

Wikidata at the museum

lowering thresholds for research with linked data
in Sweden

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Linked data and international
standards for cultural heritage
2022-09-14

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

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



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



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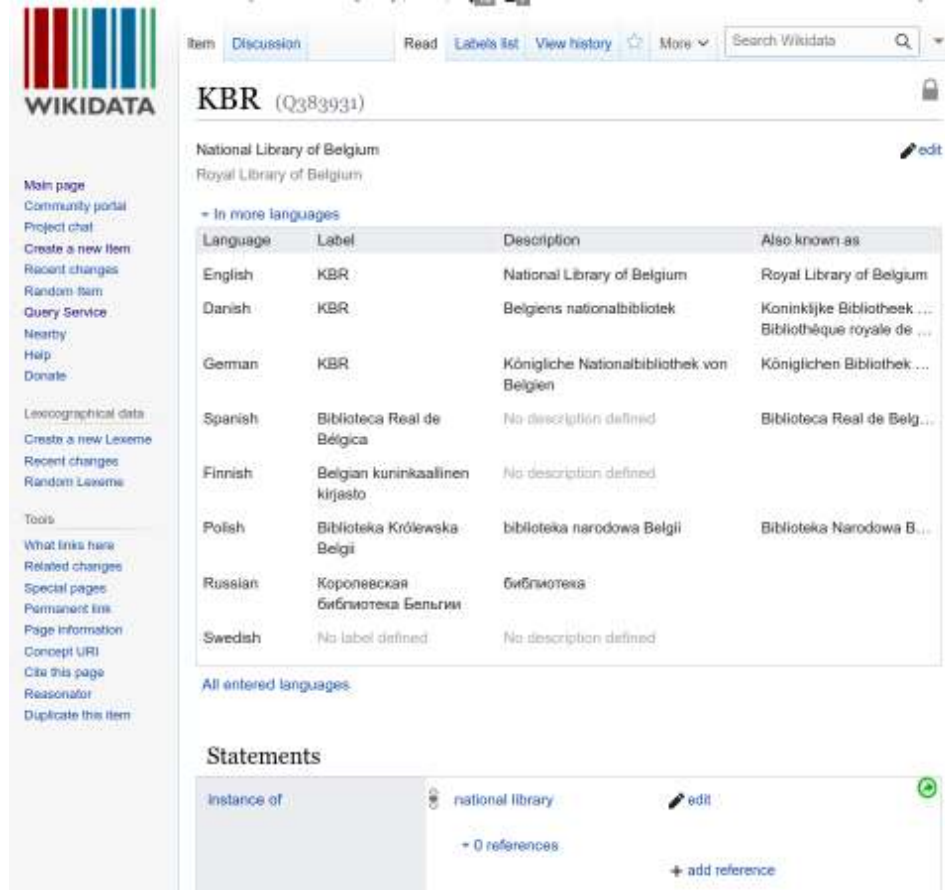
The screenshot shows the Wikidata main page. At the top, there's a navigation bar with links for 'Main Page', 'Discussion', 'Read', 'View source', 'View history', and a search box. The Wikidata logo is prominently displayed. A large central banner reads 'Welcome to Wikidata' and states 'the free knowledge base with 99,131,968 data items that anyone can edit.' Below this, there are links for 'Introduction', 'Project Chat', 'Community Portal', and 'Help'. A secondary banner asks 'Want to help translate? Translate the missing messages.' The left sidebar contains various utility links like 'Main page', 'Community portal', 'Project chat', 'Create a new item', 'Recent changes', 'Random item', 'Query Service', 'Nearby', 'Help', and 'Donata'. Below these are sections for 'Lexicographical data', 'Tools', 'What links here', 'Special pages', 'Permanent link', 'Page information', 'Wikidata item', and 'In other projects'. The main content area has two columns: 'Welcome!' and 'Learn about data'. The 'Welcome!' section explains that Wikidata is a free and open knowledge base that acts as central storage for structured data across Wikimedia projects. The 'Learn about data' section introduces new users to data literacy and includes images of Earth and a document with the caption 'Item: Earth (Q2)' and 'Property: highest point (P60)'. At the bottom, the Wikimedia Sverige logo is visible.

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Wikidata

Item Discussion Read Labels list View history More Search Wikidata

KBR (Q383931)

National Library of Belgium
Royal Library of Belgium


[edit](#)

[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](#) (Q81234864) (diff | hist) .. (+103) .. [Renamerr](#) (talk | contribs) *(Added [uk] description: αρχή η κυρία? Κασσιανή, batch #97243)* (Tag: [quickstatements](#) [2.0])
- 08:43 [HD 236456](#) (Q86271176) (diff | hist) .. (+103) .. [Renamerr](#) (talk | contribs) *(Added [uk] description: αρχή η κυρία? Κασσιανή, batch #97244)* (Tag: [quickstatements](#) [2.0])
- ▶ 08:43 [Yumi Katsura](#) (Q11536843) (2 changes | history) .. (+160) .. [Yxeh (2×)]
- 08:43 [TYC 8244-3025-1](#) (Q90221983) (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](#) (Q81237887) (diff | hist) .. (+103) .. [Renamerr](#) (talk | contribs) *(Added [uk] description: #97245)* (Tag: [quickstatements](#) [2.0])
- 08:43 [\[SPD2011\] 21753](#) (Q87680071) (diff | hist) .. (+68) .. [Nikosguard](#) (A) (talk | contribs) *(Added [el] descrip*

List of abbreviations:
r This edit may have been reverted.
N This edit created a new item.
m This is a minor edit.
b This edit was performed by a bot.
! This edit has not yet been checked.
(±123) The page size change was ±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 Бельгіі"
        },
        - 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 Бельгії"
        },
        - 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 various parts annotated. The profile includes a label, description, aliases, and a list of statements. The 'educated at' statement is expanded to show details like end time, academic major, academic degree, and start time. It also shows references to other Wikidata items, such as 'Encyclopædia Britannica Online' and 'Brentwood School'.

Annotations:

- label: Douglas Adams (Q42)
- item identifier: (Q42)
- description: English writer and humorist
- aliases: Douglas Noël Adams | Douglas Noel Adams
- property: educated at
- value: St John's College
- qualifiers: end time (1974), academic major (English literature), academic degree (Bachelor of Arts), start time (1971)
- rank: (indicated by a small icon)
- statement group: (indicated by a green box)
- opened references: (indicated by a red box around the Britannica reference)
- collapsed reference: (indicated by a red box around the Brentwood School reference)

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



Beskow, August

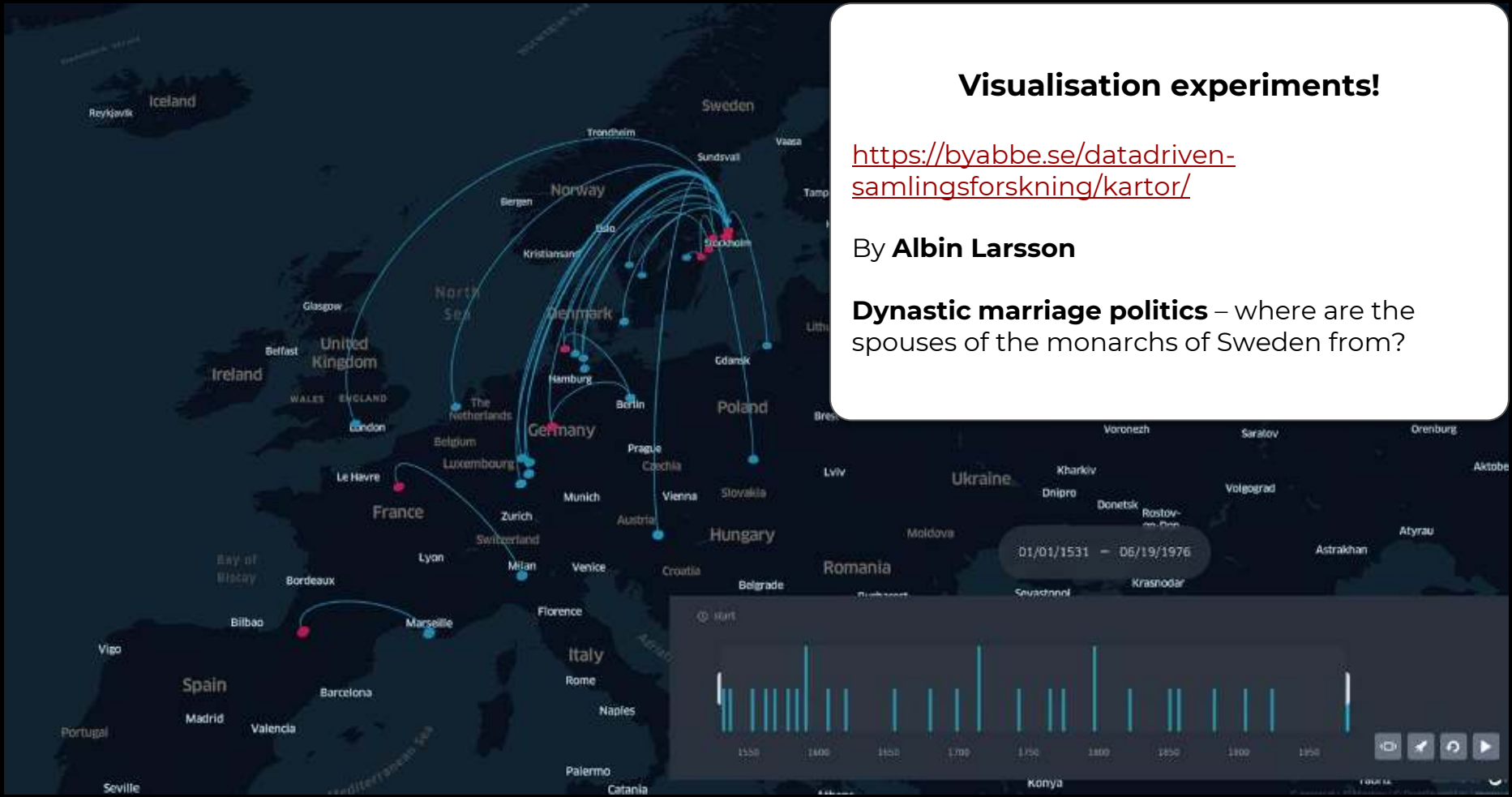
Förmamn	August
Efteramn	Beskow
Födelsedatum	1880
Dödsdatum	1946
Yrke/verksamhet	Ämbetsman
Externa källor	http://www.wikidata.org/entity/Q5574680

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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