

Wikidata as a tool to connect researchers



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Proposed Agenda / Structure of Talk

Communities and Their Missions Coming Together (social & technical alignment)

Exploring Existing Collaborations (current alignment)

Exploring Potential Collaborations (future alignment)

Opportunities for the Ronin Community

Discussion / What's next?

Networks Coming Together (social aspects)

Open
Trait
Network

Gallagher et al. (2020)

doi:[10.1038/s41559-020-1109-6](https://doi.org/10.1038/s41559-020-1109-6)

Scholia

Nielsen et al. (2017)

doi:[10.1007/978-3-319-70407-4_36](https://doi.org/10.1007/978-3-319-70407-4_36)

Wikidata

Vrandečić & Krötzsch (2014)

doi:[10.1145/2629489](https://doi.org/10.1145/2629489)

Networks Coming Together (social aspects)

Open
Trait
Network

"The Open Traits Network (OTN) is a global, decentralised community of researchers and institutions that welcomes anyone working towards standardising and integrating trait data across all organisms."

— opentraits.org at 2022-08-08

Networks Coming Together (social aspects)

Scholia

"Scholia is a service that creates visual scholarly profiles for topics, people, organizations, species, chemicals, etc. using bibliographic and other information in Wikidata."

— scholia.toolforge.org at 2022-08-08

Networks Coming Together (social aspects)

Wikidata

"Wikidata is a free and open knowledge base that can be read and edited by both humans and machines."

— wikidata.org at 2022-08-08

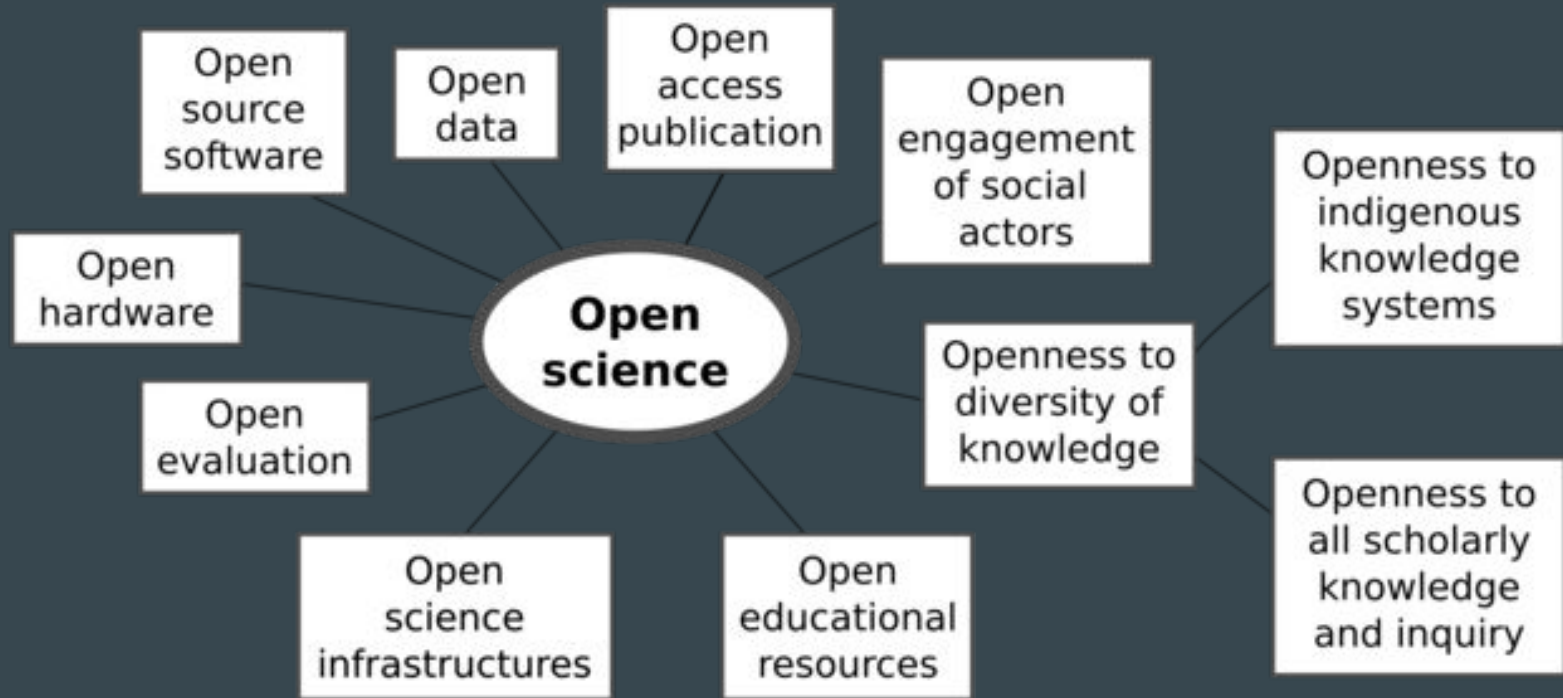
Networks Coming Together (social aspects)

Ways to organize communities

- decentralized and disconnected
- centralized and connected (hub and spoke)
- **Open Traits Network - decentralized and connected**

adapted from Fig. 2 of Gallagher et al. (2020)

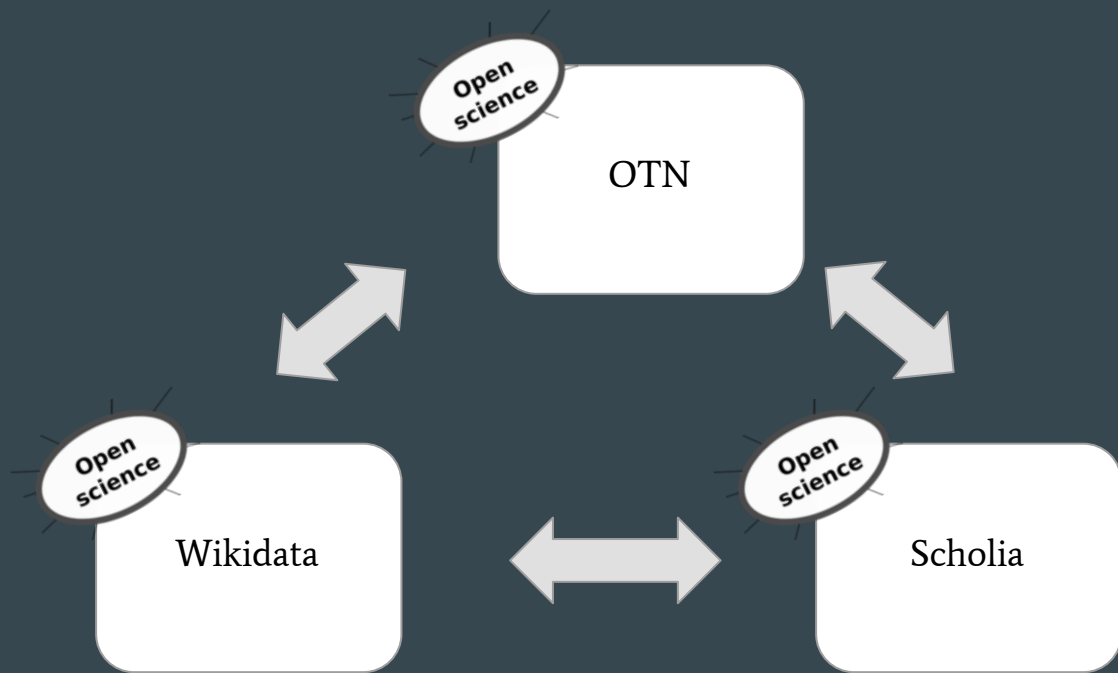
doi:[10.1038/s41559-020-1109-6](https://doi.org/10.1038/s41559-020-1109-6)



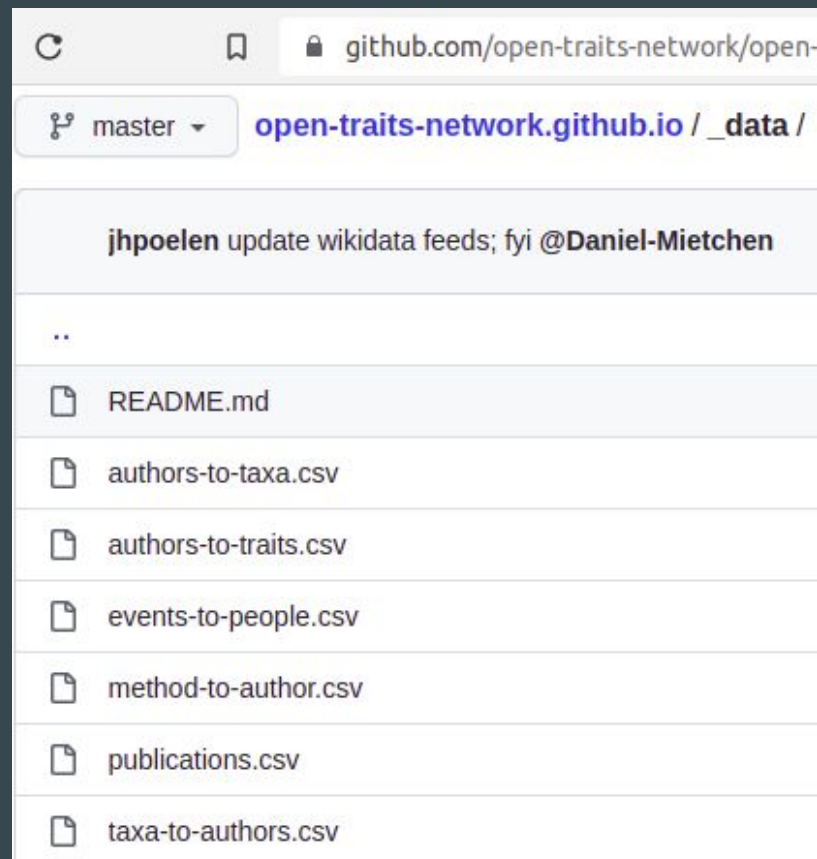
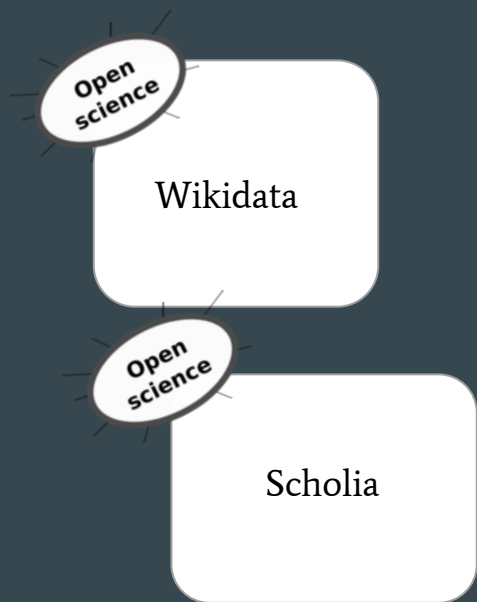
"Open science elements based on UNESCO presentation of 17 February 2021. This depiction includes indigenous science.

— https://en.wikipedia.org/wiki/Open_science at 2022-08-08

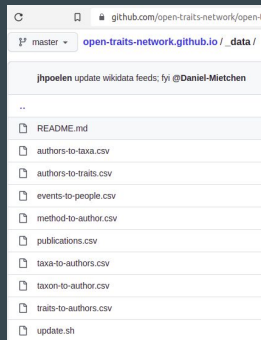
Networks Coming Together (social aspects)



github.com/open-traits-network/open-traits-network.github.io



github.com/open-traits-network/open-traits-network.github.io



authors-to-taxa.csv

person	personLabel	taxonNames
http://www.wikidata.org/entity/Q91379318	Alana R O Chin	<i>Picea sitchensis</i> <i>Sequoia sempervirens</i>
http://www.wikidata.org/entity/Q21517397	Alexander Keller	<i>Apis mellifera</i> <i>Arabidopsis thaliana</i> <i>Bursera</i>
http://www.wikidata.org/entity/Q83487382	Alexandra J. R. Carthey	<i>Acacia longifolia</i>
http://www.wikidata.org/entity/Q47503085	Anne Thessen	<i>Crassostrea virginica</i>
http://www.wikidata.org/entity/Q59062025	Anton Potapov	<i>Ablemma</i> <i>Acerentomon</i>
http://www.wikidata.org/entity/Q96096151	Aud H. Halbritter	<i>Brachypodium sylvaticum</i>
http://www.wikidata.org/entity/Q90744779	Brad Boyle	Embryophyta
http://www.wikidata.org/entity/Q47172478	Brian J. Enquist	<i>Arabidopsis thaliana</i> Asteraceae <i>Bursera</i>
http://www.wikidata.org/entity/Q89748248	Brian S. Maitner	Aves Embryophyta
http://www.wikidata.org/entity/Q104006568	Carlos Alberto Martinez-Muñoz	Coleoptera <i>Dasongius</i>
http://www.wikidata.org/entity/Q56433897	Caterina Penone	Orthoptera <i>Senecio inaequidens</i>
http://www.wikidata.org/entity/Q89735684	Cyrille Violle	<i>Arabidopsis thaliana</i> <i>Dactylis glomerata</i>

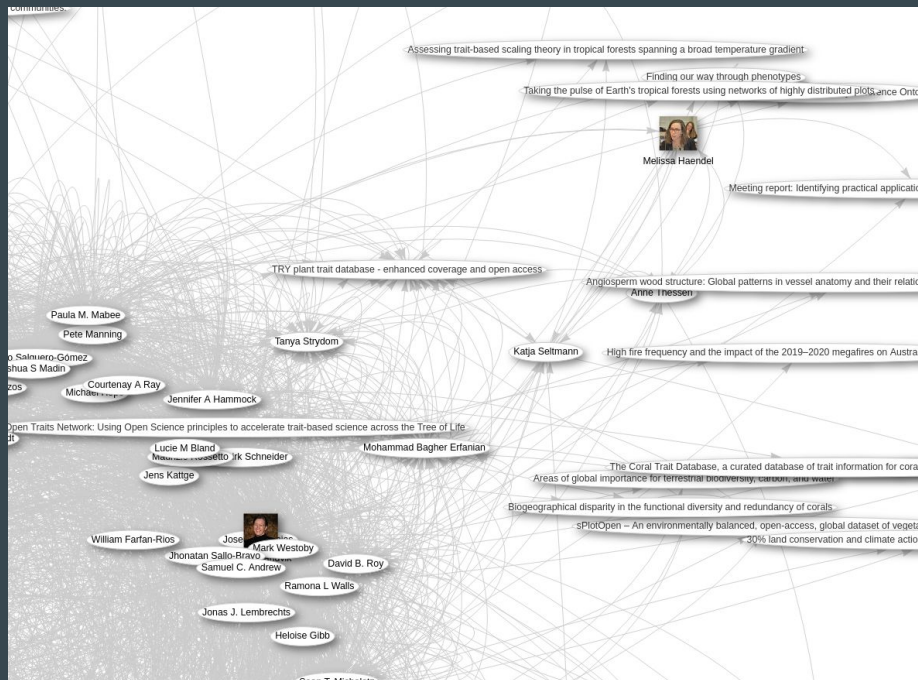
Exploring Existing Collaborations

<https://opentraits.org/publications> : Member - Publication - Member

Who publishes with whom?

What work(s) did they co-author?

Image links to live query



Exploring Potential Collaborations (ii)

<https://opentraits.org/taxa> : Member - Taxon - Member

Who works on [hymenoptera or angiosperms](#)?

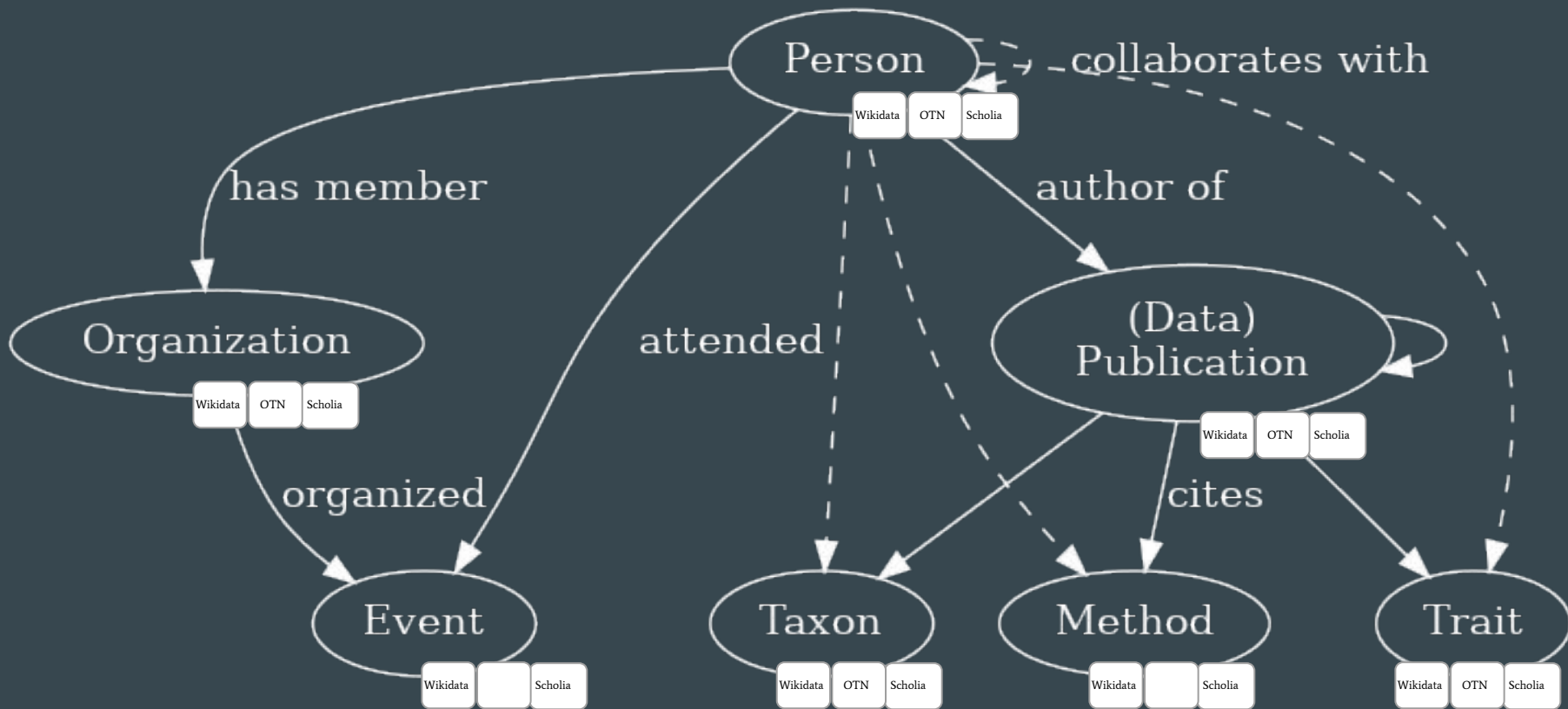
<https://opentraits.org/methods> : Member - Method - Member

Who uses [ArcGIS or ImageJ](#) or other [resources](#) in their research?

<https://opentraits.org/traits> : Member - Trait type - Member

Who studies [hairiness](#), particularly in relation to insects?

Exploring Potential Collaborations (ii)



Discussion

Is it OK to add information to someone else's profile?

How do you feel about someone else editing your OTN profile?

How do you feel about someone else editing your Wikidata profile?

What is the benefit of you or someone else editing your OTN profile?

What is the benefit of you or someone else editing your Wikidata profile?

How do you feel about opening up your research connections and research interests?

Acknowledgements

iDiv for funding the workshop

Alfred P. Sloan Foundation (G-2021-17106) for supporting work on Scholia

VolkswagenStiftung (97863) for supporting work on integrating invasion biology into Wikidata

Extra

Exploring More Collaborations

<https://opentraits.org/events> : Members meet at conferences/ workshops etc.

sample event: [ICEI 2018](#)

<https://opentraits.org/...> : Member - <Link> - Member (what links help you?)

Who might have met and where?

Which event co-attendance possibly led to future collaborations?

Gaps? E.g. invasion/ urban/ restoration ecology [in general](#) vs. [via OTN](#) ([urban traits](#)?)

[Your question here]

Demo - Finding Invasive & Bee Trait Connections

Daniel sharing a live demo, using [Scholia](#) for exploring a network of publications, datasets and people, especially those related to invasions or bee contexts.

Potential itinerary

list of invasive species [in Germany](#) / Leipzig / [Berlin](#) ?

select [only bees from invasive species list](#) (data missing)

acquire list of traits for the invasive bees, e.g. [intertegular span](#)

find experts and their publications related to these traits

Bring Your Own Links (BYOL)

Or, enrich your research connections.

Or, poke around, hit some edit buttons, and add links.

Add ORCID, GitHub, Wikidata ID (10 minutes)

Add Traits of Interest (Wikidata/OTN)

Add Taxa of Interest (Wikidata/OTN)

Add Methods of Interest (Wikidata/OTN)

Add Publications of Interest (Wikidata/OTN)

<https://opentraits.org/> : Member - <Link> - Member (what links help you?)

Explore Your Own Links (or Discover New Collaboration)

Analyze and Describe your existing collaborations in the OTN member network.

Think about your potential collaborations in the OTN member network.

Identify methods to explore existing or potential collaborations

Identify Existing and Potential Collaborations in Wikidata

Identify Existing and Potential Collaborations in opentraits.org

Identify Existing and Potential Collaborations in Scholia

Suggest Additional Ways to find publications, datasets, and people.