# Indicators of Open Access for universities

Nicolas Robinson-Garcia, Rodrigo Costas and Thed N. van Leeuwen





ISSI2019



# 17th INTERNATIONAL CONFERENCE ON SCIENTOMETRICS & INFORMETRICS

**ISSI2019** 

September 2-5, 2019 Sapienza University, ROME | Italy

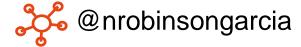
# Indicators of Open Access for Universities

Presentation prepared for the ISSI/STI 2019 Conference held in Rome, Sept 2-5, 2019 by Nicolas Robinson-Garcia



http://nrobinsongarcia.com





## Motivation



Home > Research and Innovation > Strategy > Goals of research and innovation policy >

#### **Open Science**

This is the ongoing transition in how research is performed and how knowledge is shared. News, events, publications related to Open Science



#### Motivation

- What is the current state of OA penetration?
- Is the implementation of OA in accordance with policy desires and mandates?
- Which models of OA are more expanded?

knowledge is shared. News, events, publications related to Open





# Our understanding of OA

#### Criteria for the analysis of OA uptake:

#### Sustainable

Publications are OA in the public domain, without immediate and direct risk of disappearing behind a paywall.

#### Legal

Identification as OA should not be based on 'illegal acts' and should not be based on copyright infringement.



# Our understanding of OA

Data sources that do not comply with the two requirements (Sustainability and Legality) for OA detection:

ResearchGate

SciHub

Many suggest their inclusion as OA!



#### Data sources

#### Web of Science

- Advantages: consolidated database, citation linkages, and complete metadata (author affiliations and classification scheme available)
- Disadvantages: commercial/proprietary, coverage issues (SSH, books, conference papers)

#### Unpaywall

- Advantages: comprehensive (multiple sources considered in the identification of OA evidence), systematic, large coverage (Crossref publications), 'free' source, becoming 'standard in the business'
- Disadvantages: lack of relevant metadata (affiliations, classification, doc types), dependency of DOIs (Crossref)
- More validation and research needed (how good is the data? does Unpaywall track all possible OA evidence?)



#### Identification of OA evidences

#### Four types of OA are identified:

- Green OA self-archived versions of a manuscript
- Gold OA journals publishing in OA regardless of their business model
- Bronze OA journals offering free Access but retaining copyrights
- Hybrid OA toll journals offering APC for making articles OA



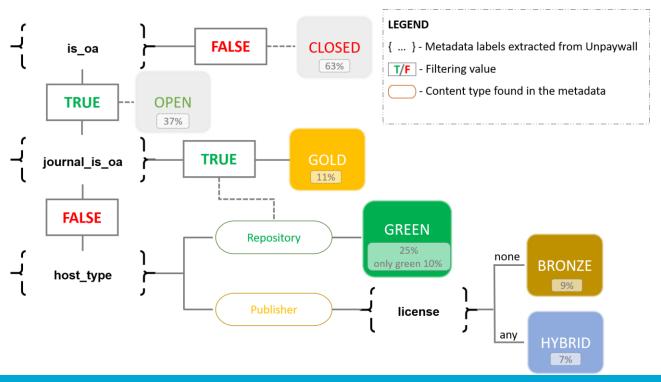
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### Identification of OA evidences





## Results: Overall OA

Iran -

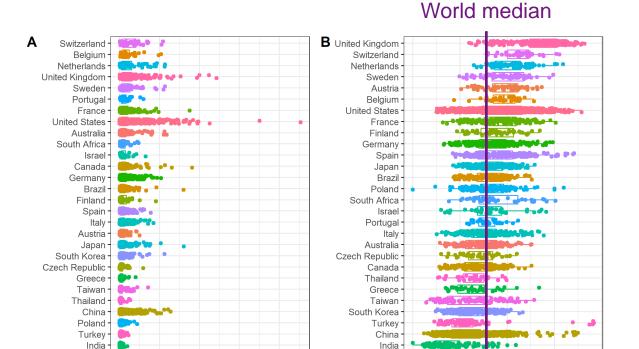
10000

20000

Total OA pubs

30000

40000



Iran

0.00

0.25

0.50

Proportion OA pubs

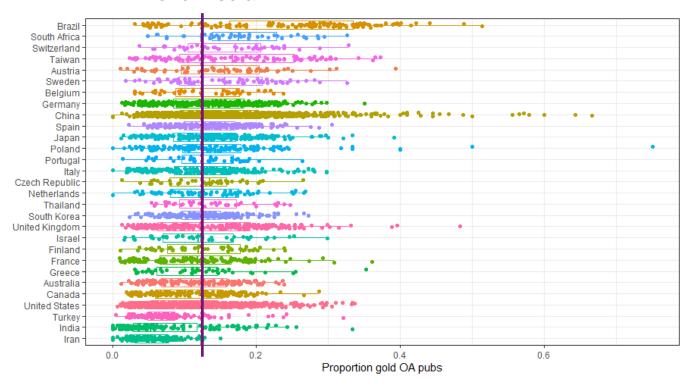
0.75

1.00



## Results: Gold OA

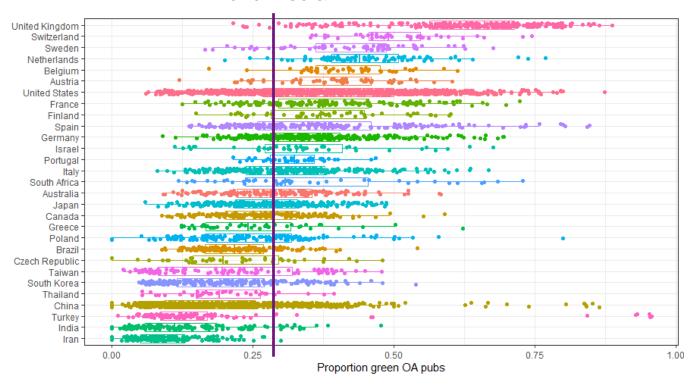
#### World median





#### Results: Green OA

World median





#### Results: Green OA

ository	% Repo	% Green	Pubs	Country	University
94.8		96.0	1851	Turkey	Bilkent Univ
2.4*		86.7	8866	China	Hong Kong Polytech Univ
81.3		84.9	2098	Spain	Univ Jaume I
69.2		81.6	6723	United Kingdom	Durham Univ
72.9		81.6	2328	United Kingdom	City Univ London
74.1		80.5	4321	United Kingdom	Univ Strathclyde
64.3		80.4	5949	United Kingdom	London Sch Hyg
69.3		79.3	5123	United Kingdom	Univ St Andrews
66.6		76.6	3883	United Kingdom	Loughborough Univ
63.3		75.5	10333	United Kingdom	Univ Leeds
		80.5 80.4 79.3 76.6	4321 5949 5123 3883	United Kingdom United Kingdom United Kingdom United Kingdom	Univ Strathclyde London Sch Hyg Univ St Andrews Loughborough Univ



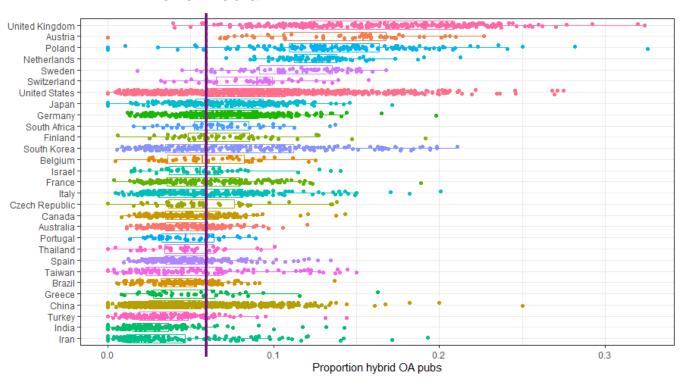
#### Results: The PMC effect on Green OA

Country	Green OA	PMC	PMC only	% Gold	% Bronze	% Hybrid
Taiwan	16233	12836	10777	65.7	6.8	17.8
South Korea	36677	28867	22966	45.3	9.2	32.7
China	161903	116282	93418	60.9	8.9	17.7
Malaysia	5670	4027	3038	77.8	5.0	10.1
Thailand	4378	3438	2255	55.1	12.4	16.3
Egypt	3036	2034	1397	57.7	9.9	15.6
Lebanon	603	450	274	55.8	11.1	12.9
Japan	50007	29560	22226	53.7	18.5	17.7
Singapore	9058	5614	3669	57.1	14.4	15.6
Poland	16459	8531	6416	49.6	8.2	33.6



# Results: Hybrid OA

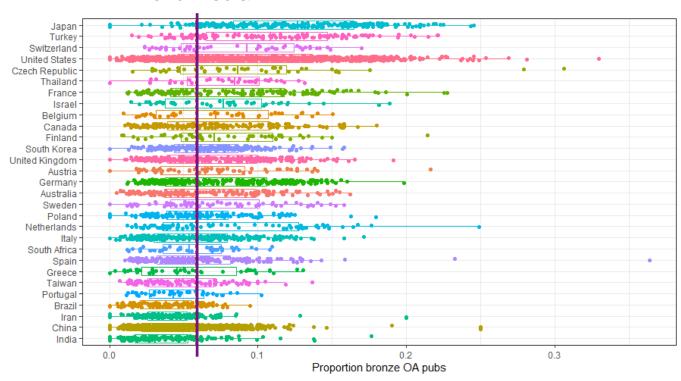
World median





# Results: Bronze OA

World median





#### The 2 main routes to open access are:

- A. Self-archiving / 'green' open access the author, or a representative, archives (deposits) the published article or the final peer-reviewed manuscript in an online repository before, at the same time as, or after publication. Some publishers request that open access be granted only after an embargo period has elapsed.
- B. **Open access publishing / 'gold' open access** an article is immediately published in open access mode. In this model, the payment of publication costs is shifted away from subscribing readers.
  - The most common business model is based on one-off payments by authors. These costs, often referred to as Article Processing Charges (APCs) are usually borne by the researcher's university or research institute or the agency funding the research.







#### **Step 1 - Depositing publications in repositories**

Beneficiaries must deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications. This must be done as soon as possible and at the latest upon publication.

This step applies **even where open access publishing** ('gold' open access) **is chosen** to ensure that the article is preserved in the long term.



	Open Access publishing venues (journals or platforms)	Subscription venues (repository route)	Transition of subscription venues (transformative arrangements)
Funding Route	Authors publish in an Open Access journal or on an Open Access platform.	Authors publish in a subscription journal and make either the final published version (Version of Record (VoR)) or the Author's Accepted Manuscript (AAM) openly available in a repository.	Authors publish Open Access in a subscription journal under a transformative arrangement.
	cOAlition S funders will financially support publication fees.	cOAlition S funders will not financially support 'hybrid' Open Access publication fees in subscription venues.	cOAlition S funders can contribute financially to Open Access publishing under transformative arrangements.



#### An important aspect in opening up: Engagement

- Green OA by archiving final, peer-reviewed drafts in a freely accessible institutional repository or disciplinary repository
  - Self-archiving? When any of the authors has archived the publication
  - Institutional self-archiving? When any of the authors of the institution has archived the publication
  - **PMC OA?** Is it the same as self-archiving? Does it capture engagement in OA?



## Conclusions

- Penetration of OA overall seems to be the result of isolated efforts rather than implementation of national policies
- Formulas for OA vary by region
   i.e., Brazil and Gold OA or UK and Green OA
- Theory and practice in what is OA and its types are not aligned
  - i.e., PMC effect, bronze OA





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# Questions? Many thanks!

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You can find me at:

http://nrobinsongarcia.com

@nrobinsongarcia

