternative publishing capability.*” In June 2005 the Digital Archiving Group (a University-wide working group) similarly recommended that an exemplar institutional repository, such as ORA, be established as soon as resources permit. OULS has responded positively to both these recommendations with the full and enthusiastic support of the Curators of University Libraries. The establishment of the ORA service and the increased investment made in the acquisition of electronic content have both been identified by OULS as key components in our strategic vision. ORA, which is based on open source software, builds on the successful and externally (JISC⁷) funded SHERPA project.

ORA will contain research materials (or output), i.e.

any digital materials produced as a result of research. Ultimately this will include all types of research materials such as articles, conference papers, working papers, datasets, book chapters and images. Whilst the service is being developed it will focus on ePrints (digital copies of journal articles, both pre- and post-prints) and eTheses (research theses only); however, other items may be added during this period. The ORA implementation will ‘create, manage, implement and rollout an institutional repository (IR) production service, known as Oxford Research Archive (ORA), across the collegiate University. ORA, in this first phase, will include a managed collection of Oxford output which will comprise ePrints and electronic theses, including the content acquired during the SHERPA project⁸.’

The aims of this first phase of the implementation are:

to implement a sustainable mainstream service for the University of Oxford which provides access (open access wherever possible) and long-term digital preservation for ePrints and eTheses produced by members of the University of Oxford⁹, in consultation and co-operation with stakeholders across the University. The service will provide the administration and management within the ICT repository framework for any existing repositories at the University.

to provide the systems (technical and administrative) and support cultural change for the ingest, storage, access and management of such digital objects. The resulting systems will be interoperable with other OULS and Oxford systems (wherever possible and relevant), comply with international standards and will be in line with relevant national and international developments.

This first phase of implementation lasts two years, August 2006 – July 2008.

The terms to note are ‘*sustainable*’ and ‘*service*’. ORA is not a ‘here today, gone tomorrow’ project. By late summer 2008 it will be a full mainstream OULS service, and as a service it will be there to serve its users’ needs. Neither is it something which is being imposed upon academic staff as a *fait accompli*. During 2007 the ORA team will be working with academics as well as staff from other departments such as Research Services and the Graduate Studies Office to find out what is required and how best to plan the development of ORA.

The development of this service is being guided by two groups. The ORA Steering Group places the work in the academic context and provides strategic direction for the implementation. This group is chaired by Dr Ken Fleming, Head of the Medical Sciences Division, and comprises heads or senior academic staff of other divisions, the Acting Director of the Research Services Office, the Director of Oxford eResearch Centre, OUCS and ASUC. The Steering Group reports to the Oxford Digital Repositories Group which will be chaired by the P.V.C. (Research). The remit of the ORA Service Development

Group, which reports to the Steering Group, is to develop policy that will enable a successful service to operate. Full details and the terms of reference of these two groups can be found at http://www.ouls.ox.ac.uk/ora/ora_implementation

Benefits

The next obvious question is “Why is Oxford University Library Services expending so much effort providing this new service?”

Firstly, there are many benefits to users, users being both Oxford researchers (as depositors) and end users (who may be internal, including those same depositors, or external to Oxford University).

For depositors the benefits include:

Preservation: ORA provides the means to preserve digital materials for the long term. Such a service is not guaranteed by use of departmental/personal websites nor generally by publishers.

Visibility: visibility of research is increased by means of compliance with international indexing standards, inclusion in global registries and directories and open access (in compliance with copyright permissions). High-quality records mean that items will be easily found by Google and other search engines. The records comply with an international standard which enable them to be ‘harvested’ by other services, thereby increasing visibility.

Access: Availability of the full text (or equivalent) is simplified by barrier-free access (ie no payment or passwords). ORA will contain the full text (or equivalent) of as many items as possible. Of these full-text items, as many as permitted will be made available on open access. A large percentage of publishers permit authors to include the full text of items in repositories such as ORA. Grey literature (see below) should be straightforward to include.

Citations, impact and use: Increased visibility and easier access should result in increased impact, use and citations of the work

Meeting the requirements of funding agencies: a number of major funders now require that output produced as a result of funded research be made freely available and deposited in a repository such as ORA. Examples include members of the RCUK such as the BBSRC, ESRC, NERC and PPARC. The EU is currently discussing this issue (see European Research Council Scientific Council statement¹⁰).

Grey literature: grey literature (ie works which are not formally published) can be notoriously difficult to a) find and b) obtain. Examples include conference papers, reports, discussion papers and theses. ORA is a means of making such works easy to find and access. ORA will also be the means whereby Oxford University takes advantage of the new UK Thesis Service from the British Library

Book chapters: Individual chapters or sections of books can be difficult to find. ORA is a means of making sure that chapters/sections do not remain ‘buried’ within the book, but become visible to the world (copyright permitting). Even if the full text cannot be made available, the

record will increase visibility.

Linking related work: ORA provides the means to link related items. Such related research works can be included in ORA. These might be extensive diagrams and graphs which were not included in the journal version, datasets which formed part of the original research (including links to grid datasets – see below), a working paper or conference paper which was later published as a journal article or an original colour version which was published in black & white

Complex items: items which comprise many different files (say a text file, a dataset, plus some images) can be included and held together as a single ‘object’

Persistent links: the links/URLs to items in ORA will stay permanently live to avoid the problems of broken or dead links. Use of departmental or personal websites does not guarantee such availability. It means, for example, that if the author leaves the University, links to the work will remain in perpetuity. These links can be used when referring to the work in citations or other references.

Grid datasets: ORA will include records and links for datasets held in OxGrid. Authors might wish to provide links from their documents to OxGrid datasets.

Records meet international standards: specialist library expertise ensures that the records for each item (the metadata) meet international standards. Use of an international protocol means that the records in ORA can be harvested and included in other services such as registries and directories. This means that ORA records can be shared with other systems both within and outside Oxford.

Speed: ORA is a quick and efficient means to make research available online

Integrated approach: ORA staff are working with key university departments such as the Graduate Studies Office, Research Services and the Press Office

Interoperability: the potential to work seamlessly with other systems both internal to Oxford (eg Library catalogue, WebLearn and departmental research databases) and externally

Single location: research materials are available all in one place rather than distributed across many locations (such as multiple publishers).

As an end-user the benefits will be:

Easy search: across research materials of the entire collegiate University

Easy access: to the author’s own (and their colleagues’) research for their students

Contacts: Increased possibility of finding others working in similar or related fields across the University

Related items: research can be linked to items by other authors whose research materials are included in ORA

Society: benefits society by making publicly funded and other research accessible

Secondly, electronic research materials form large digital collections which need managing like any other collections in order to enable them to be preserved and used

for multiple purposes. Some departments/faculties are already taking steps to manage their research materials. One example is that of the Medical Services Division (MSD) which is developing a research database. During 2007 we shall be working together with the MSD Webmaster to make intelligent links between the references to publications on MSD personal pages which are automatically updated from ORA and, where possible, which link to the full text. This method will tap the benefits of ORA (such as digital preservation), at the same time working with the local situation in the MSD. There are plenty of further opportunities to enhance these links which will be explored in time. ORA is not aimed at selected disciplines: arts and humanities can benefit as much as sciences and social sciences.

Depositing your research papers

The two most common questions asked by would-be depositors are “How much time is it going to take?” and “What about copyright?”

Time

Deposit will be a quick and easy process. ORA staff are aware of the pressures on academics and are finding ways of balancing the need for rich information about each item (so that it can be easily found and is well described) with ease of deposit. Work with early adopters will enable us to ensure that the deposit process is acceptable to the academic community. ORA staff will provide comprehensive support, particularly during this early period of implementation. We shall also publicise the benefits of ORA, so that researchers know that the time it takes to deposit is time well spent. After a short period, the benefits of increased visibility should be reasonably obvious. Deposit may be directly from the author or they may hand over the process to another individual such as a departmental administrator or other representative.

Copyright

If the author or the University holds the copyright of the item then deposit is very straightforward. It is worth knowing that, in the case of journal articles, most publishers permit deposit in some form in repositories such as ORA. There is guidance on copyright for ORA on the ORA website and staff are on hand to help. There is also a useful website, SHERPA/Romeo at <http://www.sherpa.ac.uk/romeo.php>, which provides summaries of many journal publishers’ policies. The ORA Steering Group will be discussing the copyright advice provided for depositors at its next meeting in May 2007.

Theses

Discussions are underway with all departments involved with Oxford research degrees. The ORA Steering Group has recommended that doctoral students should in future be required to deposit¹¹ an electronic copy of their thesis in ORA in addition to the print copy held in the Bodleian. This recommendation has the support of the P.V.C. (Education) and is being considered by the appropriate committees. ORA will also provide the link with the new UK Thesis Service run by the British Library.

Timeliness of self-archiving

Whilst we are expecting that authors will want to include their complete backlist of publications in ORA, we would also like to encourage authors to adopt the practice of submitting items as soon as they are completed as part of the normal dissemination of their research. This way, authors will immediately reap the benefits of ORA, particularly with regard to visibility. It will also help fulfill the requirements of those research councils which require early deposit. Additionally authors might wish to add a record of forthcoming articles to ORA, thus publicising their research at the earliest opportunity and obviating possible delays between acceptance and publication.

Creating ORA opens up many possibilities. We are initially working to build sound foundations so that we can extend and refine with confidence in future. This is the reason for there not being many “bells and whistles” at the start. When the basics are in place, we can start investigating more complex features such as deeper integration with other Oxford systems and other features to make deposit even easier. However, the benefits of deposit are there from the start: items which are deposited will be preserved and visible as outlined above whether the extended features are there or not.

So far, responses to the new service have been extremely positive. In fact, many departments and individuals have either begun or have been thinking about making their research materials available online in some way. ORA offers the opportunity to use a supported service which complies with international standards and includes additional features.

ORA itself can be found at <http://ora.ouls.ox.ac.uk/>. For more details about ORA please see the descriptive web pages about ORA at www.ouls.ox.ac.uk/ora or contact the Repository Manager, Sally Rumsey at sally.rumsey@ouls.ox.ac.uk The general ORA email address is ORA@ouls.ox.ac.uk

¹ <http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39902.htm> Para 115

² Research Councils UK. See <http://www.rcuk.ac.uk/research/outputs/access/default.htm>

³ Open access means that items can be freely accessed, distributed, copied and used by anyone with internet access and access is barrier free (ie no charges or authentication required). Copyright still applies.

⁴ The national SHERPA project in which Oxford was a partner ran until Oct 2005 and at Oxford resulted in a small repository, Oxford ePrints. ORA builds on the work of that project and will contain the content previously held in Oxford ePrints. Further details of SHERPA can be found at <http://www.sherpa.ac.uk/index.html>

⁵ The Oxford Digital Repositories Steering Group web pages are at <http://www.ict.ox.ac.uk/repositories/>

⁶ <http://www.admin.ox.ac.uk/lib/oxonly/eliso/eliso.shtml>

⁷ Joint Information Systems Committee. See www.JISC.ac.uk

⁸ See ORA aims and objectives http://www.ouls.ox.ac.uk/_data/assets/pdf_file/13041/Aims_and_Objectives.pdf

⁹ Members of the University are to be defined in the ORA Submission policy but will include current academic staff (or other member of staff acting as their representative) and research students

¹⁰ <http://erc.europa.eu/pdf/open-access.pdf>

¹¹ There may be some exceptions such as works of art