

Integrating Repositories into a New Model of Scholarly Communication

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arrow.edu.au

The ARROW Consortium comprises Monash University [lead institution], National Library of Australia, The University of New South Wales and Swinburne University of Technology.



arrow

australian research
repositories online
to the world



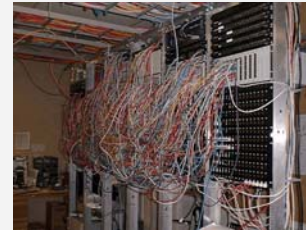
MONASH
University



UNSW



Outline



Scholarly Communication



Scholarly Communication

- The world hasn't always been like this
- Scholarly Journals are a means not an end
- Innovation is possible in (at least) two areas
 - Unit of communication
 - Process of communication
 - Business models (not covered in this talk)
- Unit of communication
 - Treloar, A (1999), *Hypermedia Online Publishing – Transformation of the Scholarly Journal*, PhD Thesis, Monash University
 - <http://andrew.treloar.net/research/theses/phd/>
 - New units – see Pathways and DART
- Process of communication
 - Pathways model

Pathways...



Pathways Model

- Van de Sompel, Herbert, Sandy Payette, John Erickson, Carl Lagoze, Simeon Warner . (2004), “Rethinking Scholarly Communication: Building the System that Scholars Deserve”, *DLib Magazine*, V10, N4
 - <http://www.dlib.org/dlib/september04/vandesompel/09vandesompel.html>
- <http://www.infosci.cornell.edu/pathways/>
- Reconceptualises units of communication and processes of communication
- Proposes a non-vertically-integrated value chain perspective on scholarly communication

Pathways Functions

- Registration
 - allows claims of precedence for a scholarly finding.
- Certification
 - establishes the validity of a registered scholarly claim.
- Awareness
 - allows actors in the scholarly system to remain aware of new claims and findings.
- Archiving
 - preserves the scholarly record over time.
- Rewarding
 - rewards actors for their performance in the communication system based on metrics derived from that system.

Repositories



Role of Repositories

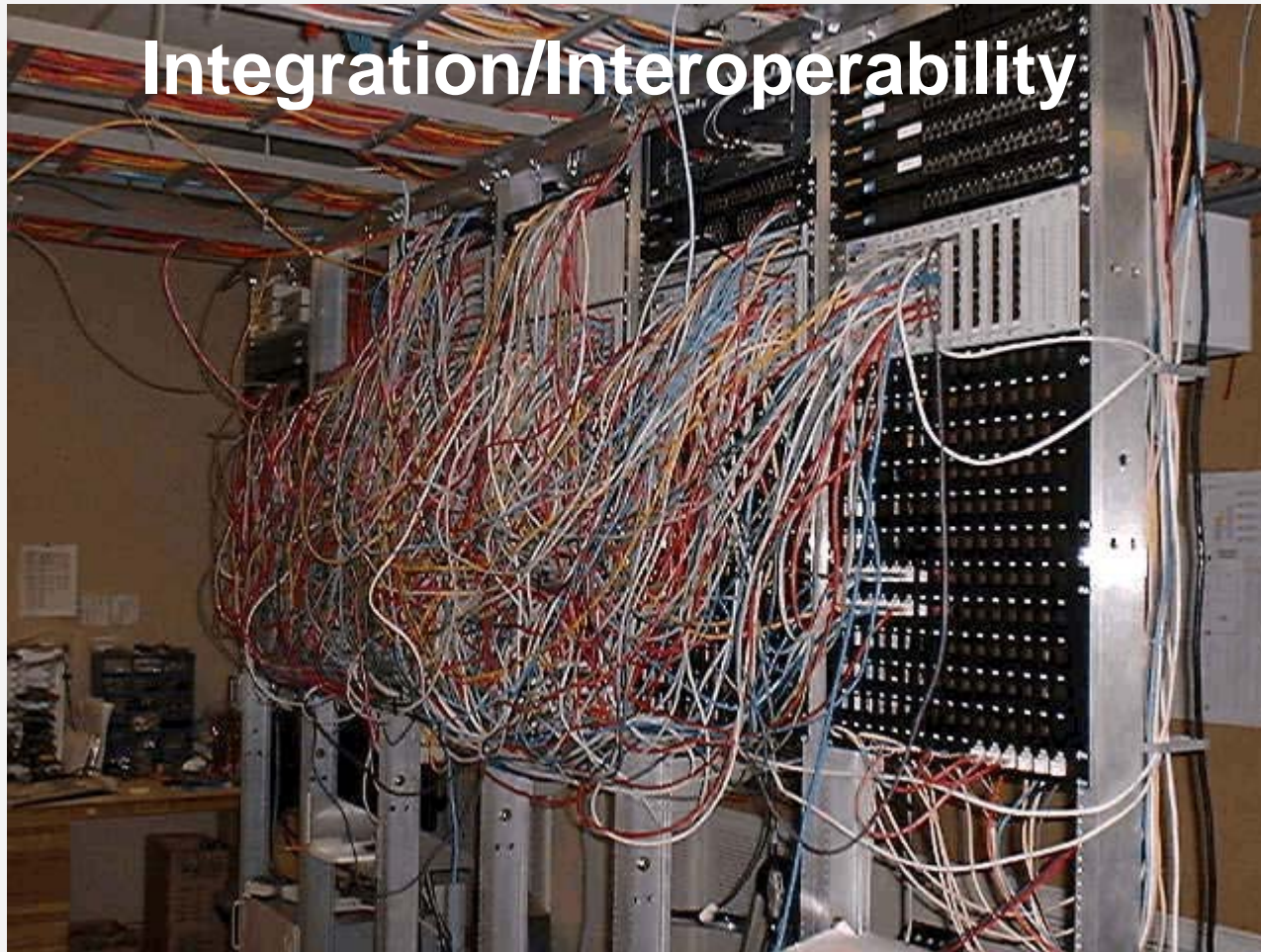
- Registration
 - Time-stamped deposit.
- Certification
 - Supports range of peer-review processes as well as open scrutiny.
- Awareness
 - OAI-PMH, RSS, SDI, Google.
- Archiving
 - Preservation, but not as good as paper (or clay!).
- Rewarding
 - Repositories likely to be a large part of RQF and RAE response.

ARROW

- Largely working with post-journal publication materials at present
- Focussed on Awareness and (increasingly) Rewarding
- ARROW response to RQF
 - All “publications” entered into repository
 - Each “publication” has specific metadata fields
 - RFCD code(s)
 - RQF-RFCD code
 - RQF tag (yes, no)
 - Reports in date range generated for each panel
 - Citation and persistent identifier retrieved and exported to panel members
 - Research office attaches factual statements
 - Associated “document” sent to DEST (or repository)
- See <http://www.caul.edu.au/caul-doc/repositories2005harboe-ree.pdf> for more

DART

- Built around the Pathways model, with two additions to their processes:
 - Research process
 - Annotation
- Research process
 - Support for collection/storage/collaboration around datasets
- Annotation of datasets, digital objects, publications, annotations, annotators
- and with additional communication units
 - Datasets
 - Annotations
- See <http://dart.edu.au/> for more



Integration/Interoperability

- Persistent identifiers for cross-citations
 - Needed to build OpenURLs that don't break
- Repository statistics
 - Interoperable Repository Statistics project
 - <http://irs.eprints.org/>
- NLA RDS
 - <http://search.arrow.edu.au/>
- XACML
 - Common expressions of user and resource attributes

Generic Tools



Generic Tools

- NOTE: These should ideally be implemented as web services
- Name Authorities
 - For looking up canonical lists of author names, subject headings, etc.
- ROMEO/Knowledgebank
 - <http://www.lboro.ac.uk/departments/dils/disresearch/JISC-Advocacy/pages/knowledgebank.html>
- Metadata transforms
 - Such as OCLC's Interoperable Core
 - <http://www.oclc.org/research/publications/archive/2003/godby-dc2003.pdf>

Questions?