



# **Institutional Repositories & Open Access – The Future of Scholarly Communication?**

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# The Situation Today

- Dissatisfaction with the current scholarly communication model
- Even the wealthiest institution cannot purchase access to all the information that all of its researchers require
- Site-licenses and consortia deals have helped, but mainly in the richest countries
- Many commercial publishers charge extra for online access – so causing more pressure on budgets



# Unlocking opportunities

- Opportunities for **expanded access** and **new uses** offered by
  - evolving digital publishing technologies
  - ever-expanding networking
- Better ways to handle increasing volume of research generated
- Technology offers the chance for academia to take back control of scholarly communication



# What are institutional repositories?

## Essential elements

- *Institutionally defined*: Content generated by institutional community
- *Scholarly content*: preprints and working papers, published articles, enduring teaching materials, student theses, data-sets, etc.
- *Cumulative & perpetual*: preserve ongoing access to material
- *Interoperable & open access*: free, online, global



# Why institutional repositories?

- **For the Individual**
  - Provide a central archive of their work
  - Increase the dissemination and impact of their research
  - Acts as a full CV
- **For the Institution**
  - Increases visibility and prestige
  - Acts as an advertisement to funding sources, potential new faculty and students, etc.
- **For Society**
  - Provide access to the world's research
  - Ensures long-term preservation of institutes' academic output



# Aggregated system

Scholarly publishing comprises four functions:

<b>REGISTRATION</b> Establishing intellectual priority	<b>CERTIFICATION</b> Certifying the quality/validity of the research	<b>AWARENESS</b> Assuring accessibility of research	<b>ARCHIVING</b> Preserving research for future use
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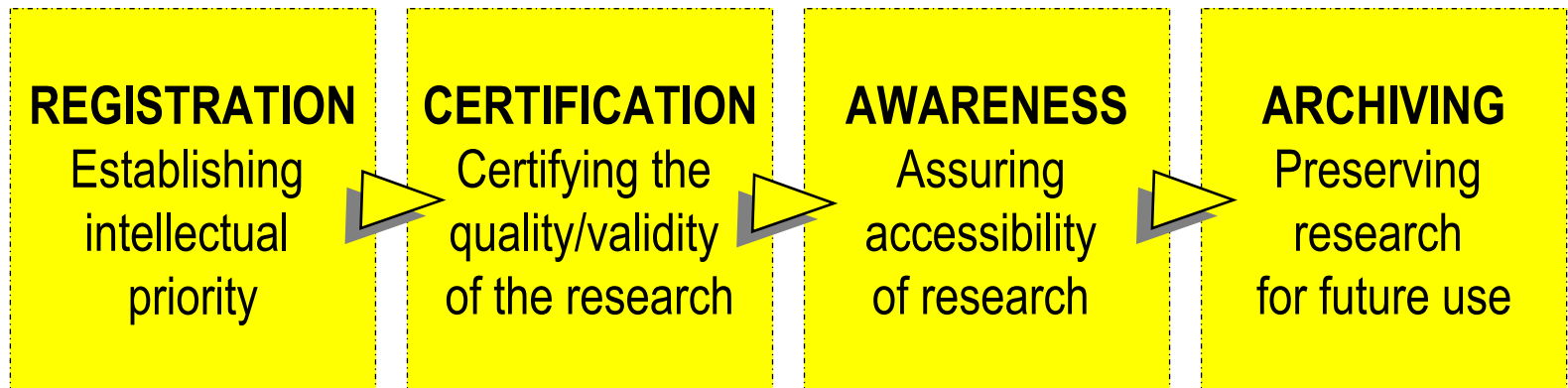
## Current model:

- integrates these functions in journals



# Disaggregated system

Scholarly publishing comprises four functions:



## Disaggregated models:

- Allow functions to be fulfilled independently – by logically discrete, networked service providers
- Reveal that academy contributes most of value



# How institutional repositories?

## REGISTRATION

Establishing  
intellectual  
priority

## CERTIFICATION

Certifying the  
quality/validity  
of the research

## AWARENESS

Assuring  
accessibility  
of research

## ARCHIVING

Preserving  
research  
for future use



- Institutional repositories supply basic step of initial registration
- Accommodate increased volume of research output (No page limits, can accept ‘null results’, large data-sets, etc.)





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- Awareness services enabled by OAI-compliance & interoperability
- Search engines index the metadata harvested from federated repositories (e.g., descriptive metadata, references, certification metadata, usage information)



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- No final answer on archiving
- However, disaggregation helps put librarians—rather than journal publishers—in charge of digital archiving



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- Certification necessary to validate registration
- Repository “certification” essentially imprimatur of sponsoring institution/department (sometimes more, sometimes less)
- Disaggregation allows new mechanisms for certification *in addition to* peer review



# Certification

- Peer review journals sit above institutional repositories to form ‘overlay journals’
- Overlay journals give stamp of quality to the research presented in the repositories
- Existing journals could convert to overlay journals or new journals could be launched
- Overlay journals should be open access



# Open Access

What is it?

Call for *free, unrestricted access* on the public internet to the literature that scholars give to the world *without expectation of payment*.

Why?

Accelerate research, enrich education, share learning among rich & poor nations, enhance return on taxpayer investment in research.

How?

Use existing funds to pay for *dissemination*, not *access*.



# Move to Open Access

- Can you reduce costs by not producing print journal (or using new digital printing technology)?
- Can you use funds from:
  - Academies
  - Libraries
  - Government
  - Independent foundations
  - Authorsto cover online production costs?



# Advantages to Academies of Open Access Journals

- They increase the dissemination of the work of your authors from a few hundred institutes to everybody in the world with web access
- They increase the profile of your Academy and the research being done in your country
- By removing print and postage they reduce costs



# Advantages to Academies of Open Access Journals

- They allow the possibility of revitalising non-English language publishing
- By promoting a new model, they offer a future where all the world's literature is available to all readers





# Theory Into Practice - Institutional Repositories

www.sparceurope.org

- SHERPA – UK
- DARE – The Netherlands
- D-Space – MIT Repository, expanding to Cambridge, UK
- National University of Ireland (NUI), Maynooth
- SPARC Resources –  
(<http://www.arl.org/sparc/core/index.asp?page=m0>)



# Theory Into Practice - Open Access

www.sparceurope.org

SPARC open access journal partners:

- *Algebraic and Geometric Topology*
- *BioMed Central*
- *Documenta Mathematica*
- *Calif. Digital Library eScholarship*
- *Geometry & Topology*
- *Journal of Insect Science*
- *Journal of Machine Learning Research*
- *New Journal of Physics*



# Theory Into Practice - Open Access

[www.sparceurope.org](http://www.sparceurope.org)

- Two new journals from the Public Library of Science
- Indian Academy of Sciences has made their 11 journals available free online



## Next Steps

- Set up institution repositories
- Transform existing journals to online, open access journals
- Support academy-friendly author/publisher agreements
- Deposit material in your local institutional repository
- Join SPARC Europe



## *Scholarly Publishing & Academic Resources Coalition*

- Formed in 2002 following the success of SPARC (launched in 1998 by the US Association of Research Libraries)
- Encourages partnership between libraries, academics, societies and responsible publishers
- Currently focused on STM, but coverage expanding
- Has over 50 members and is growing
- By acting together the members can influence the future of scholarly publishing



# Measures of Success

- SPARC supported projects are financially viable and significantly less expensive
- SPARC supported products are attracting quality authors and editors
- New players have entered the STM marketplace (SPARC partners and others)
- Created an environment where editorial boards are emboldened to take action
- STM journal price increases have moderated
- New models are gaining acceptance



# Create Change!

www.sparceurope.org



**“Although the battle is being fought over subscription prices, what is really at stake...is the scientific process itself.”**

New York Times, Dec. 8, 1998

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