



Wikidata at the museum

Lowering thresholds for research with linked data
in Sweden

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Background

Wikimedia Sverige is the Swedish chapter of the Wikimedia Foundation – empowering organizations and individuals to use and contribute to open knowledge.

We work with universities, schools, libraries, archives, museums and more...



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Helping them understand Wikipedia, Wikimedia Commons, Wikidata, Wiktionary – the freely accessible, multilingual platforms that everyone around the world can use and improve.



Wikidata

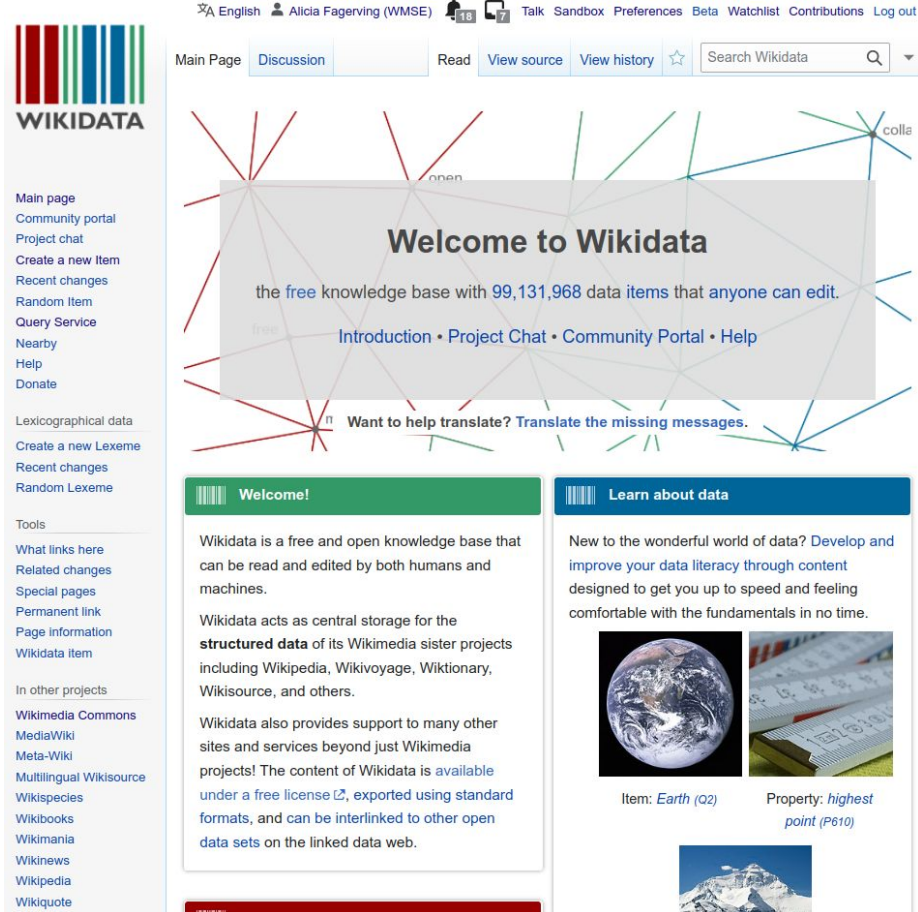
A free and open **database** that anyone can use and edit – under an open license.



Wikidata

A free and open **database** that anyone can use and edit – under an open license.

It's **big!** Almost 100 million items.



The screenshot shows the Wikidata main page. At the top, there is a navigation bar with links for 'Main Page', 'Discussion', 'Read', 'View source', and 'View history'. A search box is located on the right. Below the navigation bar is a large central banner with the text 'Welcome to Wikidata' and 'the free knowledge base with 99,131,968 data items that anyone can edit.' Below the banner are links for 'Introduction', 'Project Chat', 'Community Portal', and 'Help'. There is also a link for 'Want to help translate? Translate the missing messages.' Below the banner are two columns of text. The left column is titled 'Welcome!' and contains three paragraphs of text. The right column is titled 'Learn about data' and contains a paragraph of text. Below the text are two images: a globe and a stack of papers. Below the images are labels for 'Item: Earth (Q2)' and 'Property: highest point (P610)'. At the bottom of the page is a red banner with the text 'Get involved'.

Wikidata

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

Lexicographical data
Create a new Lexeme
Recent changes
Random Lexeme

Tools
What links here
Related changes
Special pages
Permanent link
Page information
Wikidata item

In other projects
Wikimedia Commons
MediaWiki
Meta-Wiki
Multilingual Wikisource
Wikispecies
Wikibooks
Wikimania
Wikinews
Wikipedia
Wikiquote

Main Page Discussion Read View source View history Search Wikidata

Welcome to Wikidata

the free knowledge base with 99,131,968 data items that anyone can edit.

Introduction • Project Chat • Community Portal • Help

Want to help translate? Translate the missing messages.

Welcome!

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

Wikidata acts as central storage for the **structured data** of its Wikimedia sister projects including Wikipedia, Wikivoyage, Wiktionary, Wikisource, and others.

Wikidata also provides support to many other sites and services beyond just Wikimedia projects! The content of Wikidata is available under a free license [\[1\]](#), exported using standard formats, and can be interlinked to other open data sets on the linked data web.

Learn about data

New to the wonderful world of data? Develop and improve your data literacy through content designed to get you up to speed and feeling comfortable with the fundamentals in no time.

Item: Earth (Q2)

Property: highest point (P610)

Get involved

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Wikidata

Item [Discussion](#) [Read](#) [Labels list](#) [View history](#) [More](#)

KBR (Q383931)

National Library of Belgium [edit](#)
Royal Library of Belgium

[In more languages](#)

Language	Label	Description	Also known as
English	KBR	National Library of Belgium	Royal Library of Belgium
Danish	KBR	Belgiens nationalbibliotek	Koninklijke Bibliotheek ... Bibliothèque royale de ...
German	KBR	Königliche Nationalbibliothek von Belgien	Königlichen Bibliothek ...
Spanish	Biblioteca Real de Bélgica	No description defined	Biblioteca Real de Belg...
Finnish	Belgian kuninkaallinen kirjasto	No description defined	
Polish	Biblioteka Królewska Belgii	biblioteka narodowa Belgii	Biblioteka Narodowa B...
Russian	Королевская библиотека Бельгии	библиотека	
Swedish	No label defined	No description defined	

[All entered languages](#)

Statements

instance of [national library](#) [edit](#)

[0 references](#) [+ add reference](#)

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Recent changes

Track the most recent changes to the wiki on this page.

[Other review tools](#) ▾

Active filters

[Human \(not bot\)](#) × [Page edits](#) × [Page creations](#) × [Logged actions](#) ×

☰ Filter changes (use menu or search for filter name)

▶ [Live updates](#)

🔄 [View new changes since 08:43, 6 September 2022](#)

6 September 2022

- ▶ 08:43 [idiotisme \(L701117\)](#) (2 changes | history) .. **(+3,342)** .. [\[Jon Harald Søby \(2×\)\]](#)
- 08:43 [TYC 4019-3136-1 \(Q81234664\)](#) (diff | hist) .. **(+103)** .. [Renamerr \(talk | contribs\)](#) *(Added [uk] description: зоря в сузір'ї Кассіопеї, batch #97243)* (Tag: [quickstatements](#) [2.0])
- 08:43 [HD 236458 \(Q86271176\)](#) (diff | hist) .. **(+103)** .. [Renamerr \(talk | contribs\)](#) *(Added [uk] description: зоря в сузір'ї Кассіопеї, batch #97244)* (Tag: [quickstatements](#) [2.0])
- ▶ 08:43 [Yumi Katsura \(Q11536843\)](#) (2 changes | history) .. **(+160)** .. [\[Yxe:h \(2×\)\]](#)
- 08:43 [TYC 8244-3025-1 \(Q90221963\)](#) (diff | hist) .. **(+101)** .. [Renamerr \(talk | contribs\)](#) *(Added [uk] description: #97237)* (Tag: [quickstatements](#) [2.0])
- 08:43 [TYC 4019-966-1 \(Q81240703\)](#) (diff | hist) .. **(+103)** .. [Renamerr \(talk | contribs\)](#) *(Added [uk] description: #97245)* (Tag: [quickstatements](#) [2.0])
- ✎ 08:43 [Valentin Osredkar \(Q113757817\)](#) (diff | hist) .. **(+4,225)** .. [Sporti \(talk | contribs\)](#) *(Created a new Item: № (#109640513))* (Tag: [Mix'n'match](#) [1.0])
- 08:43 [TYC 4023-676-1 \(Q81237916\)](#) (diff | hist) .. **(+103)** .. [Renamerr \(talk | contribs\)](#) *(Added [uk] description: #97245)* (Tag: [quickstatements](#) [2.0])
- 08:43 [TYC 4015-1575-1 \(Q81237897\)](#) (diff | hist) .. **(+103)** .. [Renamerr \(talk | contribs\)](#) *(Added [uk] description: #97245)* (Tag: [quickstatements](#) [2.0])
- 08:43 [\[SPD2011\] 21753 \(Q67680071\)](#) (diff | hist) .. **(+88)** .. [Nikosguard \(A\) \(talk | contribs\)](#) *(Added [el] description: ...)*

List of abbreviations:

- r This edit may have reverted the page.
- N This edit created a new page.
- m This is a minor edit.
- b This edit was performed by a bot.
- ! This edit has not yet been reviewed.
- (±123) The page size changed by ±123 bytes.
- 👁 Temporarily watched.

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It's **collaborative!** Edited by thousands of people all around the world.

It's **human-** and **machine-readable!** Welcoming researchers and developers to analyze, re-use and build tools utilizing the data.

```
{
  - entities: {
    - Q383931: {
      pageid: 365290,
      ns: 0,
      title: "Q383931",
      lastrevid: 1687723477,
      modified: "2022-07-25T09:28:55Z",
      type: "item",
      id: "Q383931",
    - labels: {
      - es: {
        language: "es",
        value: "Biblioteca Real de Bélgica"
      },
      - be: {
        language: "be",
        value: "Каралеўская бібліятэка Бельгii"
      },
      - en: {
        language: "en",
        value: "KBR"
      },
      - fi: {
        language: "fi",
        value: "Belgian kuninkaallinen kirjasto"
      },
      - fr: {
        language: "fr",
        value: "KBR"
      },
      - it: {
        language: "it",
        value: "Biblioteca reale del Belgio"
      },
      - la: {
        language: "la",
        value: "KBR"
      },
      - nl: {
        language: "nl",
        value: "KBR"
      },
      - ru: {
        language: "ru",
        value: "Королевская библиотека Бельгии"
      },
      - uk: {
        language: "uk",
        value: "Королівська бібліотека Бельгii"
      },
      - pl: {

```


All structured and linked

Most importantly, Wikidata is a repository of highly structured, **Linked Open Data**.

This makes the data easy to re-use, query and analyze.

Check out the example queries on <https://query.wikidata.org/>

The image shows a Wikidata profile for Douglas Adams (Q42) with several annotations. The profile includes a label, a description, and a list of statements. The 'educated at' statement is highlighted with a purple box, and its value 'St John's College' is highlighted with an orange box. The 'end time' and 'academic degree' are highlighted with a blue box. The '2 references' section is highlighted with a red box, and the 'Brentwood School' statement is highlighted with a red box. The '0 references' section is highlighted with a red box. The 'opened references' section is highlighted with a red box. The 'collapsed reference' section is highlighted with a red box. The 'property' label is highlighted with a purple box. The 'rank' label is highlighted with a grey box. The 'statement group' label is highlighted with a green box. The 'item identifier' label is highlighted with a grey box. The 'aliases' label is highlighted with a grey box. The 'value' label is highlighted with an orange box. The 'qualifiers' label is highlighted with a blue box. The 'opened references' label is highlighted with a red box. The 'collapsed reference' label is highlighted with a red box.

label — Douglas Adams (Q42) — item identifier

description — English writer and humorist
Douglas Noël Adams | Douglas Noel Adams — aliases
▶ In more languages

property — educated at — value

rank —

statement group —

value — St John's College

qualifiers —
end time 1974
academic major English literature
academic degree Bachelor of Arts
start time 1971

opened references —
▼ 2 references
stated in Encyclopædia Britannica Online
reference URL http://www.nndb.com/people/731/000023662/
original language of work English
retrieved 7 December 2013
publisher NNDB
title Douglas Adams (English)
+ add reference

collapsed reference —
Brentwood School
end time 1970
start time 1959
▶ 0 references
+ add (statement)

Users and creators

Thousands of volunteers all around the world.

Large scale imports of freely licensed data.

Museums, archives and libraries can contribute – and benefit.



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Two Swedish museums:

- **Nationalmuseum** (art museum)
- **Statens Historiska Museer** (history museum)

with a keen interest in the Wikimedia platforms.

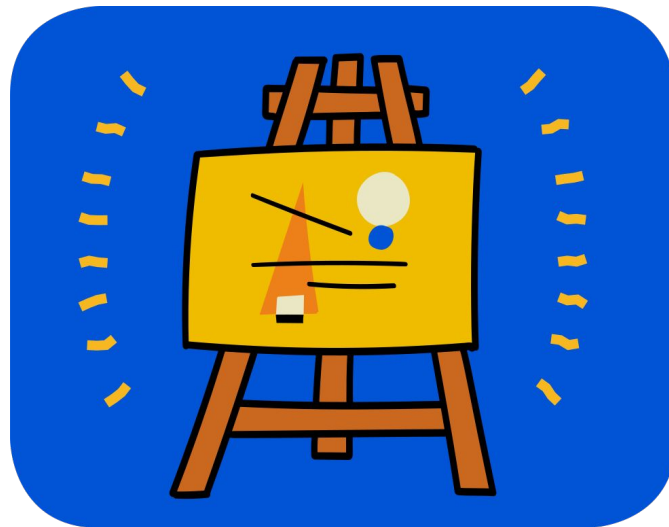


Working together

Usable authorities for data-driven cultural heritage research

Investigate whether vocabularies as Linked Data stimulate new data-driven research on museum collections and whether Wikidata is a suitable platform for linking different authority files and vocabularies.

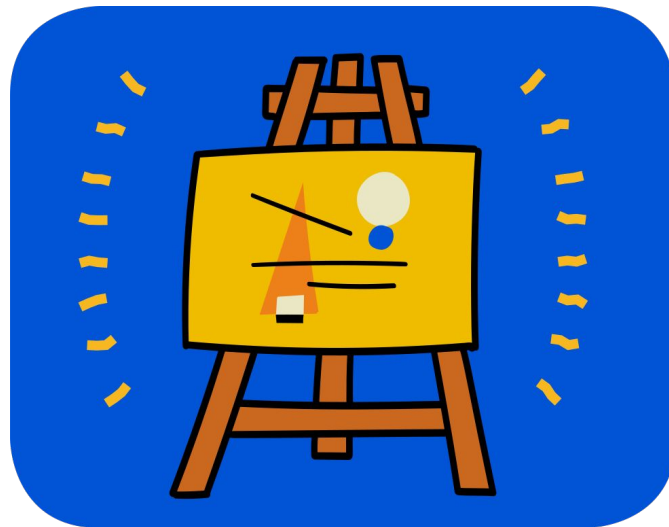
The project is financed by the Swedish National Heritage Board (Riksantikvarieämbetet).



Working together

Two main parts:

- Upload the data about the people, objects, events in the museums' authority files to Wikidata
- Visualise that data to make it interesting, show connections – to see whether the use of Wikidata can stimulate new data-driven research

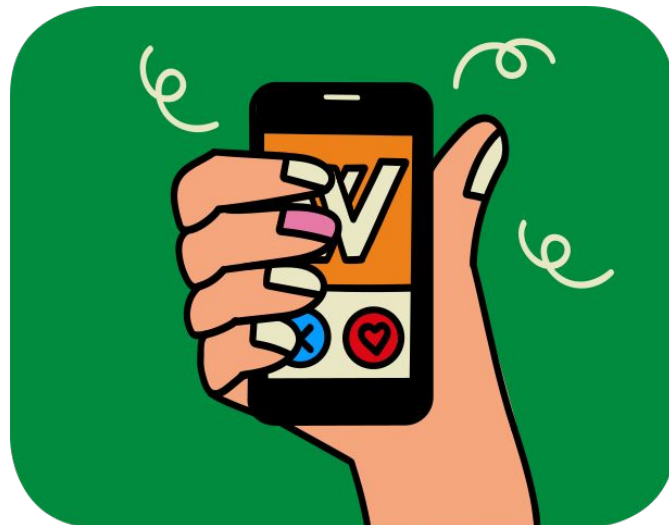


Welcome to Wikidata!

A small project group with some previous knowledge of Wikipedia, Wikimedia Commons.

Our role: training, ongoing support, providing the right tools...

- How does Wikidata work?
- How are different types of items modeled?
- Querying with SPARQL
- Mass editing with OpenRefine



A crucial tool

OpenRefine is an **open-source** data wrangling application.

- Analyze your data!
- Clean it up!
- Reconcile it with Wikidata items!
- Upload it to Wikidata!

It's being actively developed and has extensive documentation – so the effort to learn it pays off in the long term.

LA (code)	EstablishmentN	EstablishmentName	TypeOfEstablish
383	8011	Leeds College of Music Choose new match	Higher education institutions
383	8151	Leeds College of Art Choose new match	Higher education institutions
879		Plymouth College of Art Choose new match	Higher education institutions
908	8151	Falmouth University Choose new match	Higher education institutions
919		University of Hertfordshire Choose new match	Higher education institutions
330		University of Birmingham Choose new match	Higher education institutions
330		University College Birmingham Choose new match	Higher education institutions
330		Newman University, Birmingham <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Newman University (76) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Create new item Search for match	Higher education institutions
330		Aston University Choose new match	Higher education institutions
330		Birmingham City University Choose new match	Higher education institutions



OpenRefine

Clean it up...

OpenRefine turned out to be a great tool to work with the museums' data **internally** and prepare it for a Wikidata sync.

- Discover posts with missing data
- Clean up duplicate posts
- The project gave us opportunity and time to get an overview of what's exactly in there



 Geografi

Molkom

Typ	Plats
Vidare term	Europa/Sverige/Värmland/Nyed socken
Externa källor	https://www.wikidata.org/wiki/Q1814865

 Personer och institutioner

Brusnitsyn, Pavel Lvovotj

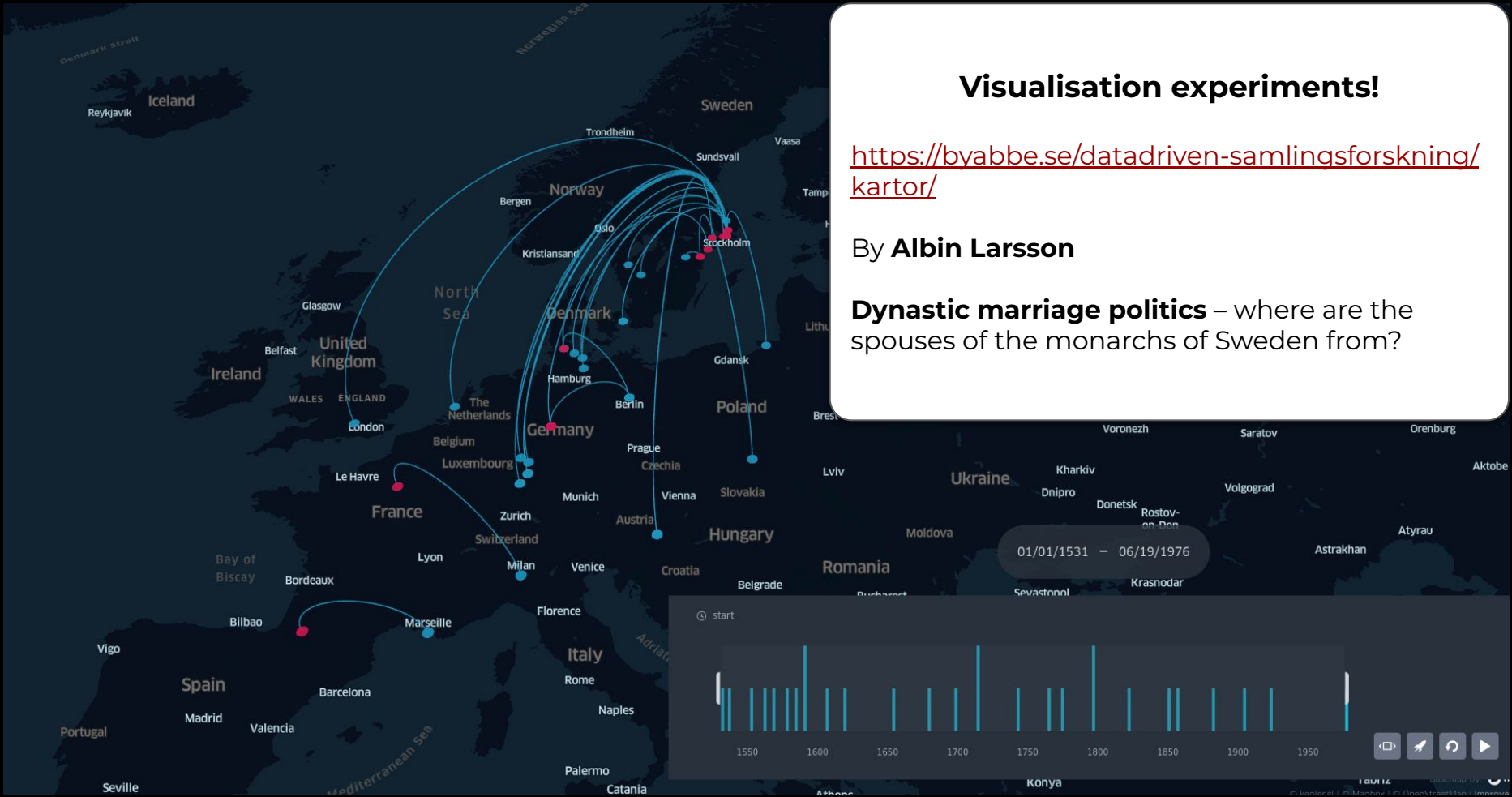
Förnamn	Pavel Lvovotj
Efternamn	Brusnitsyn
Födelsedatum	1816
Dödsdatum	1871
Yrke/verksamhet	Medaljkonstnär
Externa källor	https://www.wikidata.org/wiki/Q117006791

Visualisation experiments!

<https://byabbe.se/datadriven-samlingsforskning/kartor/>

By **Albin Larsson**

Dynastic marriage politics – where are the spouses of the monarchs of Sweden from?



Gösta Florman

Nationalmuseum, 5 av 5



Statens historiska museer, 5 av 38



Visualisation experiments!

<https://byabbe.se/datadriven-samlingsforskning/jamforelse/>

By **Albin Larsson**

Comparison – works by an artists in the collections of the two museums

Skills involved

- SPARQL
- GREL
- Wikidata structure
- Wikidata community norms
 - how to create a property?
 - what are the notability criteria?
 - who can delete items?
 - how to discuss with others?



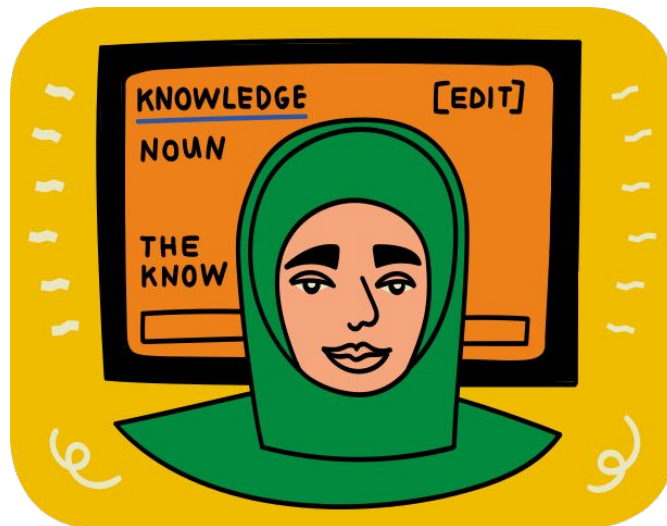
Why?

Wikidata is an important part of the modern LOD landscape – a **hub** where data from many sources comes together.

An institution can benefit from the work of the global community to verify and **enrich** their own authority posts.

In-house **Wikidata expertise** benefits the institution in the long term and can be shared with others.

Supporting **free and open knowledge** is always right!



Thank you for your attention!

Get in touch with us:

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