

Beyond Wikipedia

Cultural heritage and LOD on the Wikimedia
platforms

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Linnæus University

Wikimedia Sverige

- A non-profit organization based in Sweden
- We work towards making knowledge accessible to more people, for free, and under free licenses
- More about us: wikimedia.se
- We use the Wikimedia platforms as our most important resource
- We support educational and cultural heritage institutions in their work with free knowledge

Into Wikidata!

Wiki?

The **Wikimedia movement**: that's all of us!

MediaWiki: the software behind everything



WIKIPEDIA



WIKIMEDIA
COMMONS



WIKIDATA



Wiktionary
The free dictionary

Wikimedia Foundation: runs and develops the websites

Local chapters



wikimedia.se/engagera-dig

WIKIMEDIA
NORGE Oslo

WIKIMEDIA
SUOMI

WIKIMEDIA
SVERIGE

WIKIMEDIA
SVERIGE

WIKIMEDIA
РОССИЯ

WIKIMEDIA
UK

WIKIMEDIA
DEUTSCHLAND

WIKIMEDIA
POLSKA

WIKIMEDIA
ESPAÑA

WIKIMEDIA
ISRAEL



Galleries, **L**ibraries, **A**rchives, **M**useums

ABM: Arkiv, **B**ibliotek, **M**useer

Wikidata

Launched in 2012 – a young project that is developing rapidly.

Over 90 million data items.

Aiming to collect the sum of human knowledge in a structured and linked form.



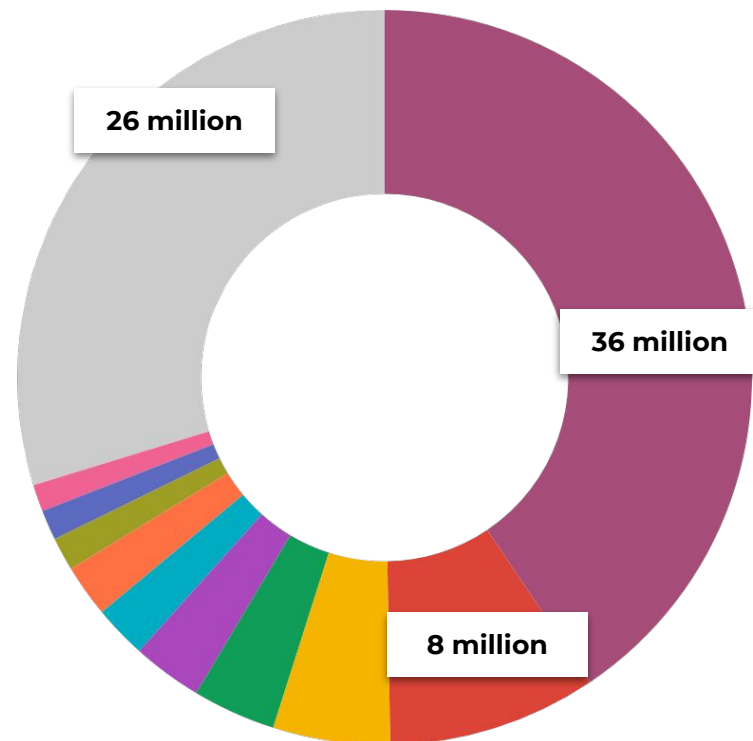
WIKIDATA

What does Wikidata actually contain?

The goal of Wikidata is to collect the sum of human knowledge – in a structured, linked form.

With 90 million items, you might think we are close to achieving this...

- scholarly article (Q13442814)
- human (Q5)
- Wikimedia category (Q4167836)
- star (Q523)
- taxon (Q16521)
- galaxy (Q318)
- review article (Q7318358)
- Wikimedia disambiguation page (Q4167410)
- gene (Q7187)
- chemical compound (Q11173)
- other



Scholarly articles on Wikidata

These items were created by importing data from open databases of bibliographic metadata.

Importing data is a major part of the work Wikidata community does.

Wikidata is licensed CC0, this means other datasets with a compatible license can be imported.

PubMed was a major source, leading to an overrepresentation of medicine/life sciences.



Multiple Metal-Metal Bonds in Iron-Chromium Complexes (Q59464209)

scientific article published on 11 March 2013

[In more languages](#)

[Configure](#)

Language	Label	Description	Also known as
English	Multiple Metal-Metal Bonds in Iron-Chromium Complexes	scientific article published on 11 March 2013	
Swedish	No label defined	No description defined	
Finnish	No label defined	No description defined	
Tornedalen Finnish	No label defined	No description defined	

[All entered languages](#)

Statements

instance of	scholarly article edit
	1 reference
	+ add value

title	Multiple metal-metal bonds in iron-chromium complexes (English) edit
	1 reference
	+ add value

author	Laura Gagliardi edit
	series ordinal 5
	1 reference
	+ add value
	Connie C. Lu edit
	series ordinal 6
	1 reference
	+ add value

Scholia

scholia.toolforge.org

Wikidata profiles of scholars,
organizations, research topics,
publications and related concepts.

Scholia is part of the WikiCite initiative -
wikicite.org



organization location topic

Linnaeus University (Q1751928)

Linnaeus University (LNU) (Swedish: Linnéuniversitetet) is a state university in the Småland region of Sweden. It has two campuses, one in Växjö and one in Kalmar. Linnaeus University was established in 2010 by a merger of former Växjö University and Kalmar University (Högskolan i Kalmar), and is named in honour of the Swedish botanist Carl Linnaeus. ... (from the [English Wikipedia](#))

Related: [Växjö University](#) · [University of Gothenburg](#) · [Q10549212](#) · [Örebro University](#) · [Ministry of Defence](#) · [Salle Richelieu](#) · [Chalmers University of Technology](#) · [Tropenmuseum](#) · [Stockholm School of Economics](#) · [Kooperativa förbundets arkitektkontor](#)

[@linneuni](#) | ROR 00j9qag85

Employees and affiliated

Past and present employees, affiliated, and members

Show entries

Search:

Works	Wikis	Researcher	Researcher description	Orcid
125	0	Jonas Waldenström	researcher	0000-0002-1152-4235
79	0	Alf Månsson	researcher	0000-0002-5889-7792
54	0	Cornelius Holtorf	archaeologist	0000-0002-0557-9651
38	0	Daniel Lundin	researcher ORCID ID = 0000-0002-8779-6464	0000-0002-8779-6464
35	0	Janusz Sadowski	researcher ORCID ID = 0000-0002-9495-2648	0000-0002-9495-2648
30	0	Carl Rikard Unelius	researcher	0000-0001-7158-6393
23	1	Stefan Gössling	Swedish academic	
21	0	Anders Bremer	researcher	0000-0001-7865-3480
21	0	António Filipe Teixeira	researcher ORCID ID = 0000-0003-3436-2010	0000-0003-3436-2010

A group of people are seated at long wooden tables in a room filled with rows of wooden drawers, likely an archive or library. In the foreground, a woman with dark hair is focused on her laptop. To her left, an older woman is also working. In the background, another woman is visible. On the right, a man with glasses and a beard is holding a coffee cup. The scene is lit with warm, indoor lighting. The text 'Anyone can edit! ... do they?' is overlaid in large white font across the center of the image.

Anyone can edit!
... do they?

Whose knowledge?

The average Wikipedian is:

https://en.wikipedia.org/wiki/Wikipedia:Systemic_bias

- a white male
- technically inclined
- formally educated
- aged 15–49
- from a majority-Christian country
- from a developed nation
- from the Northern Hemisphere
- likely employed as a white-collar worker or enrolled as a student rather than being employed as a blue-collar worker

Which languages do Wikidatans speak?

Wikidata editors can add their language skills to their user page.

- Over 50% speak English.
- Most popular other languages: French, German, Spanish, Russian.

Wikidata is multilingual – but English is the de facto language of community discussions and documentation.

Babel user information	
fi-N	Tämän käyttäjän äidinkieli on suomi.
en-4	This user has near native speaker knowledge of English.
sv-2	Den här användaren har medelgoda kunskaper i svenska.
fr-2	Cette utilisatrice dispose de connaissances intermédiaires en français.
nb-1	Denne brukeren har grunnleggende kjennskap til norsk (bokmål).
nn-1	Denne brukaren meistrar nynorsk på eit grunnleggjande nivå.

Kaffee, L.-A., & Simperl, E. (2018, August). Analysis of editors' languages in Wikidata. *Proceedings of the 14th International Symposium on Open Collaboration* (pp. 1–5).

Which languages do Wikidatans speak?

Items can have labels in multiple languages; their distribution can tell us something about the editors' knowledge and interests.

- English: 11%
- Dutch: 6%
- French: 6%
-
- Swedish: 4%
- Chinese: 1%

The Semantic Web has the potential to improve the language imbalance of the Internet, but suffers from the same problems.

▼ In more languages

Language	Label
English	National Library of Sweden
Danish	Kungliga biblioteket
German	Königliche Bibliothek zu Stockholm
Spanish	Biblioteca Nacional de Suecia
Finnish	Ruotsin kuninkaallinen kirjasto
Polish	Kungliga biblioteket
Russian	Национальная библиотека Швеции
Swedish	Kungliga biblioteket

Kaffee, L.-A., Piscopo, A., Vougiouklis, P., Simperl, E., Carr, L., & Pintscher, L. (2017, August 23). A Glimpse into Babel. *Proceedings of the 13th International Symposium on Open Collaboration* (pp. 1–5)

GLAM institutions and Wikimedia

A lot of GLAMs around the world have experience from working with the Wikimedia projects since before Wikidata became a thing, such as by uploading digitized artworks to Wikimedia Commons.

The emergence and development of Wikidata, has created new possibilities to not only add their collections to Wikimedia's ecosystem of open knowledge, but also to create connections with other institutions' data, and data contributed by volunteers.

Museum collections on Wikidata

Several museums have made a decision to upload their collection data to Wikidata, or to release openly licensed datasets that volunteers can work with.

The Nationalmuseum in Stockholm has worked with Wikimedia Sverige to upload high quality images to Wikimedia Commons and the metadata about the artworks to Wikidata.

Items with Nationalmuseum Artwork ID

```
SELECT ?item ?itemLabel ?natmus_id ?image WHERE {  
  ?item wdt:P2539 ?natmus_id.  
  OPTIONAL { ?item wdt:P18 ?image. }  
  SERVICE wikibase:label {  
    bd:serviceParam wikibase:language "sv|en".  
  }  
}
```

item	itemLabel	natmus_id	image
Q18537473	Q18537473	25644	
Q18573169	Procession at the Feast of Corpus Christi in Rome	18223	commons:Procession at the Feast of Corpus Christi in Rome (Egron Lundgren) - Nationalmuseum - 18223.tif
Q18573186	Cupid	18246	commons:Cupid (Fredric Westin) - Nationalmuseum - 18246.tif
Q18573562	Queen Marie Antoinette of France and two of her Children Walking in The Park of Trianon	18035	commons:Queen Marie Antoinette of France and two of her Children Walking in The Park of Trianon - Nationalmuseum - 18035.tif
Q18573677	Christ and the Woman taken in Adultery NM 1128	18131	commons:Christ and the Woman taken in Adultery - Nationalmuseum - 18131.tif
Q18574301	The Council of the Society of Artists	18606	commons:The Council of the Society of Artists (Richard Bergh) - Nationalmuseum - 18606.tif
Q18577540	Portrait of Pope Clement XI	16162	commons:Clemens XI, 1649-1721, päve - Nationalmuseum - 16162.tif
Q18578927	Q18578927	40239	commons:Självpporträtt (Egron Lundgren) - Nationalmuseum - 40239.tif
Q18578930	Selfportrait	19297	commons:Selfportrait (Martin van Meytens d.y.) - Nationalmuseum - 19297.tif

[https://www.wikidata.org/wiki/
Q18573562](https://www.wikidata.org/wiki/Q18573562)

Artworks that depict a person

```
SELECT ?item ?itemLabel ?image WHERE {  
  ?item wdt:P180 wd:Q47365.  
  OPTIONAL { ?item wdt:P18 ?image. }  
  SERVICE wikibase:label {  
    bd:serviceParam wikibase:language "sv,en".  
  }  
}
```

<https://w.wiki/39aq>


Crotos

www.zone47.com/crotos/

A search and display engine for artworks powered by Wikidata and Wikimedia Commons.




Language


 **Crotos**
Cosmos
Callisto
Lab


40 Results


Everything


1 2



Cat Hunting Birds
Bruno Liljefors - Gothenburg Museum of Art


Big brother playing
Harriet Backer - Gothenburg Museum of Art


Man with a Falcon (possibly St. Bavo)
Rembrandt - Gothenburg Museum of Art


Vampire
Edvard Munch - Gothenburg Museum of Art


Little Suzanne
Carl Larsson - Gothenburg Museum of Art


Winter Evening in Roslagstull
Karl Nordström - Gothenburg Museum of Art

The Sum of All Paintings

https://www.wikidata.org/wiki/Wikidata:WikiProject_sum_of_all_paintings

A WikiProject (dedicated community space) to collect and improve the data about the world's artworks and coordinate mass imports.



Background [\[edit \]](#)

On Wikipedia we have a lot of experience breaking down large amounts of work into smaller chunks that can be completed.

Examples of this are the windmill project on the Dutch Wikipedia and the many lists of historic buildings that were created for Wiki Loves Monuments (Q1353202). For paintings we can use the same strategy: We break it down into smaller parts that can be handled and then we can utilize Wikidata to celebrate the sum of all paintings through linked open data!



Scope [\[edit \]](#)

All or everything is too broad and has no limit. This limit is to be able to handle the processing of the data – let's not overwhelm ourselves (yet). The scope can always be expanded – in the future we will have the sum of all sculptures, drawings, you get the picture! The scope of this project is **notable** paintings. A painting is considered notable if one of these options is true:

- The painting is in a notable collection of a museum, library, archive (e.g. a painting in the Metropolitan Museum of Art)
- The painting is made by a notable artist (e.g. Van Gogh painting in a private collection)



Tips [\[edit \]](#)

- Paintings in scope meet notability guidelines in Wikipedia, as they are notable for being in a notable [GLAM \(Q1030034\)](#) collection, are painted by notable painters, and/or generally have secondary reliable source documentation written about them.
- GLAM is an acronym and means **g**alleries, **l**ibraries, **a**rchives and **m**useums, but in a broader sense includes also public buildings like castles, town halls, administrative buildings or religious buildings like churches, cloisters, temples etc. that can hold paintings or wallpaintings and other pieces of art.
- Use the guidelines of [item structure](#) when adding data to each painting entry. Think of it like a collections management database of information.

Wikidata at the National Library of Wales

Has been working the Wikimedia Commons for a long time, uploading digitized material.

A lot of structured data that couldn't be used efficiently on Commons.

A strategic project – the Welsh Landscape prints.

Over 4,000 objects, 500 artists and engravers.

Being able to work with a whole collection provided an interesting opportunity to examine how the Wikimedia projects can fit into the institution's work.

<http://www.zone47.com/crotos/?p195=21542493>



Beumaris from Baron Hill
William Crane, Public Domain

Resultat 1 - 20 av 27

Sök

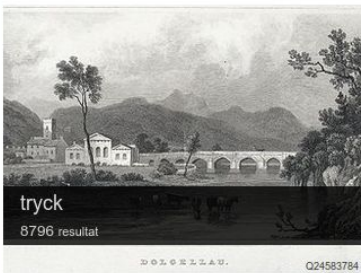
Minsta 3

1

2

Nästa

Slumpvis



tryck

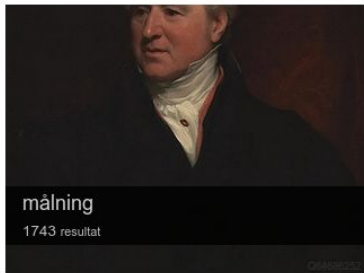
8796 resultat

DORCHILLAU. Q24583784



fotografi

6388 resultat



målning

1743 resultat



teckning

833 resultat

Q7895813



akvarell

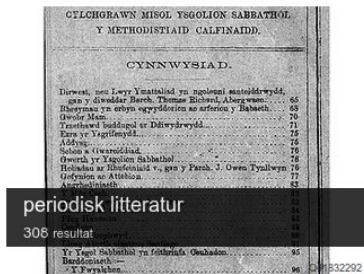
606 resultat

Q7788331



publikation

435 resultat



periodisk litteratur

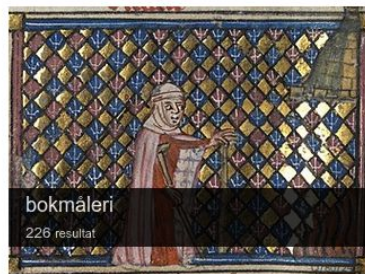
308 resultat

Q32292



journal

247 resultat



bokmålari

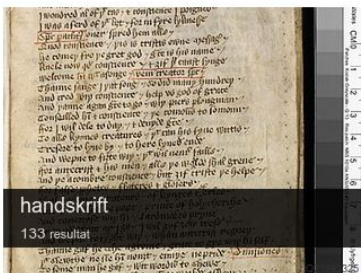
226 resultat



karta

152 resultat

Q95562906



handskrift

133 resultat



tidning

62 resultat

Q2087826



veckotidning

57 resultat



Q7573451



Q23762128

<http://zone47.com/crotos/dwynwen/>

The Wikimedia projects as a channel

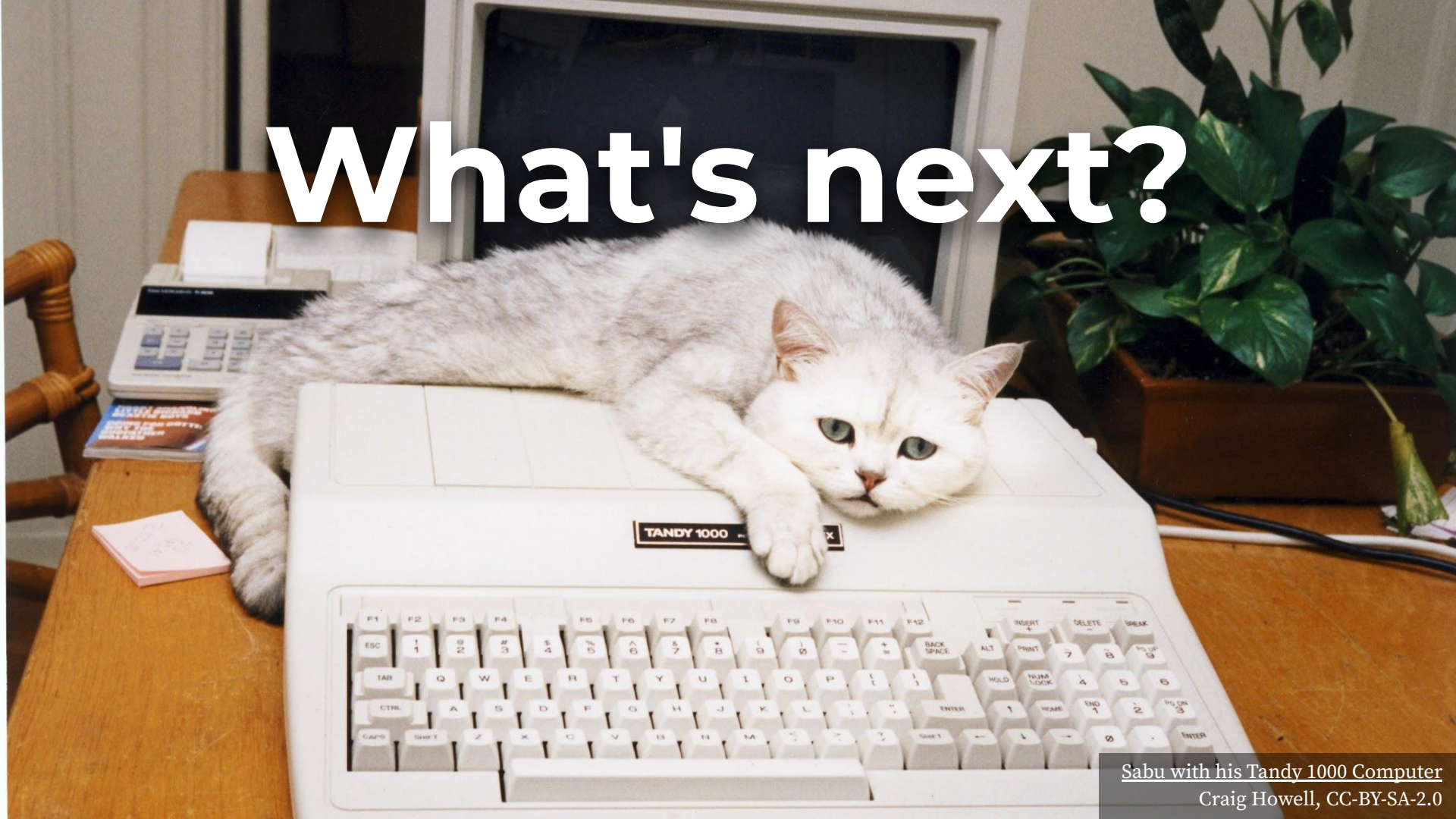
When an artwork is on Wikipedia, the readers are one click away from learning more about its context and about the collection it belongs to.

The Association of Swedish museums reports that in 2020, Wikipedia was an important channel for several institutions.

14 museums received in total 174 million views to "their" files on Wikipedia.

<https://www.sverigesmuseer.se/wp/wp-content/uploads/2021/01/Rapporten-Museibes%C3%B6k-en-2020.pdf>

What's next?



[Sabu with his Tandy 1000 Computer](#)

Craig Howell, CC-BY-SA-2.0

Controlled vocabularies and Wikidata

There are lots of terminologies, authorities and other types of controlled vocabularies in use across GLAM institutions, which is a barrier to discovery and analysis of cultural heritage data.

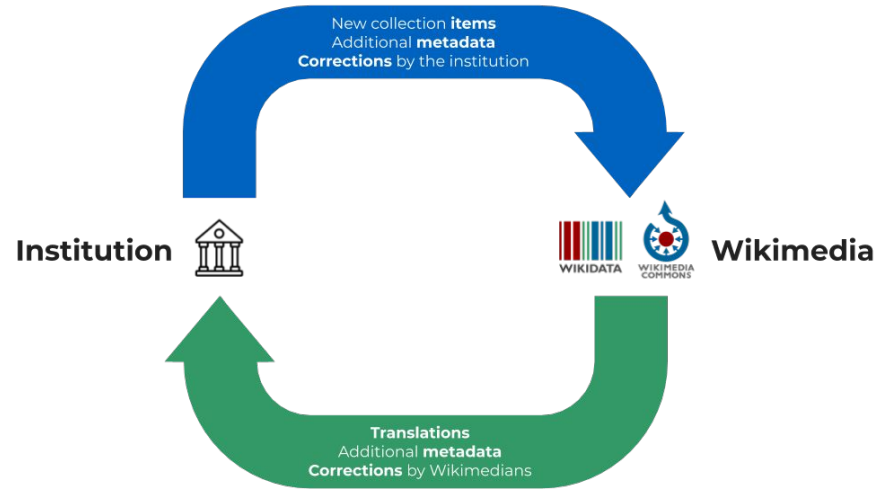
Wikidata has a lot of potential as a hub. By linking an item in an institution's vocabulary to its corresponding Wikidata item, you indirectly create links to corresponding entries in other vocabularies.

KulturNav (kulturnav.org) allows its users to define equivalent terms in other vocabularies, and it encourages editors to link to corresponding Wikidata items.

Data Roundtripping

A process to ingest the changes people have made on the Wikimedia projects back into the institutional database that data originated from.

There's a growing interest in recognizing these contributions.



Data Roundtripping

The Swedish National Heritage Board has investigated the potential for data roundtripping among some institutions, including Musikverket, Nationalmuseum and Nordiska museet.

[Wikimedia Commons Data Roundtripping - Final report \(2019\).](#)

Can we trust crowdsourced data?



Wikidata vs. local repositories

The larger Wikidata becomes, the more important is to reflect on its role in the cultural heritage knowledge ecosystem.

Can it contain everything? Can it replace local databases?

<https://www.wikidata.org/wiki/Wikidata:Notability>

Wikidata as a hub

Wikidata enables synergies between different data sources.

But it's still far from being complete, so when reusing the data, one should think about the biases and what conclusions we can make from the data.

90 million items is not that much!

Thank you!

wikimedia.se/engagera-dig

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