Reimagining the role of Institutional Repository in Open Scholarship

OpenAIRE and COAR Joint Conference
Open Access: Movement to Reality
Putting the Pieces Together
Acropolis Museum, Athens, Greece
May 21-13, 2014

Leslie Chan
Bioline International
Centre for Critical Development Studies
University of Toronto Scarborough
OpenAIRE
Open Access Infrastructure for Research in Europe

COAR
Confederation of Open Access Repositories

Promoting greater visibility and application of research through global networks of Open Access repositories
“Visibility” and “Application” of Research

• Roles of Institutional Repositories – then and now
• Broader context
• Why we need to rethink “Open” and “Knowledge”
• “Putting the pieces together”
• Development of scholarly APIs
Why Institutional Repository?

• Provide Open Access to published research (Green OA)
• Showcase an institution’s research outputs and other scholarly and teaching resources
• An “institutional commitment” to the stewardship of research outputs (Clifford Lynch 2003)
• A publishing platform and other value-added services for enhancing scholarly communication
• A research management system
Back in 2004

Using our IR to

• Support journal publishing by faculty
• Novel forms of publications in the humanities and social sciences
• Archive out-of-print books
• Provide access to teaching and learning materials
• Supporting international publishing and knowledge circulation – community building

Supporting and Enhancing Scholarship in the Digital Age: The Role of Open-Access Institutional Repositories

Leslie Chan

Abstract: Scholarly communication and publishing are increasingly taking place in the electronic environment. With a growing proportion of the scholarly record now existing only in digital format, serious and pressing issues regarding access and preservation are being raised that are central to future scholarship. At the same time, the desire of scholars to maximize readership of their research and to take control of the scholarly communication process back from the restrictive domain of commercial publishing has prompted the proliferation of access options and experimental models of publishing. This paper examines the emerging trend of university-based institutional repositories (IRs) designed to capture the scholarly output of an institution and to maximize the research impact of this output. The relationship of this trend to the open access movement is discussed and challenges and opportunities for using IRs to promote new modes of scholarship are provided.


http://www.utsc.utoronto.ca/~womenshealth/womenshealth/Home.html
Russian Heritage: Land, People and Culture

by Professor Wayne Dowler

Programming & Design

by William Barek

CITD - Centre for Instructional Technology Development
Bladen Library, University of Toronto at Scarborough

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https://tspace.library.utoronto.ca/handle/1807/1049
Please use this identifier to cite or link to this item: http://hdl.handle.net/1807/246

From Gutenberg's Galaxy to Cyberspace: the Transforming Power of Electronic Hypertext
Monumental Past

by Cornelius J. Holtsford

Online Version
CD-ROM Version
About the Author
CITDPress Home

Several megaliths were destroyed to build the Ulanendenkmal in Demmin (1923/24)
The districts of Mecklenburg-Vorpommern and their megaliths
(in the borders of 1989; my study area in the stronger green excludes those areas now outside Mecklenburg-Vorpommern)

![Map showing the locations of megaliths in Kreis Anklam](image)

### The receptions of megaliths in Kreis Anklam

<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>Later prehistoric receptions</th>
<th>Historic and modern receptions</th>
<th>References, sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>733</td>
<td>Borntin 5403220/5957020</td>
<td>protected since 1962</td>
<td></td>
<td>Ortsakte</td>
</tr>
<tr>
<td>734</td>
<td>Brenkenhof</td>
<td>cup-marked stone in municipality</td>
<td></td>
<td>in Ortsakte not recorded</td>
</tr>
<tr>
<td>735</td>
<td>Daugzin 5414300/5975180</td>
<td>250 N: &quot;Gerichtsberg&quot;; protected since 1962</td>
<td></td>
<td>Ortsakte</td>
</tr>
<tr>
<td>736</td>
<td>Drewelow</td>
<td></td>
<td></td>
<td>Ortsakte unsatisfactory</td>
</tr>
<tr>
<td>737</td>
<td>Groß Polzin 5408940/5974710</td>
<td>near parish border; badly destroyed; protected since 1968; in 1974 ploughed away; visited (31.7.95)</td>
<td></td>
<td>Ortsakte: not a megalith(?); Sprockhoff 561</td>
</tr>
<tr>
<td>744</td>
<td>Janow 4591480/5960800</td>
<td>in neighbourhood; 20m N: early Slavic pottery; cup-marked stone in</td>
<td>protected</td>
<td>Ortsakte; Sprockhoff 571</td>
</tr>
<tr>
<td>14</td>
<td>Kreis Hagenow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Kreis Pasewalk</td>
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T-Space at The University of Toronto Libraries >
University of Toronto at Scarborough >

Recent Submissions

Taxonomical notes on selected freshwater fish species described from northern and southern Vietnam
- Cyprinidae, Balitoridae, Atherinidae, Osphronemidae; Perciformes: Sciaenidae, Belonidae, Scatingidae, Serranidae, Pomacanthidae, Chromisidae, Lutjanidae, Lethrinidae, Lutjanidae, NASERMED.COM

Bioline International

Acta Botanica Sinica
Actinomycetes
African Crop Science Journal
African Health Sciences
African Journal of Biomedical Research
African Journal of Food, Agriculture, Nutrition and Development
African Journal of Food, Agriculture, Nutrition and Development
African Journal of Health
African Journal of Health
African Journal of Reproductive Health
African Journal of Traditional Medicine
African Journal of Traditional Medicine
Agricultura Técnica
Annals of African Medicine
Archivos Latinoamericanos de Endocrinología y Nutrición
Australasian Biotechnologist
Bangladesh Journal of Natural Sciences
Biofilm Journal
Biokemi
Biopolicy International
Biopolicy Journal
Biosafety Journal
Biotecnologia Aplicada
Brazilian Journal of Oral Pathology
Brazilian Journal of Oral Pathology
Chilean Journal of Agriculture
Ciência Florestal
East African Journal of Agriculture and Forestry
East Central African Journal of Science
Electronic Journal of Biotechnology
Entomotropica
European Journal of General Medicine
Health Policy and Development
Ichthyological Bulletin
Indian Journal of Cancer
Indian Journal of Critical Care Medicine
Indian Journal of Dermatology, Venereology and Leprology
Indian Journal of Human Genetics
Indian Journal of Medical Microbiology
Indian Journal of Medical Sciences
Indian Journal of Occupational and Environmental Medicine
Indian Journal of Pharmacology
Indian Journal of Plastic Surgery
Indian Journal of Surgery
International Journal of Environment
International Journal of Environment
International Journal of Environmental Health
International Journal of Environmental Health
Iranian Journal of Pediatrics
Iranian Journal of Pharmacology and Therapeutics
Iranian Journal of Reproductive Medicine
Journal of Applied Sciences and Environment
Journal of Applied Sciences and Environment
Journal of Biotechnology and Biodiversity
Journal of Cancer Research and Therapy
Journal of Community Medicine & Public Health
Journal of Culture Collections
Journal of Indian Association of Preventive Medicine
Journal of Medicine and Biomedical Research
Journal of Minimal Access Surgery
Journal of Postgraduate Medicine

Malawi Medical Journal
Malaysian Journal of Medical Sciences
Medical Journal of The Islamic Republic of Iran
Medicina
Memórias do Instituto Oswaldo Cruz
Middle East Fertility Society Journal
Neurology India
Nigerian Food Journal
Nigerian Journal of Physiological Sciences
Nigerian Journal of Surgical Research
Oceanologica et Limnologica di Indonesia
Reports from
Revista Ciències UDO Agrícola
Revista Colombia Médica
Rwanda Medical Journal
Smithiana Bulletin
Smithiana Special Publication
Special Publication
Systematic and Applied Acarology
Tanzania Health Research Bulletin
Tanzania Journal of Health Research
The Journal of Food Technology in Africa
The Journal of Health, Population and Nutrition
Tropical Journal of Pharmaceutical Research
Tsinghua Science and Technology
VITAEP Academia Biomédica Digital
Zoological Research
Zootecnia Tropical

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The World of Scientific Output According to Thomson’s ISI Science Citation Index

Data from 2002
http://www.worldmapper.org/display.php?selected=205
Closed Access

Open Access
“Big Deals”

Library

Budget
Will Open Access change the current power structure of global scientific production and dissemination?
From “Big” science to Networked science

Knowledge for local problem solving
What are we doing with our IR in 2014?
Map of repositories worldwide, December 2012

FIG. 1. Overall growth of repositories in OpenDOAR, December 2005 to December 2012.
Pinfield et al. (2014)
Of the 2,129 repositories in OpenDOAR with “size” data recorded, only 74 of them have more than 100,000 items, and 570, more than 10,000 items. Although the mean average of items in repositories is 66,526, the median number is only 3,093.

Pinfield et al. (2014)
Pinfield et al. (2014)
Open Development

FEATURED

VIDEO

How an Editor Uses World Bank Open Data

Take a look at how an editor who works at China's largest web portal uses the data for his work and also introduces it to millions of internet users in China.

Blog: How I Use World Bank Data: Researching Access to Electricity

ABOUT

Open development is about making information and data freely available and searchable, encouraging feedback, information-sharing, and accountability. We've opened our data, knowledge and research to foster innovation and increase transparency in development, aid flows, and finances. Learn more here.

OPEN SOLUTIONS

World Bank Policy on Access to Information

Open Knowledge Repository

Doing Business at a Glance iPhone App

World Development Report 2013 iPad App

World Bank Group Finances Mobile App

http://www.worldbank.org/open/
Why the lack of content in IRs?

• Low awareness among researchers?
• Lack of incentives?
• Confusion over rights?
• Disciplinary differences?
• Institutional commitment?
• Other services outside of institutions?
• OA journal publishing?
• Open “everything”? (OER, Open data, open government, open science...)
Open Science

“science carried out and communicated in a manner which allows others to contribute, collaborate and add to the research effort, with all kinds of data, results and protocols made freely available at different stages of the research process”

The RIN / NESTA report Open to All? Case Studies of Openness in Research (2010)
The RIN / NESTA report Open to All? Case Studies of Openness in Research (2010)
The “Journal” is the Network

Generative layer

Overlay services

Content layer

Authority
Personalization
Trust
Findability
Immediacy

Open Source
Open Access

Research
Development
Capital

Coherent and structured

Fragmented and scattered
“Putting the pieces together”
“Open Access is global — but implementation is local”

OpenAIRE

“Creating participatory infrastructures by involving institutional, national and disciplinary actors”

How to enable collective action?

Is there a collective vision?

What are the key enablers and barriers?
“Data is an essential commodity for life science research. Ten years ago, finding a connection between a gene and a characteristic such as drought tolerance or disease susceptibility could take years. Now it takes minutes.”

“So there are big data benefits in preventing diseases, cutting out unnecessary tests, or testing how effective new drugs and treatments actually are. Indeed, one study put the value of big data in US healthcare at over $300 billion a year.”

Neelie Kroes
VP of the European Commission

Exploitative publishing regimes are symptomatic of larger problems in the distribution of wealth and power. The concentration of wealth that warps so much of our political and economic life will inevitably warp the Open Movement toward unintended and unwanted outcomes.

Eric Kansa (2014) It’s the Neoliberalism, Stupid: Why instrumentalist arguments for Open Access, Open Data, and Open Science are not enough.
http://blogs.lse.ac.uk/impactofsocialsciences/2014/01/27/its-the-neoliberalism-stupid-kansa/
Development of Scholarly APIs

• Journal is embedded in a socio-political system of governance

• How to design knowledge governance system in an open networked environment?
Political Economy of Knowledge Circulation

• Beware of the “filter bubble”
• Are we substituting one forms of circulation with another that is equally, and even more restrictive, because it is largely invisible?
• Choice of tools and technology increasingly crucial, though surprisingly un-contested
• Digital underclass – those who have IDs and digital presence and and those without (e.g. DOI, ORCID, ImpactStory)
<table>
<thead>
<tr>
<th>Paradigm</th>
<th>Assumption</th>
<th>Actors</th>
<th>Goals</th>
<th>Impact</th>
<th>Who benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Society</td>
<td>Knowledge as public goods</td>
<td>Scholars and citizens</td>
<td>Inclusive and participatory society</td>
<td>Democratization of knowledge circulation</td>
<td>All Citizens</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy makers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Economy</td>
<td>Knowledge as commodity</td>
<td>Private sector</td>
<td>Wealth creation</td>
<td>Growing inequality</td>
<td>The few</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy makers</td>
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</tbody>
</table>
Theory of change elements

**ISSUE, CONTEXT and DRIVERS**
- Socio-economic, political, Technological factors
- Existing policies, practices, beliefs
- Actors, networks in research, policy and practice, power
- Capacity of target groups to respond
- Receptiveness of context
- Organizations, resources, systems, skills

**LONG-TERM, LASTING CHANGES**
Sphere of indirect influence – policy shapers, knowledge networks, planners, practitioners, stakeholder groups

**MEDIUM TERM CHANGES**
Sphere of indirect influence – policy shapers, knowledge networks, planners, practitioners, stakeholder groups

**SHORT-TERM CHANGES**
Sphere of direct influence – partners, collaborators, stakeholders immediate programme target groups

**Impact**
- Scaling up/out of changes in knowledge, attitude, skills, practices, policies through actor networks etc.
- Changes in e.g. practices, policies, allocations
- Changes in e.g. knowledge, attitudes, skills, relationships

**Outputs = products? Comms? Networks?**

**Take up and involvement by main actor / stakeholder groups**

**What needs to be happening to support this change?**

**For whom? Defined by whom? Significant for whom?**

Adapted from Morton, 2012, Montague, 2011
Isabel Vogel, CDI September 2012

**What are the assumptions about the drivers of these changes, and the processes involved?**
Knowledge as Public Goods

Sustainability as a set of institutional structures and processes that build and protect the knowledge commons (after Sumner 2005, Mook and Sumner 2010)
“How do fallible humans come together, create communities and organizations, and make decisions and rules in order to sustain a resource or achieve a desired outcome?” (Hess 2005: 3)

“So while IRs may have an eventual impact on the economics of scholarly publishing, or the "affordability" problem, their primary and immediate role is in facilitating open access to traditional scholarship, as well as **advancing, supporting, and legitimizing the broader spectrum of scholarly communications that is emerging in the electronic environment.** By making available research generated in poor countries in addition to knowledge created in well-endowed institutions, IRs could play a role in bridging the global knowledge gap. Research institutions and universities have the primary mission of creating, sharing, and disseminating knowledge, which are public goods. Open access through institutional repositories is a low-cost and low-barrier strategy for achieving this mission.”