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Joe Wass Head of Software Development jwass@crossref.org @joewass





Scholarly publications



Datasets



Research organisations



Researchers and Authors



Scholarly infrastructure organisations

- Focus on a specific area.
- Serve and work with different communities.
- Work together to improve scholarship.
- Are nearly invisible.



- Focus on scholarly publications.
- Serve the publishing, science, funding, authoring communities and anyone who wants information about publications.
- Work together with other organisations like ORCID and DataCite.
- Is nearly invisible.



Manuscript tracking Scholarly sharing Hosting networks content Measure, Verify records are valid & report & **Specialist subject Bibliographic** accurate apply metrics databases management Search & Fill discover metadata gaps Crossref Metadata APIs **Author** Library 뎶 discovery profiling Collect **Aggregate** related & integrate research content objects Match & link Recommendations **Annotation** citations **Collaborative authoring Metrics and** and reading analytics



What is "scholarship"?

The scholarly method or scholarship is the body of principles and practices used by scholars to make their claims about the subject as valid and trustworthy as possible, and to make them known to the scholarly public.

https://en.wikipedia.org/wiki/Scholarly method



What are "claims about the subject"?

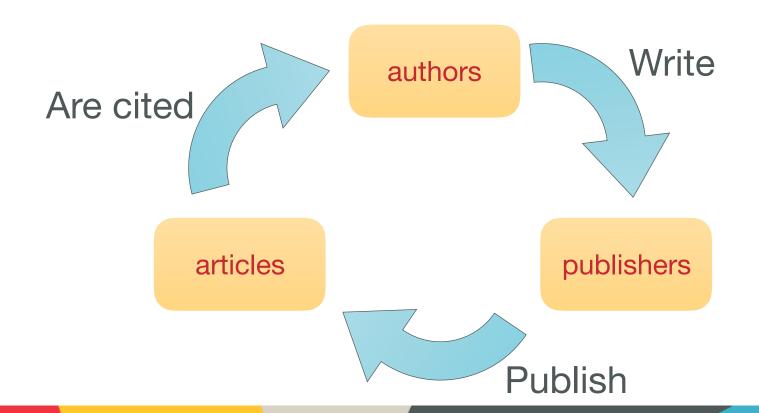
- · Basic research.
- Research about research.
- Bibliometrics, altmetrics and ... *metrics.
 - The impact of research or funding.
 - · How communities interact with the research.

The landscape is changing



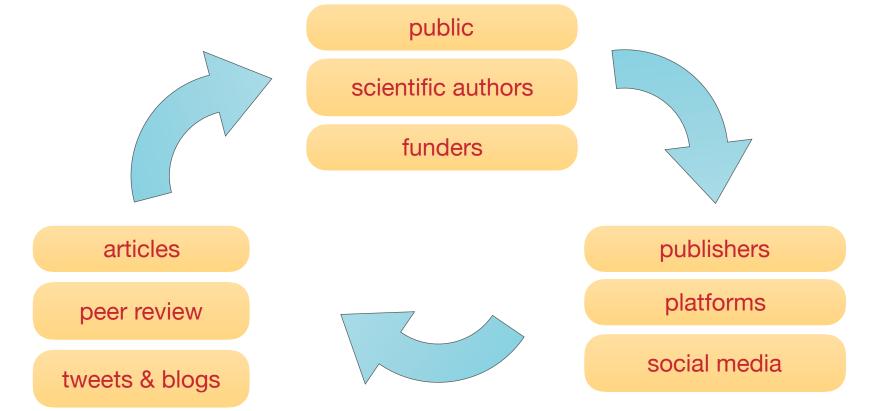


Metadata flow for "Traditional" scholarship





"New" scholarship





Where does metadata come from?

Old world:





- We exist to do those things that all of our members need to do, or that happens across all of our members.
- e.g. They all need identifiers so we give DOIs. They all need to exchange metadata, so we accept and distribute that.
- We know that DOI Registered Content is being mentioned out there on the web, so we can go and collect those links.
- There are common problems we can solve.



What role can we play?

- Provide open platform for exchanging data, Event Data, for exchanging data.
- Collect web mention data.
- Combining traditional publisher-originated data with new fetched metadata.
- Allowing sharing of data usage metrics.



Crossref collects data from:

- Twitter
- Wikipedia
- Reddit
- StackExchange
- Blogs

- Crossref DataCite data citations
- Hypothes.is annotations

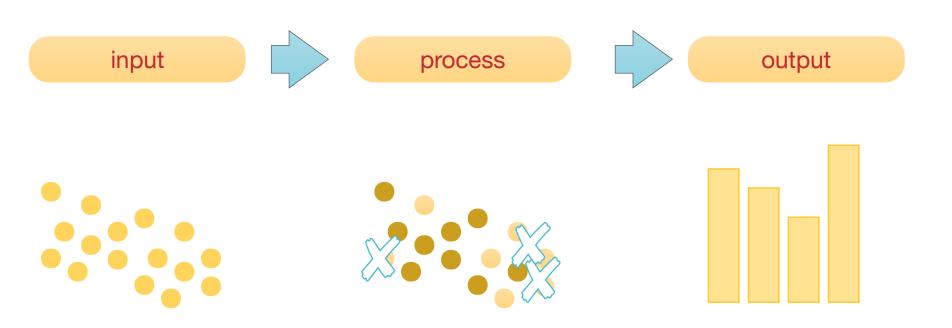


What happens if we don't?

- Our members will do it.
 - But what if one member does it, and another does not?
 - What if they do it differently?
- Researchers will do it.
 - Long-term sustainability? Open data? Re-use of data? Focus of study?
- Private companies will do it.
 - Data is not open.
 - Collected for specific purpose, which forces you to make choices.



The purpose defines the processing

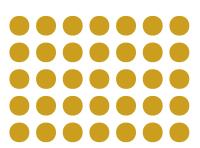




Wider purpose, less processing

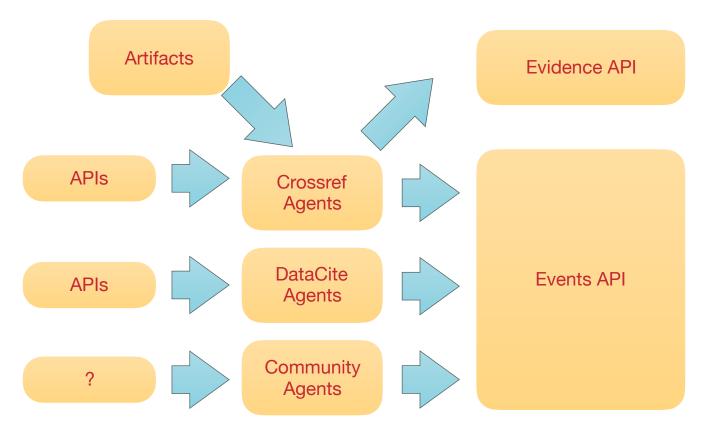
input community process







How does Event Data work?

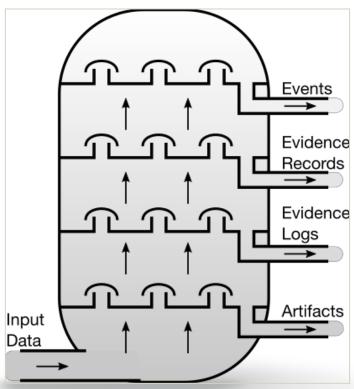


More than one role





Intermediary data



https://www.crossref.org/blog/you-do-want-to-see-how-its-made-seeing-what-goes-into-altmetrics/

Open = Open opportunities



Open Data

CC0 and CC BY 4.0 allows the widest range of uses.

Open Source

Users can understand where the data comes from.

Open Evidence

Users can look at what our agents did.

Open Contributions

Community can contribute data.

Open Ended

We collect the underlying data, it can be used for anything.



- CC0 and CC BY 4.0 are unrestrictive.
- Each Event has a license so you always know how you can use the data.
- You don't need to ask us first. We have terms and conditions, but they are as unrestrictive as possible.



- All the software is available on GitHub.
- You can see how the Agent gathered data.
- If you have questions about the data, you can look to see how it was made at a given point in time.
- The community can suggest improvements to our code.



- "What did the Agent do"
- The activity is provided in open data. Events link to the Evidence Record and Logs which describes the software version and input version.
- Nothing is hidden. We have the same data as you!



- We can't collect everything. We allow community data sources to send us data.
- There is no risk to them, because the license is open.
- New tools, like Plaudit.pub,can send data directly in.



- We don't make metrics. We just collect links.
- We have some good ideas about how you can use it.
- But if you have a new idea for using data, just do it!

That's up to you!



- Event Data User Guide: https://www.eventdata.crossref.org/guide/
- Ideas in this presentation:
 https://www.crossref.org/authors/joe-wass/

Thanks

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