

From Wikidata to Scholia

Creating structured-linked data to generate scholarly profiles

Code4Lib Conference

February 15, 2018

Mairelys Lemus-Rojas (@mlemusrojas)

Jere Odell (@jaireeo)



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

Scholarly Profiles Pilot: Purpose

IU Lilly Family School of Philanthropy

- Contributing IUPUI faculty members data and their publications to Wikidata
- Building a free, open, linked-data scholarly record
- Generating their scholarly profiles using Scholia
- Offering the creation of scholarly profiles as a service to faculty members



Selected Platform to Store Data

Wikidata

- Newest project of the Wikimedia Foundation
- Developed in 2012
- Multilingual knowledge base
- Stores structured linked data
- Items get a unique identifier
- 43 million content pages (<https://www.wikidata.org>)

Scholia

Interface to Display Data

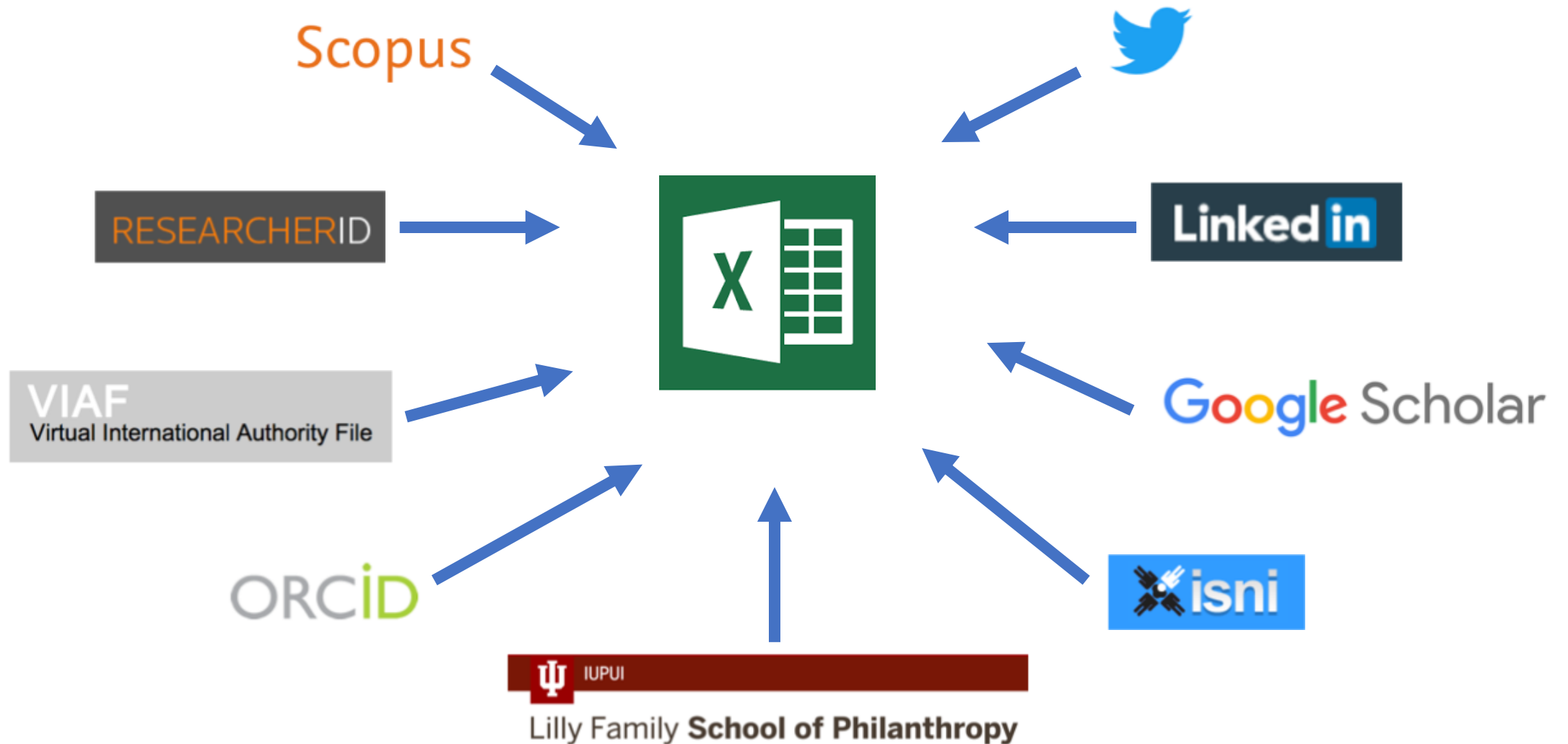
Scholia

- Web service (<https://tools.wmflabs.org/scholia/>)
- Pulls information from the Wikidata knowledge base
- Displays scientific bibliographic information (authors, works, organizations, venues, series, publishers, sponsors, awards)
- Used to generate researchers' profiles and search their scholarship

18 Faculty Members Selected from the School of Philanthropy

- Kathi Badertscher
- Lehn Benjamin
- Dwight Burlingame
- Tyrone Freeman
- Kirsten Grønberg
- Julie Hatcher
- Catherine Herrold
- David King
- Sara Konrath
- Debra Mesch
- Una Osili
- Amir Pasic
- Patrick Rooney
- Timothy Seiler
- Genevieve Shaker
- Bill Stanczykiewicz
- Gene Tempel
- Gregory Witkowski

Scholarly Profiles: Data Gathering





professor of economics and philanthropic studies

Una O. Osili | Una Okonkwo Osili | Una O Osili

Statements

instance of

[human](#)

0 references

sex or gender

[female](#)

1 reference

reference URL <https://philanthropy.iupui.edu/people-directory/osili-una.html>

quote Una O. Osili, Ph.D., is an economist with significant experience in research and policy in the fields of household behavior and economic policy. She is also associate dean for research and international programs at the Indiana University Lilly Family School of Philanthropy (English) retrieved 31 January 2018

given name

[Una](#)

0 references

family name

[Osili](#)

0 references

field of work

[philanthropy](#)

0 references

[economics](#)

0 references

employer

[Northwestern University](#)

start time 1996

end time 1998

position held [teaching assistant](#)

0 references

[Yale University](#)

position held [visiting professor](#)

start time 2007

end time 2007

0 references

[Indiana University – Purdue University Indianapolis](#)

start time 1999

0 references

work location

[Indiana University – Purdue University Indianapolis](#)

0 references

affiliation

[Indiana University Lilly Family School of Philanthropy](#)

1 reference

reference URL <https://philanthropy.iupui.edu/people-directory/index.html?type=Faculty+Core&page=2>

official website

<https://philanthropy.iupui.edu/people-directory/osili-una.html>

0 references

LinkedIn personal profile URL

<https://www.linkedin.com/in/una-osili-809a4316/>

0 references

Intermediary Tools: Entries for Articles

[PMID/DOI/PMCID] -> Source Metadata Tool -> Quick Statements

10.1111/J.1540-6261.2004.00629.X



Source MetaData

Source ID:



Check source



Source MetaData

You can create a new item, or update an existing one, for this source in QuickStatements:

CREATE

```
LAST P356 "10.1111/J.1540-6261.2004.00629.X"
LAST P31 Q13442814
LAST P1476 en:"Social Interaction and Stock-Market Participation"
LAST Len "Social Interaction and Stock-Market Participation"
LAST P433 "1"
LAST P304 "137-163"
LAST P478 "59"
LAST P577 "+2004-02-00T00:00:00Z/10"
LAST P2093 "Harrison Hong" P1545 "1"
LAST P2093 "Jeffrey D. Kubik" P1545 "2"
LAST P2093 "Jeremy C. Stein" P1545 "3"
```

Open in QuickStatements



- Main page
- Community portal
- Project chat
- Create a new item
- Recent changes
- Random item
- Query Service
- Nearby
- Help
- Donate

Tools

- What links here
- Related changes
- Special pages
- Permanent link
- Page information
- Concept URI
- Cite this page
- Reasonator
- VIP's labels

Item [Discussion](#)

Read

[Labels list](#)

[View history](#)



Social Interaction and Stock-Market Participation (Q48340694) ...

academic journal article

[edit](#)

[In more languages](#) [Configure](#)

Language	Label	Description	Also known as
English	Social Interaction and Stock-Market Participation	academic journal article	
Spanish	No label defined	No description defined	
Traditional Chinese	No label defined	No description defined	
Chinese	No label defined	No description defined	

Statements

instance of

[scientific article](#) ...

[edit](#)

[0 references](#)

[+ add reference](#)

[+ add value](#)

Hand-created “Statements”: Published in, Number of pages, Language of work or name

Note: If Journal is not in Wikidata already, an entry must be created for it

<https://www.wikidata.org/wiki/Q48340694>

Una Osili

*Professor of Economics and Associate Dean for Research and International Programs,
IU Lilly Family School of Philanthropy*

Entries created for co-authors

- Jacqueline Ackerman
- René Bekkers
- Katy Börner
- Partha Deb
- Amir Daniel Hayat
- Chin Hua Kong
- Xiaonan Kou
- Robert P. Light
- Bridget Terry Long
- Debra Mesch
- Cagla Okten
- Anna Paulson
- Heng Qu
- Pamala Wiepking
- Jia Xie

Intermediary Tools: Resolving Articles to Entries for Authors

[Author's Name] -> Source Metadata Author Resolver -> Quick Statements

Harrison Hong



Resolve authors

Author name: Fuzzy match



Resolve authors

Author name: Fuzzy match

Potential publications

1 publications found

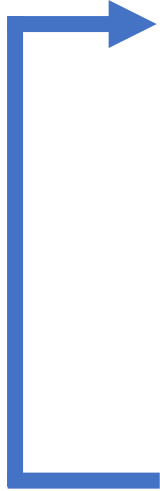
Misc

[Check all](#) | [Uncheck all](#)

<input checked="" type="checkbox"/>	Social Interaction and Stock-Market Participation [ORCID]	Harrison Hong, Jeffrey D. Kubik, Jeremy C. Stein
-------------------------------------	---	--

Potential author items

<input checked="" type="radio"/>	Harrison G. Hong	economist
----------------------------------	------------------	-----------



Creates entry for Author (if needed) and links to entry for Article

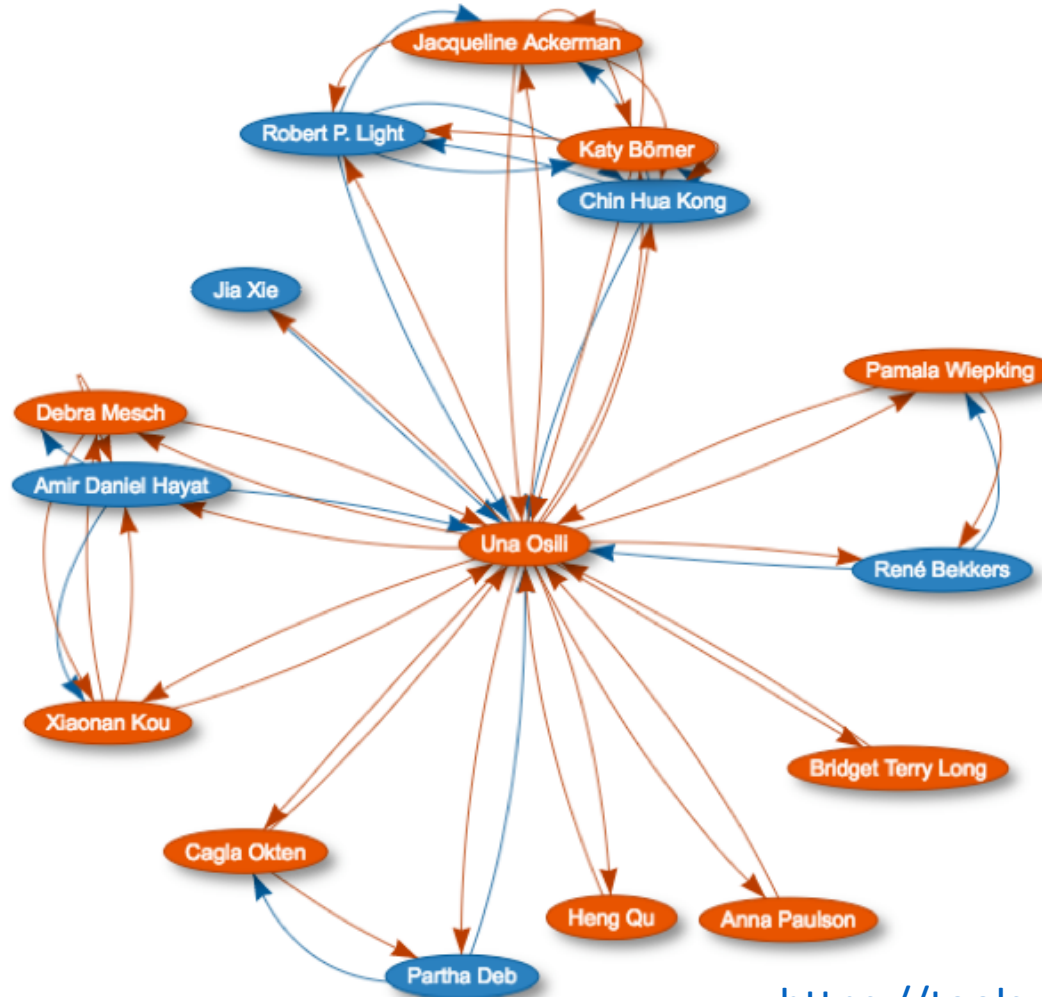
author	Harrison G. Hong ...		edit
	series ordinal	1 ...	
	stated as	Harrison Hong ...	
	▼ 0 references		
			+ add reference
			+ add value

author name string	Harrison Hong ...		edit
	series ordinal	1 ...	
	▼ 0 references		
			+ add reference
	Jeffrey D. Kubik ...		edit
	series ordinal	2 ...	
	▼ 0 references		
			+ add reference
	Jeremy C. Stein ...		edit
	series ordinal	3 ...	
	▼ 0 references		
			+ add reference
			+ add value

Scholia Demo

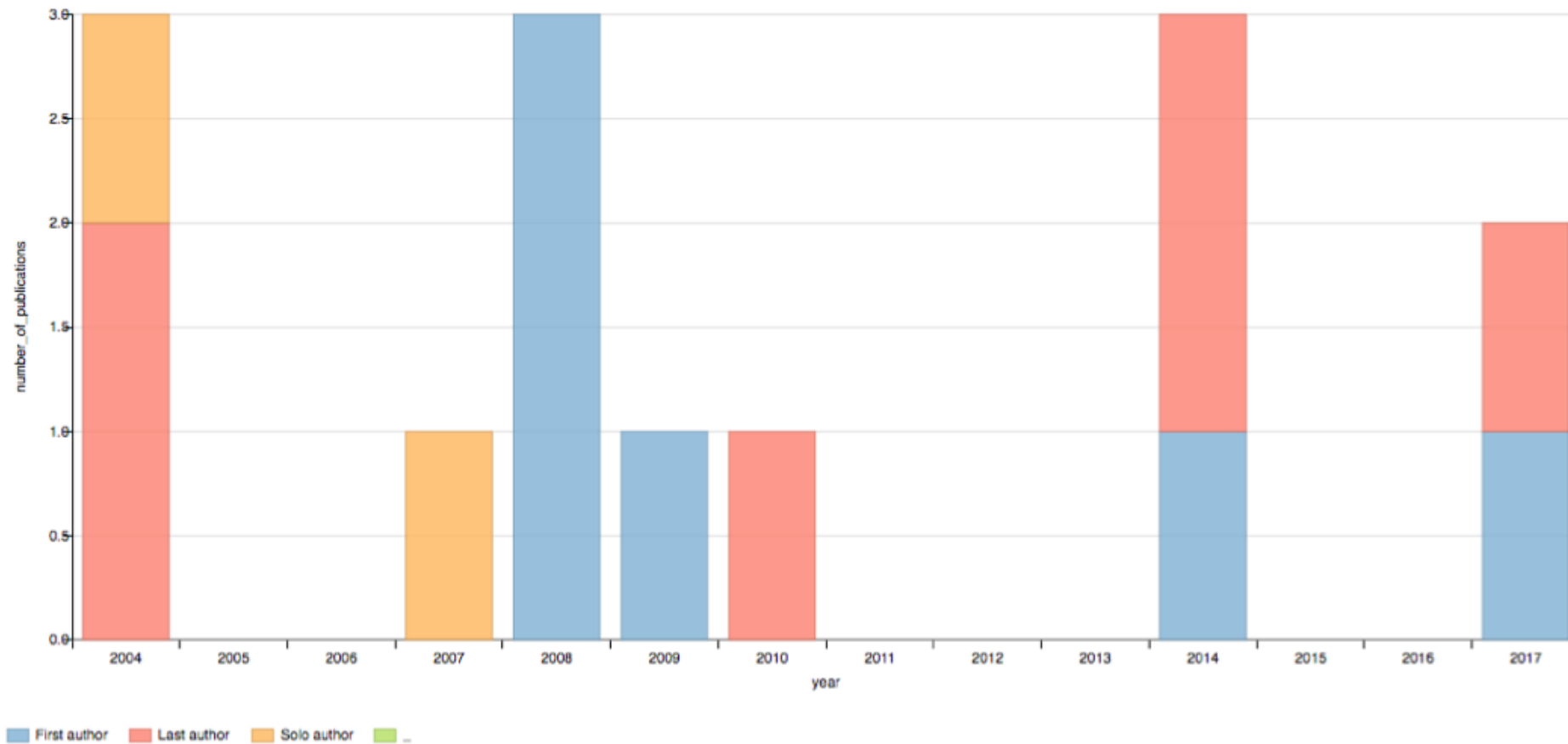
[IU Lilly Family School of Philanthropy](#)

Una Osili's co-authors graph in Scholia



<https://tools.wmflabs.org/scholia/author/Q32979516>

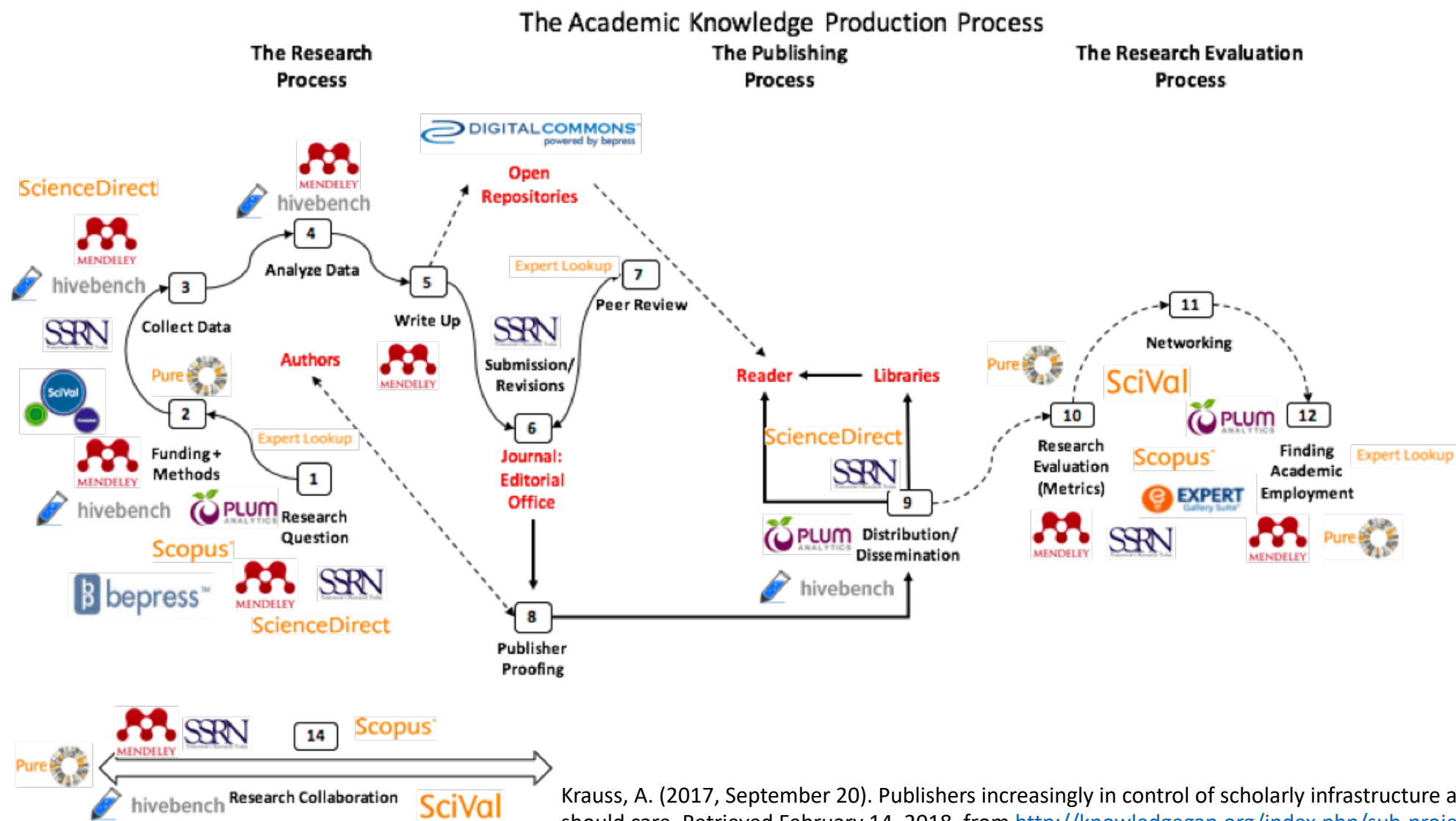
Una Osili's publications per year



Outcomes

- Created 17 entries in Wikidata for core faculty selected
- 1 core faculty already in Wikidata
- Created 58 entries in Wikidata for co-authors of core faculty
- Created 110 entries for publications
- Created 39 entries for works cited in 3 publications from one faculty member
- Created 7 entries for works that cited those 3 publications from the faculty member
- Combined number of edits so far: ~ 8,000

Why are we doing this?



Krauss, A. (2017, September 20). Publishers increasingly in control of scholarly infrastructure and this is why we should care. Retrieved February 14, 2018, from <http://knowledgegap.org/index.php/sub-projects/rent-seeking-and-financialization-of-the-academic-publishing-industry/preliminary-findings/>

What might be next?

Will libraries share data about their collections and stakeholders?

- Library-published journals (e.g., 15 OJS titles hosted at IUPUI)
- Library-maintained digital collections
- Librarian-curated data for individual faculty members? (e.g., awardees & exemplars)
- Data about our communities?

What are the challenges?

- It's a lot of work, *for now ...*
- Wikidata corpus of bibliographic records comparatively lacking, *for now ...*
- Faculty (and librarians) unsure of the value, *for now ...*

... but with your help, we can do this!



wikidata
the free wiki-like database

Mairelys Lemus-Rojas (@mlemusrojas)
Jere Odell (@jaireeo)