## A Guide to Policy Making Related to Open Access to Scientific Research Outputs

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## Outline

- Background
- Motivation for this Study
- Study Objectives
- Dataset
- Further Analysis
- Questions



## Scholarly Publishing in Numbers

- Scholarly Publishing Enterprise (350 years old)
- 96% of journals available online
- Market size = \$10 billion, highly concentrated
- between 5-10,000 publishers globally
- top 100 publish 67% of all journals
- top 10 publish 45%
- 61 97% of contracts are through consortia
- 2.5 million articles in 2014
- about 11,000 quality-controlled open access journals (not all in English)
- over 700 Open Access Mandates



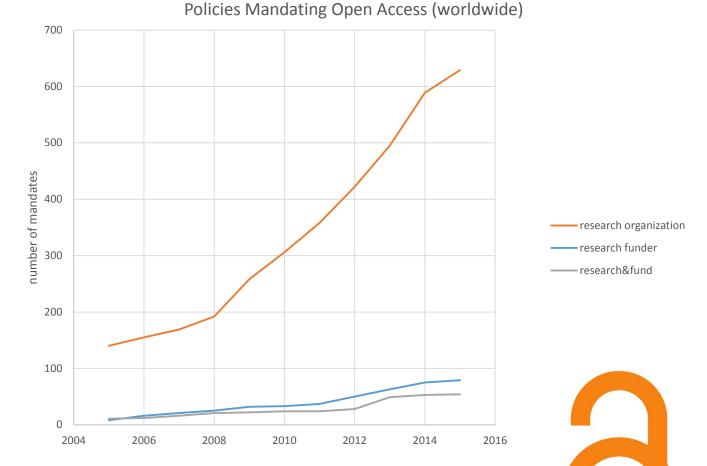
#### **Open Access Movement**

- Serials crisis in the 1990s
- prices rise by 10% annually ... library budgets couldn't keep up
- subscription cancellations implied even higher prices
- "Big Deal" solution
- Budapest Open Access Initiative in 2002 ; Berlin Declaration in 2003
- Green or Gold?? .... Gold or Green??
- or Something else??



#### Motivation

- rising policy interest related to OA issues
- A lot of Unsubstantiated Claims
- Tradition of "Lists", but no comprehensive policyrelevant review



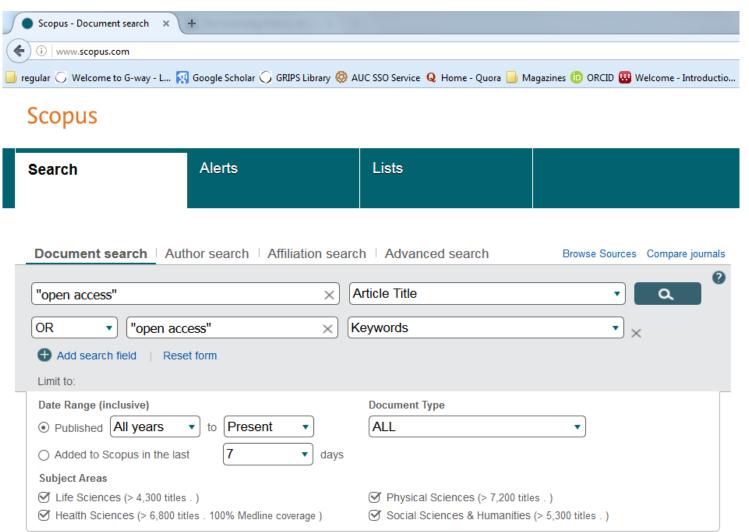
Adapted from ROAR-MAP database

## Study Objectives

- Main Target:
  - A Guide to Policy Makers & OA Advocates
- More Specific:
  - Determine the <u>level of awareness</u> of OA issues
  - Identify <u>key places/people</u> working on the subject
  - Explain the OA research landscape
  - Identify areas where more <u>research is needed</u>



#### Data Collection



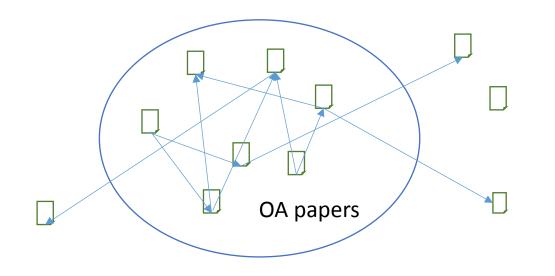
 All published research with the expression "Open Access" in the title or among the keywords (as indexed in Scopus Database)

- 5206 documents retrieved
- over 33,000 if abstract is included



#### How Representative is the Sample?

- Two tests will be necessary:
  - Matching with previous attempts of bibliographies (Bailey, 2005&2010)
  - Characterizing the sample's self-citation behavior





#### Data Cleanup

#### Open Access can mean so many things

- "Open-access upper alimentary endoscopy"
- "Is open access the most efficient way of utilizing railway infrastructure?"
- "Navigating 'open access' community colleges: Matriculation policies...."
- "Protein open-access liquid chromatography/mass spectrometry"

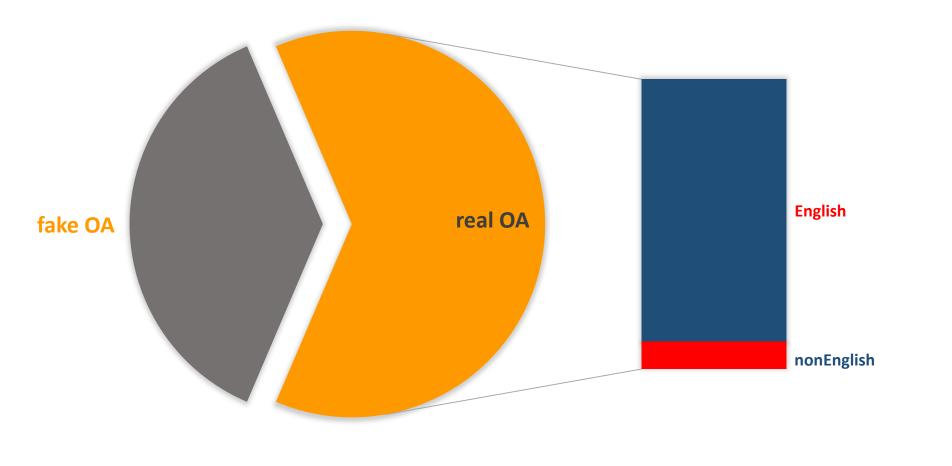
Scrambled records

Manual approach to identify unrelated papers



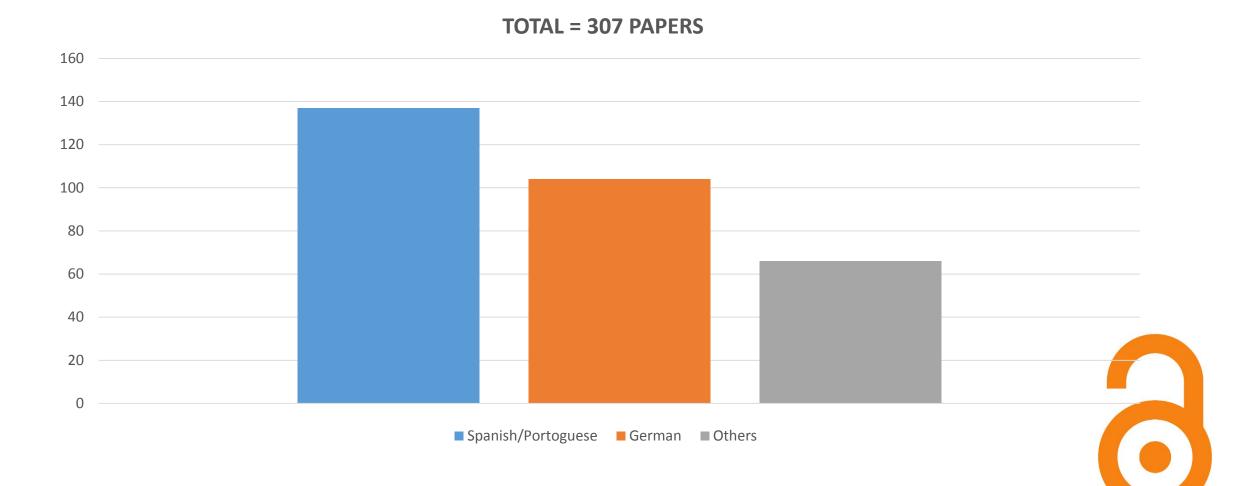
#### Breakdown of Retrieved Records

#### **TOTAL = 5206 RECORDS**

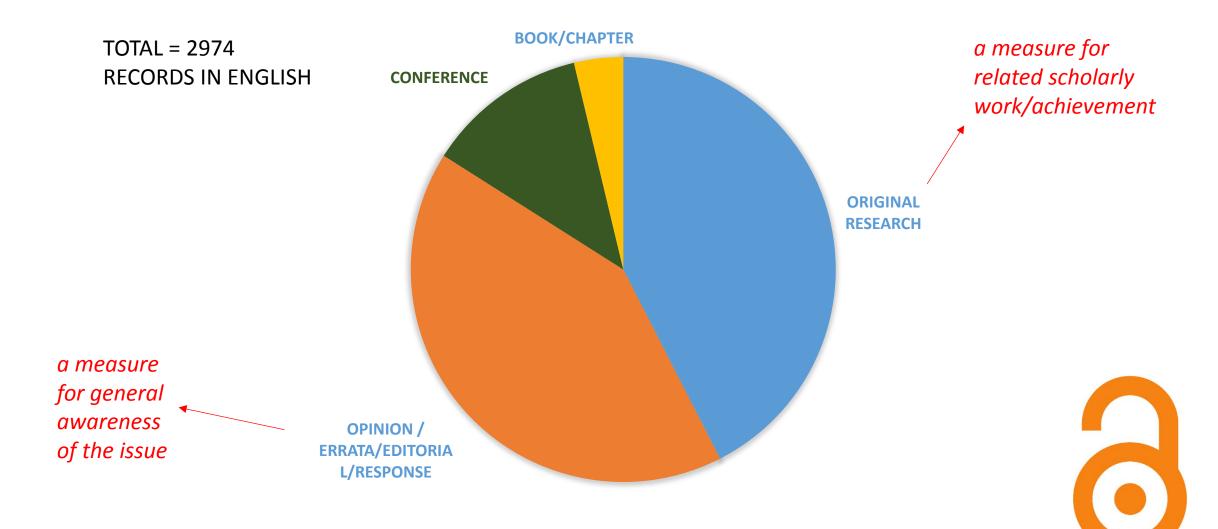


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#### Non-English Records

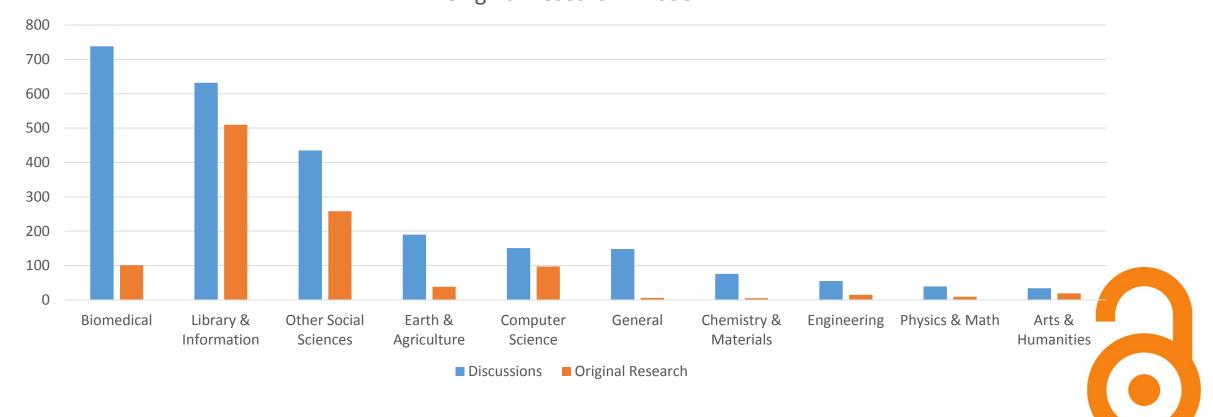


#### Document Types



#### Awareness vs. Research among Disciplines

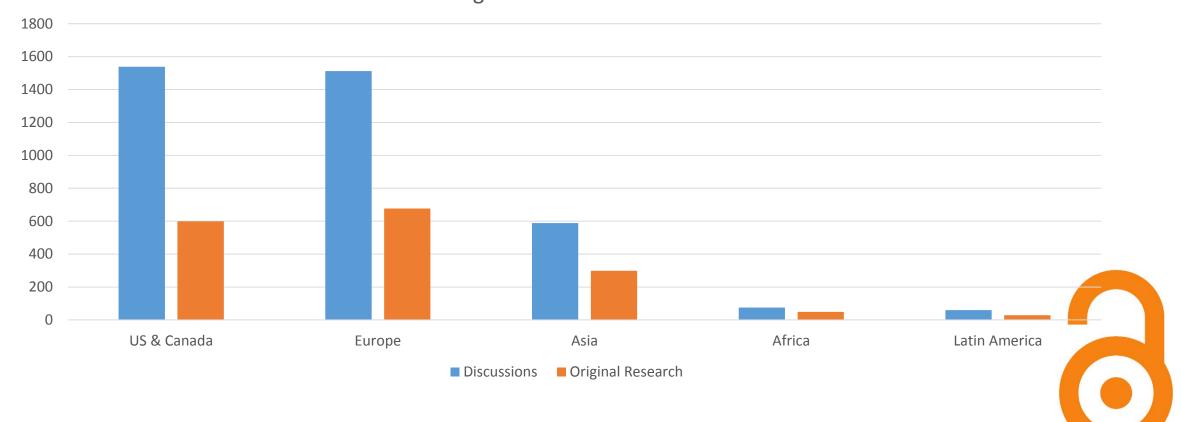
Discussion = 2498 (including research papers) Original Research = 1058



#### **Researcher Affiliation**

No listed Affiliation!! 494 discussion papers 68 original research

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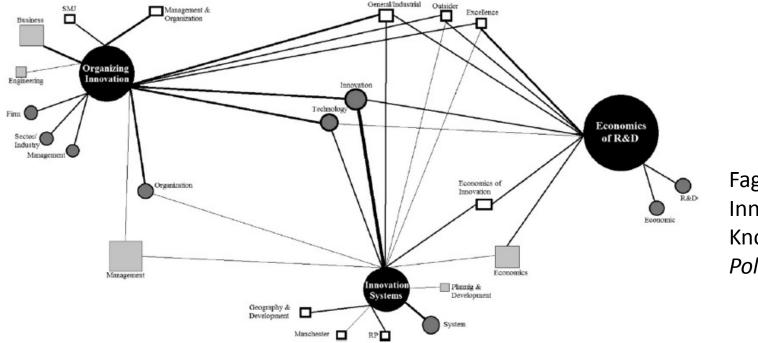


#### Papers with over 100 Citations

Author	Title	Year	Journal	#
	Comparison of PubMed, Scopus, Web of Science, and Google Scholar:			
Falagas et al.	Strengths and weaknesses	2008	FASEB Journal	366
Eysenbach	Citation advantage of open access articles.	2006	PLoS biology	171
	The access/impact problem and the green and gold roads to open			
Harnad et al.	access	2004	Serials Review	133
Kousha &	Google scholar citations and google Web/URL citations: A multi-		Journal of the American Society for Information	
Thelwall	discipline exploratory analysis	2007	Science and Technology	124
Björk et al.	Open Access To The Scientific Journal Literature: Situation 2009	2010	PLoS ONE	122
Craig et al.	Do open access articles have greater citation impact?. A critical review of the literature	2007	Journal of Informetrics	117
Gargouri et	Self-selected or mandated, open access increases citation impact for			
al.	higher quality research	2010	PLoS ONE	105
Laakso et al.	The development of open access journal publishing from 1993 to 2009	2011	PLoS ONE	104

#### Agenda for Future Research

- Identifying Co-Citation relations using a >>>> approach
- Building a concept map using cluster analysis techniques

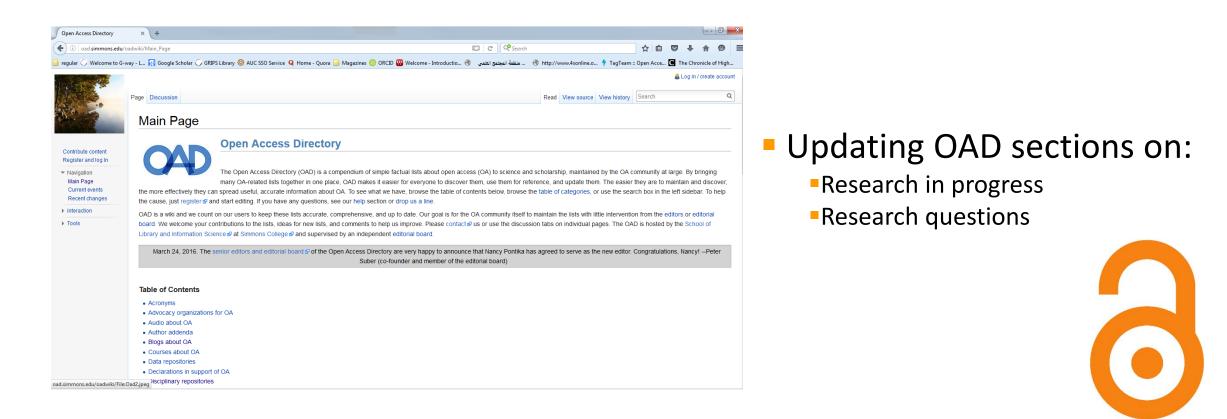


Fagerberg et al. (2012). Innovation: Exploring the Knowledgebase. *Research Policy* 41. pp. 1132-1153



#### Study Contribution

- A better understanding of the OA research landscape
- A guide to policymakers & OA advocates on what we know and what we don't



#### Question to You

What kind of information you think would benefit policy makers other than what I mentioned?



# Thank you

