

# An introduction to Wikidata for sharing and visualising cultural heritage resources

DSDH-17

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# Overview

- Introduction to Wikidata
- Wikimedia Commons
- Identifier properties
- Wikipedia integration
- Data visualisations



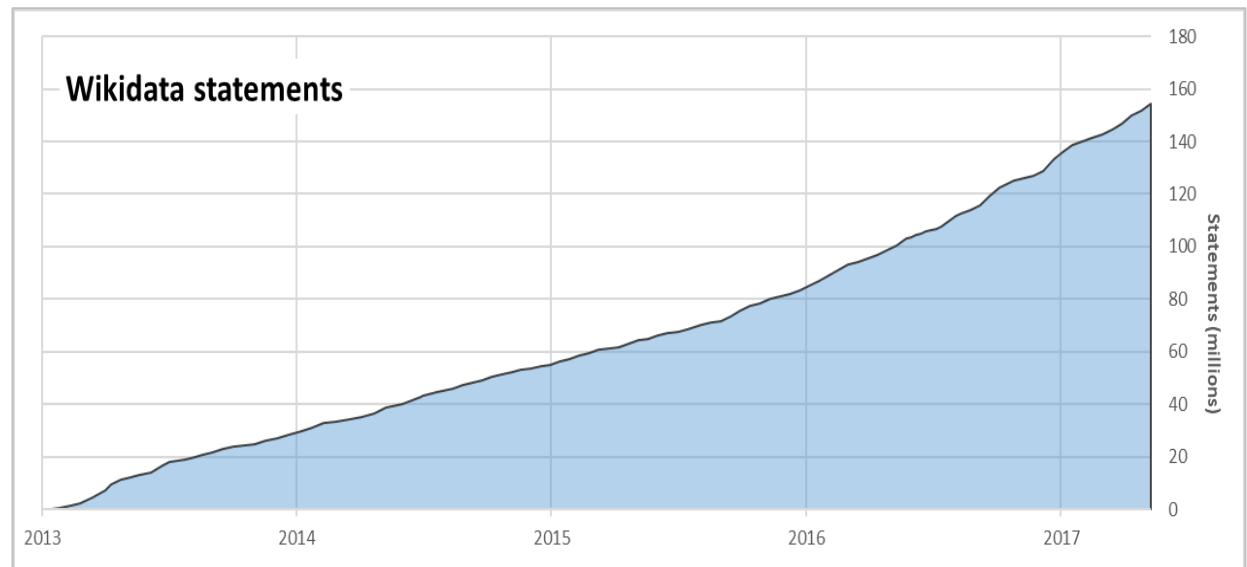
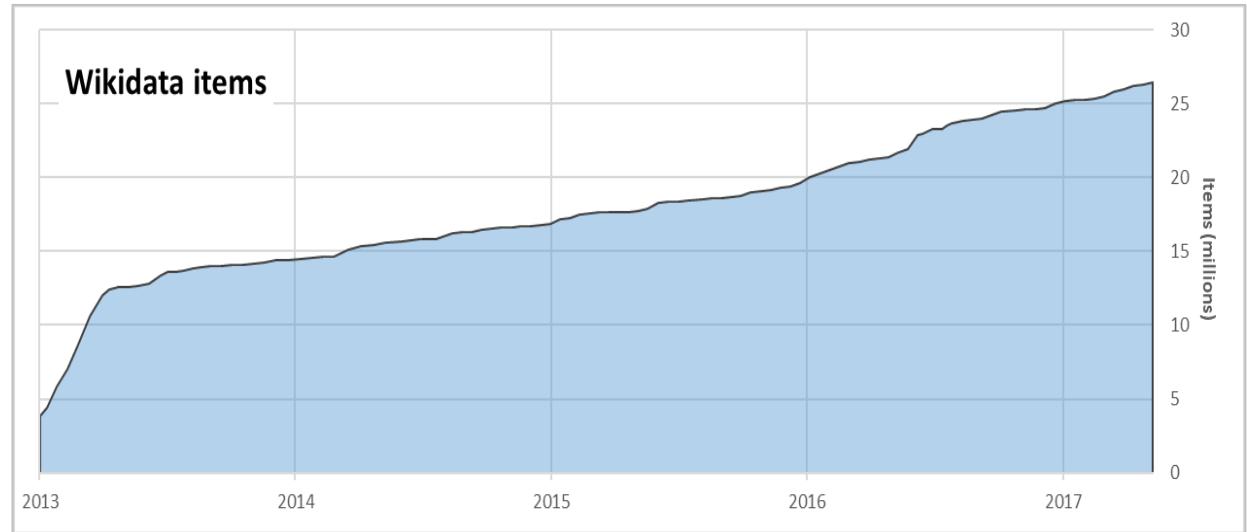
# What is Wikidata?

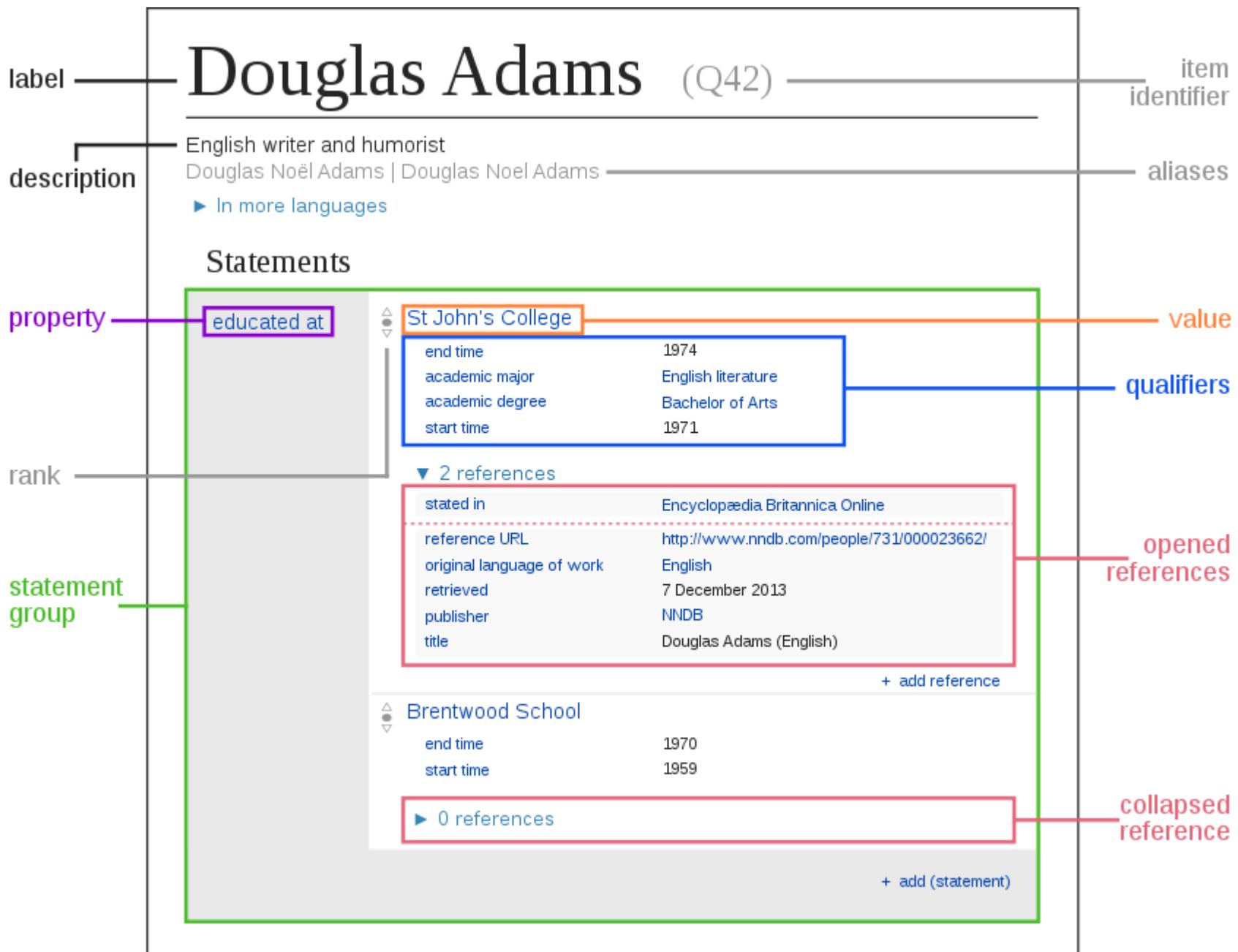


- Collaboratively-created, multilingual knowledge base
- Structured data – machine readable
- Free – released under the public domain waiver (CC0)
- Linked to other database – provides authority control
- Secondary database – sources and references

# A few statistics

- 26,418,299 items
  - Described by
- 151,714,968 statements
  - Including
- 87,833,765 item link statements
- 6,254,956 time statements
- 3,347,070 geographic coordinate statements

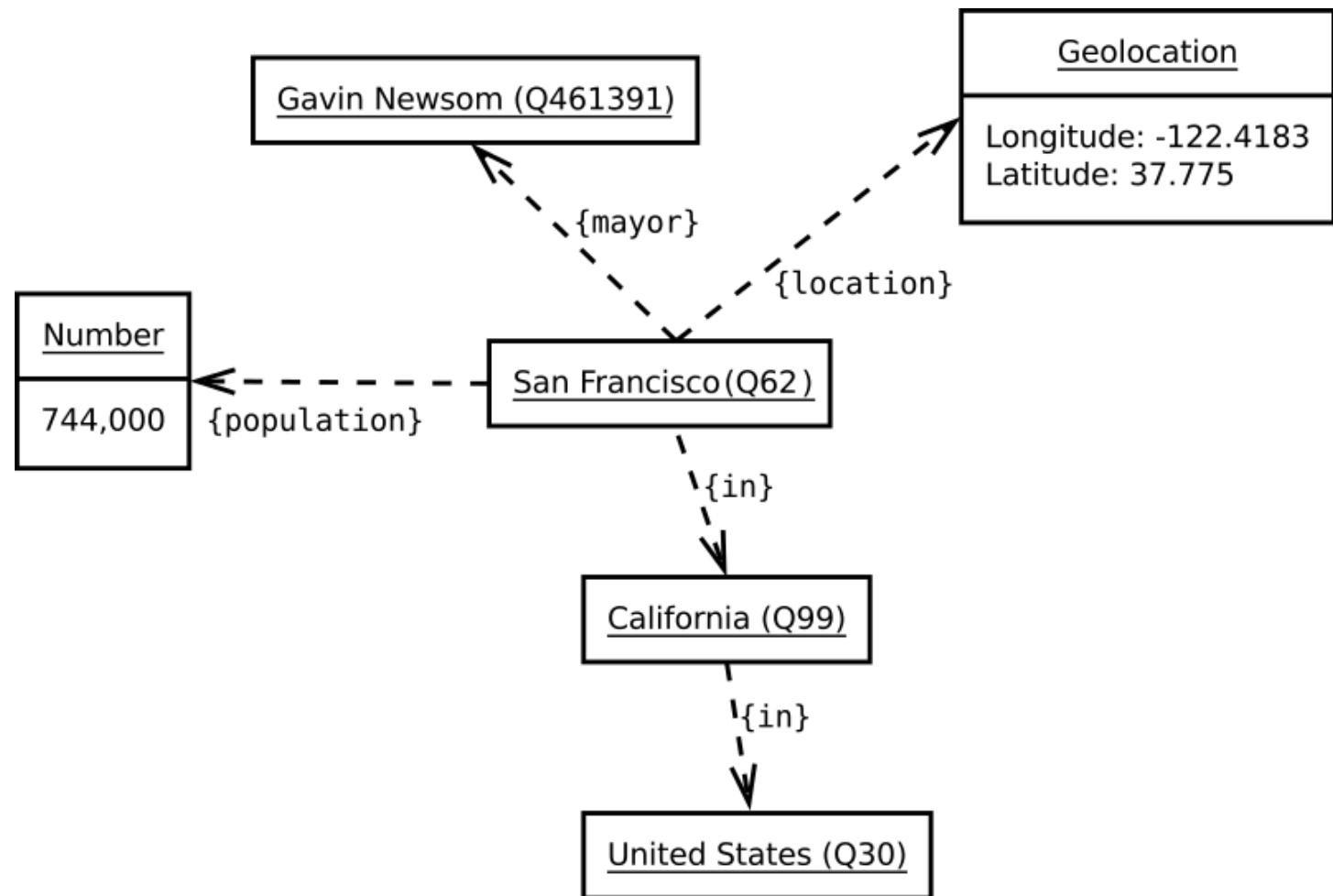




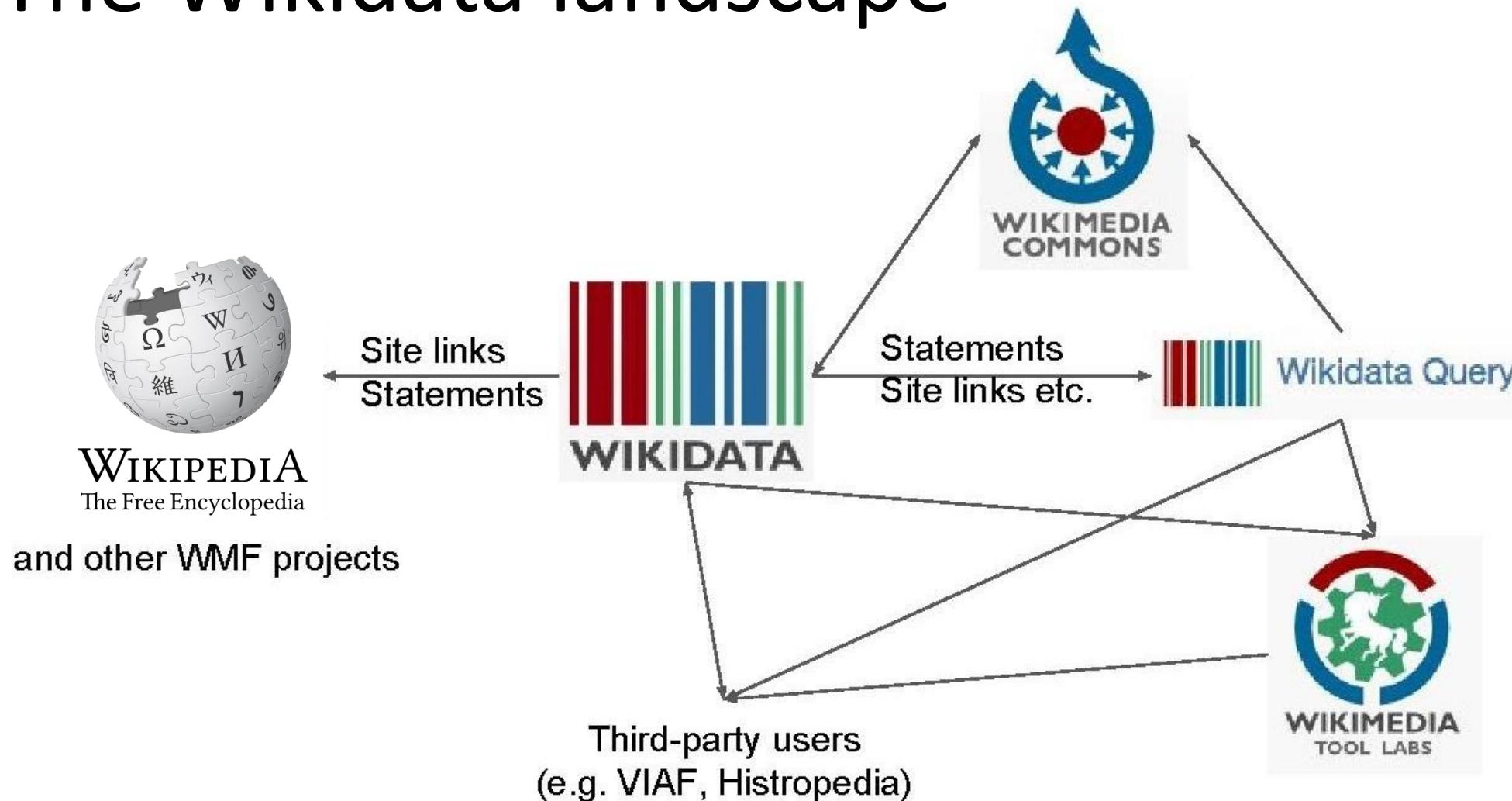
# Linked data

San Francisco is linked to:

- Items
- Geolocation
- Number



# The Wikidata landscape



Adapted from image by Magnus Manske (Own work) [CC BY-SA 4.0 (<http://creativecommons.org/licenses/by-sa/4.0>)], via Wikimedia Commons ([https://commons.wikimedia.org/wiki/File:MediaWiki\\_talk,\\_Bern,\\_2017-02-04,\\_Magnus\\_Manske.pdf](https://commons.wikimedia.org/wiki/File:MediaWiki_talk,_Bern,_2017-02-04,_Magnus_Manske.pdf))

# Wikimedia Commons



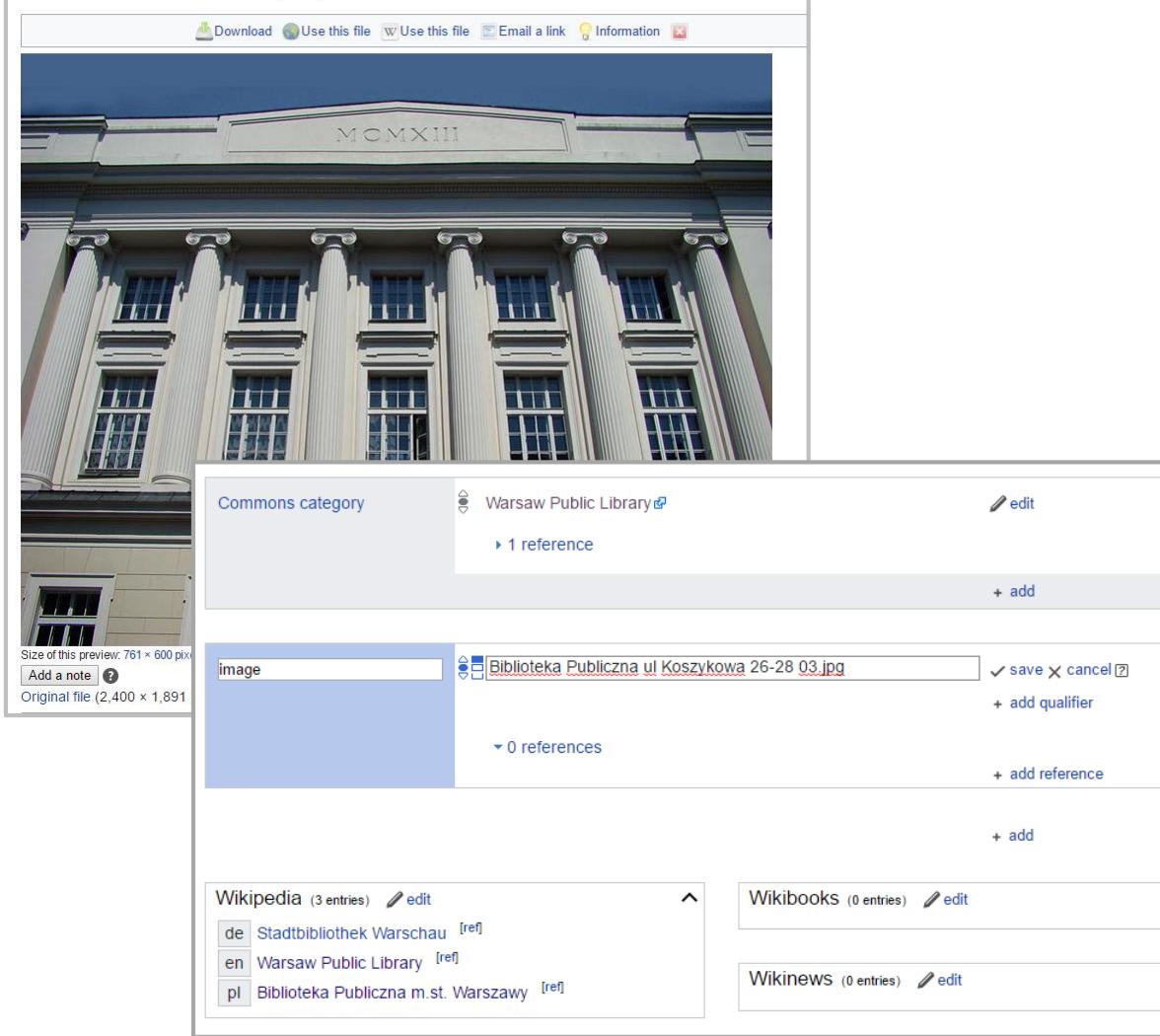
- Media file repository
- Images, sound and video clips
- Public domain and freely-licensed content
- 40 million+ files

Commons category page view stats		
Category	Months	Total views
Library of Congress	80	20,418,257,016
German Federal Archive	82	9,223,304,361
British Museum	82	3,277,464,429
Imperial War Museum	34	3,089,142,437
British Library	63	1,517,505,991
National Library of Wales	35	274,839,662

# Images in Wikidata

File:Biblioteka Publiczna ul Koszykowa 26-28 03.jpg

From Wikimedia Commons, the free media repository

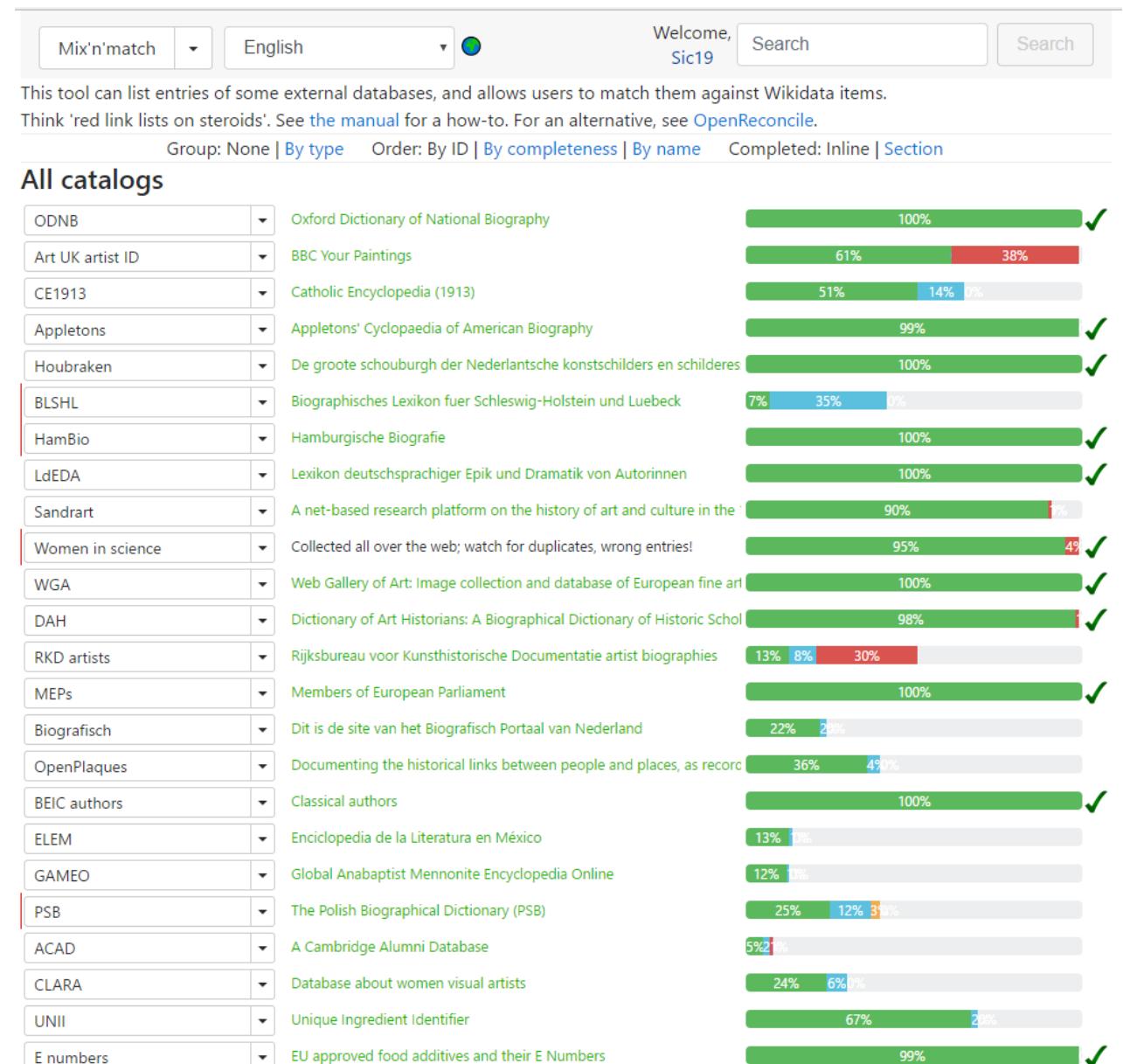


## Image (P18)

- flag image (P41)
- coat of arms image (P94)
- signature image (P109)
- logo image (P154)
- seal image (P158)
- locator map image (P242)
- scanned file on Wikimedia Commons (P996)
- image of grave (P1442)
- monogram (P1543)
- detail map (P1621)
- place name sign (P1766)
- commemorative plaque image (P1801)
- service ribbon image (P2425)
- sectional view (P2713)
- collage image (P2716)
- sheet music (P3030)
- plan image (P3311)
- film poster (P3383)
- nighttime view (P3451)
- shield image (P4004)

# Mix'n'Match

- 480 external catalogues
- Match identifiers with Wikidata items
- Identifiers are added to item pages – creating link to external information
- Semi and fully automatic matching
- Manual matching - browsing and searching
- Download matched records



# Warsaw Public Library

- Matched with ISNI
- ISNI (P213) identifier property added to Wikidata
- Link from Wikidata to ISNI is created
- ISNI is linked to authority files, including VIAF
- Authority files can be added to Wikidata
- Wikidata will appear in VIAF

The screenshot shows the Wikidata search interface. At the top, there are dropdown menus for 'Mix'n'match' and 'English', and a language selector with a globe icon. To the right are links for 'Welcome, Sic19', 'Warszawy biblioteka', and a 'Search' button. Below the header is a search bar containing 'Warszawy biblioteka', with a 'Search' button and an 'Exclude catalogs from search' link. The main area displays search results for 'Biblioteka na Koszykowej'. The results are listed in rows, each with a title, description, and status indicators ('Not matched', 'Set Q | New item | N/A', or 'By Sic19'). There are also 'Remove' links for certain entries.

# ISNI:	Description	Status
<b>Biblioteka Publiczna m st Warszawy Biblioteka Glowna Wojewodztwa Mazowieckiego</b>	Biblioteka na Koszykowej; Warszawa, , PL; www.biblpubl.waw.pl	Not matched
<b>Biblioteka Publiczna m st Warszawy Biblioteka Glowna Wojewodztwa Mazowieckiego</b>	Search Wikidata   Search en.wikipedia   Google-search Wikipedias   Google-search Wikidata	Set Q   New item   N/A
<b>Biblioteka Publiczna m st Warszawy Biblioteka Glowna Wojewodztwa Mazowieckiego</b>	Warszawa, PL, http://www.biblpubl.waw.pl/	Not matched
<b>Biblioteka Publiczna w Dzielnic Ochota m st Warszawy</b>	Search Wikidata   Search en.wikipedia   Google-search Wikipedias   Google-search Wikidata	Set Q   New item   N/A
<b>Biblioteka Publiczna w Dzielnic Ochota m st Warszawy</b>	District Public Library in Warsaw Ochota; Warszawa, , PL; bpochota.waw.pl	By Sic19
<b>Ochota District Public Library [Q9170863]</b>	Public library in Warsaw, Poland; library in Warsaw, Poland	Remove
<b>Biblioteka Publiczna w Dzielnic Targówek m st Warszawy</b>	Biblioteka Publiczna w Dzielnic Targówek m st Warszawy; Warszawa, , PL; www.multibiblioteka.waw.pl	Not matched
<b>Biblioteka Publiczna w Dzielnic Ochota m st Warszawy</b>	Search Wikidata   Search en.wikipedia   Google-search Wikipedias   Google-search Wikidata	Set Q   New item   N/A
<b>Biblioteka Publiczna w Dzielnic Ochota m st Warszawy</b>	Warszawa, PL, http://bpochota.waw.pl/	By Sic19
<b>Ochota District Public Library [Q9170863]</b>	Public library in Warsaw, Poland; library in Warsaw, Poland	Remove

# VIAF (Virtual International Authority File)



- Aggregates authority control data from 45 institutions
- Includes personal and organisational names, works and their translations
- Creates a cluster record for each unique name with links to national authority records
- Links in Wikidata (and thus Wikipedia)
- One of most frequently accessed sources consumed by linked data services
- Over 1 million Wikidata items have a VIAF Identifier

**WIKIDATA**

VIAF identifier **34457918** 34457918 3 references

**WIKIPEDIA**  
The Free Encyclopedia

Authority control

WorldCat Identities · VIAF: 34457918 ·  
LCCN: n79081313 · ISNI: 0000 0001 2127 2257 ·  
GND: 118548018 · SELIBR: 205911 ·  
SUDOC: 026917688 · BNF: cb119071433 (data)

**维基百科**  
自由的百科全书

规范控制

WorldCat标识符 · VIAF: 34457918 · LCCN:  
n79081313 · ISNI: 0000 0001 2127 2257 · GND:  
118548018 · SELIBR: 205911 · SUDOC:  
026917688 · BNF: cb119071433 (数据)



WIKIPEDIA  
The Free Encyclopedia

# National Library of Poland

From Wikipedia, the free encyclopedia

Coordinates: 52°12'52"N 21°00'16"E

The **National Library of Poland** (Polish: *Biblioteka Narodowa*) is the central Polish library, subject directly to the Ministry of Culture and National Heritage of the Republic of Poland.

The library collects books, journals, electronic and audiovisual publications published in the territory of Poland, as well as Polonica published abroad. It is the most important humanities research library, the main archive of Polish writing and the state centre of bibliographic information about books. It also plays a significant role as a research facility and is an important methodological center for other Polish libraries.

The National Library receives a copy of every book published in Poland as [legal deposit](#). The [Jagiellonian Library](#) is the only other library in Poland to have a [national library](#) status.

## Contents [hide]

- 1 Organizational structure
- 2 History
- 3 Collections
- 4 See also
  - 4.1 Notes
  - 4.2 References
- 5 External links

## Organizational structure [edit]

There are three general sections:

- The Library
- The Bibliographic Institute of the Nation
- The Book and Readership Institute

## History [edit | edit source]

The National Library's history has origins in [Sobieski](#) which were obtained from his gra

**Biblioteka Narodowa**  
(National Library of Poland)



Type National library  
Established 1928 (89 years ago)  
[\(Imperial Public Library was](#)

## National Library of Poland (Q856423)

national library English

Configure

In more languages

Language Label Description Also known as

Language	Label	Description	Also known as
British English	National Library of Poland	No description defined	
English	National Library of Poland	national library	Biblioteka Narodowa National Library
Welsh	No label defined	No description defined	
French	Bibliothèque nationale de Pologne	No description defined	BN Biblioteka Narodowa

All entered languages

## Statements

instance of

national library

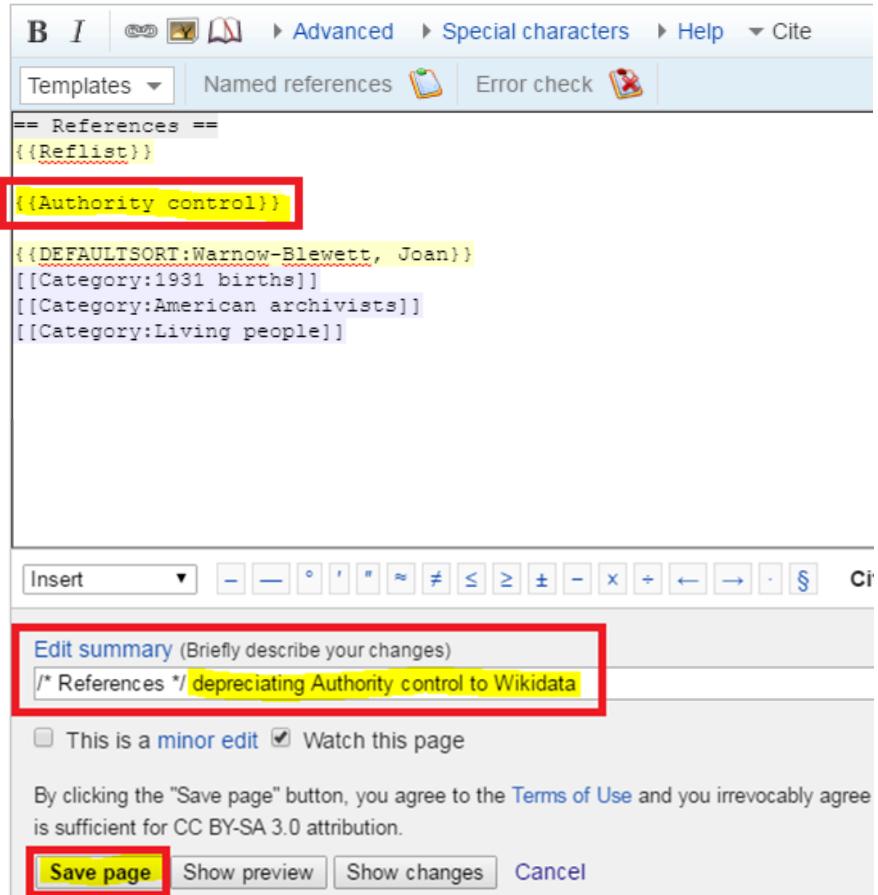
edit

► 1 reference

+ add

Wikipedia	(20 entries)	edit
be	Нацыянальная бібліятэка Польшчы	<a href="#">[ref]</a>
ca	Nacyana'l'naya bibliyatéka Pol'shchý	<a href="#">[ref]</a>
csb	Biblioteca Nacional de Polonia	<a href="#">[ref]</a>
de	Nationalbibliothek Warszawa	<a href="#">[ref]</a>
en	National Library of Poland	<a href="#">[ref]</a>
eo	Nacia Biblioteko de Polando	<a href="#">[ref]</a>
es	Biblioteca Nacional de Polonia	<a href="#">[ref]</a>
fa	کتابخانه ملی لهستان	<a href="#">[ref]</a>
fi	Puolan kansalliskirjasto	<a href="#">[ref]</a>
fr	Bibliothèque nationale (Pologne)	<a href="#">[ref]</a>
hy	Bibliothèque nationale (Pologne)	<a href="#">[ref]</a>
ka	Lithuanian National Library	<a href="#">[ref]</a>
ko	Lehast'ani azgajin gradaran	<a href="#">[ref]</a>
nl	Nationale Bibliotheek van Polen	<a href="#">[ref]</a>
pl	National Library of Poland	<a href="#">[ref]</a>
ru	Nacional'naya biblioteka Pol'schi	<a href="#">[ref]</a>

# {{Authority control}}



Add the following authority files from Wikidata:

- VIAF ID (P214)
- LCAuth identifier (P244)
- ISNI (P213)
- ORCID iD (P496)
- GND ID (P227)
- SELIBR (P906)
- SUDOC authorities (P269)
- BnF ID (P268)
- ULAN ID (P245)
- Biografisch Portaal number (P651)
- MusicBrainz artist ID (P434)
- NLA (Australia) ID (P409)
- NDL Auth ID (P349)
- BIBSYS ID (P1015)
- ResearcherID (P1053)
- RKDartists ID (P650)

Authority control WorldCat Identities · VIAF: 34457918 · LCCN: n79081313 · ISNI: 0000 0001 2127 2257 · GND: 118548018 · SELIBR: 205911 · SUDOC: 026917688 · BNF: cb119071433 (data) · MusicBrainz: d5efb3bf-4d84-4c70-a461-d8e3cdb4b755 · NLA: 35184852 · NDL: 00442914 · NKC: jn19990003328 · ICCU: IT\ICCU\CFIV\005337 · RLS: 000085041 · BNE: XX841477

# {{Infobox World Heritage Site}}



# Editing Venice

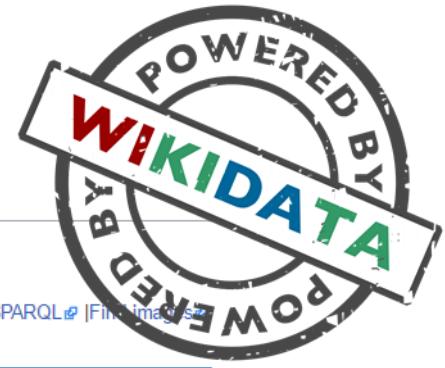
**B** *I* Advanced Special characters

Heading Format A+ A- A<sup>+</sup> A<sub>-</sub>

**[[Infobox World Heritage Site**  
|Name = Venice and its Lagoon  
|Image = [[File:Rialto Bridge Grand Canal.jpg|225px|]  
|State Party = Italy  
|Type = Cultural  
|Criteria = i, ii, iii, iv, v, vi  
|ID = 394  
|Region = [[List of World Heritage Sites in Europe|E]  
|Year = 1987  
|Session = 11th  
|Link = <http://whc.unesco.org/en/list/394>  
**}}**



# Listeria – Wikidata list template



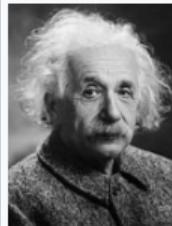
User:Sic19/authors of books burned in 1933

From Wikipedia, the free encyclopedia  
< User:Sic19

This list is automatically generated from data in Wikidata and is periodically updated by Listeribot.

Automatically update the list now! | SPARQL | Find images

**Edits made within the list area will be removed on the next update!**

image	name	description	occupation	date of birth	place of birth	date of death	place of death	archives at
	Maxim Gorky	Russian and Soviet writer	writer playwright novelist autobiographer diarist screenwriter journalist poet	1868-03-16	Nizhny Novgorod	1936-06-18	Gorki Leninskiye Moscow	University of Pennsylvania Libraries Library of Congress
	Albert Einstein	German-American physicist and founder of the theory of relativity	theoretical physicist philosopher of science inventor science writer educator university teacher professor physicist non-fiction writer	1879-03-14	Ulm	1955-04-18	Princeton	Swiss Literary Archives
	Walter Benjamin	German literary critic, philosopher and social critic (1892-1940)	philosopher writer translator essayist literary critic sociologist	1892-07-15	Berlin	1940-09-26	Portbou	National Library of Israel Museum of Modern Art

# Dynamic Wikidata lists

Dynamic Wikidata Lists   Create new list   About this tool   Text or Q number(s)   Find   Logged in as Sic19

## Libraries damaged during World War II

by Sic19 150 items in list Last update: 2017-06-26 00:17:05 Force list update Find images AutoList

Data View Columns Sections

Language : English [en]

Sectioning:  one table per section  one big table  tabbed

Update Save list Save list as

country	image	Label	located in the administrative territorial entity	instance of
Poland		Raczyński Library	Poznań	library
Poland		Załuski Library	Śródmieście	public library
Poland		National Library of Poland	Warsaw	national library
Poland		Central Judaic Library	Warsaw	library
Poland		Warsaw University Library	Warsaw	library college library
Poland		Ossolineum	Wrocław	publisher

# Reasonator – Douglas Adams

<https://tools.wmflabs.org/reasonator/?q=Q42&lang=en>

# Crotos

- Multilingual artwork browser
- Searches Wikidata
- Files from Commons
- Links to Wikipedia
- Filter artworks by type (e.g. painting, sculpture), time period, creator, institution, etc.

Language English ▾ Images/page 20 ▾

**Crotos**

Cosmos  
Callisto  
Lab

Results 21 - 40 of 668

Type Creator Movement Genre Based on Subject heading Depicts Exhibition Collection

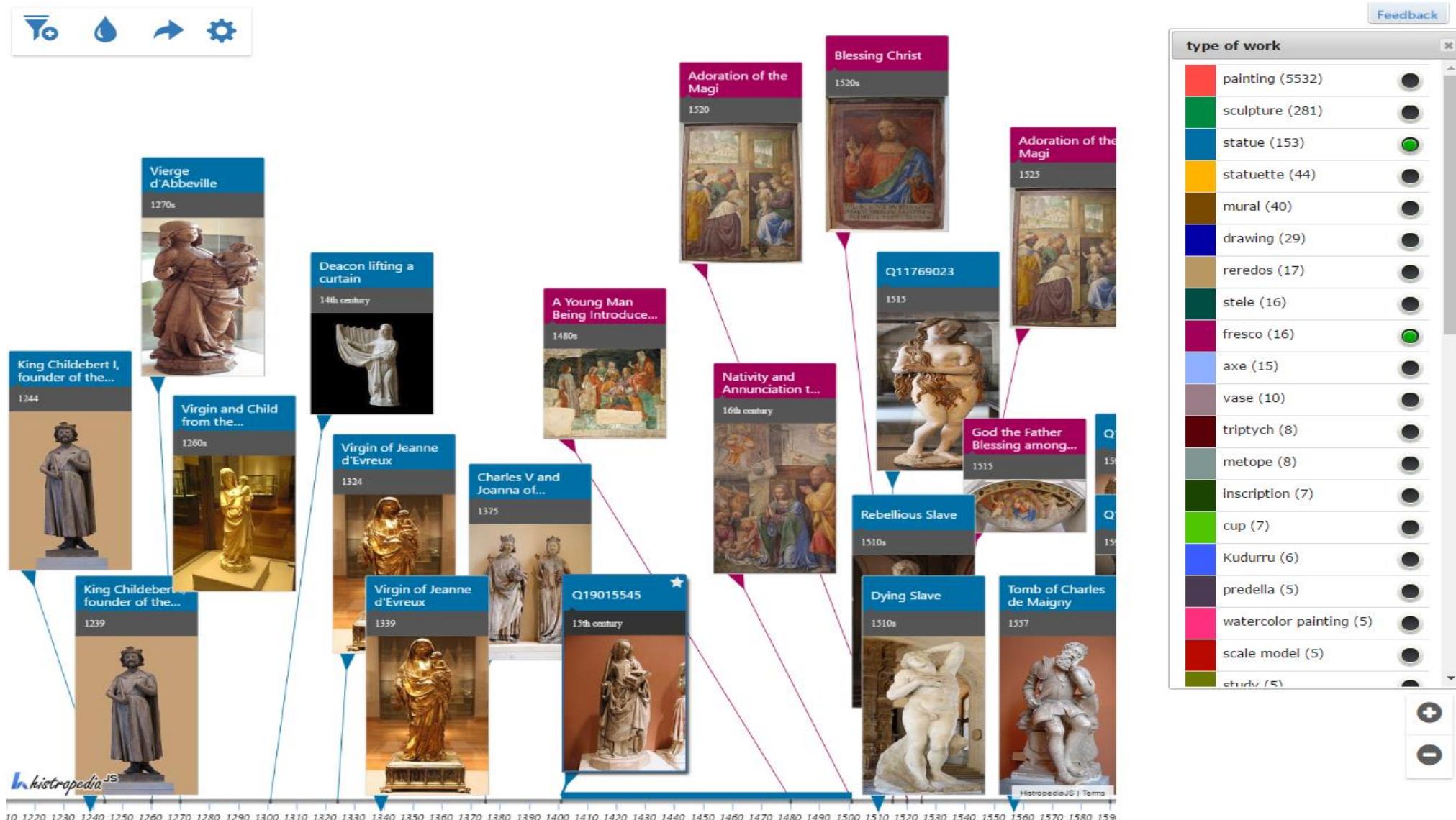
Minimum 1 ▾

Previous 1 2 3 4 5 ... 34 Next Random

The screenshot shows a search results page for 'Crotos'. At the top, there are language and image per page dropdown menus. Below that is the title 'Crotos' with three small images: a winged figure, a red horse, and a blue square. To the right are a search bar, a 'Search' button, and a set of icons for dark/light mode and zoom. The main area is titled 'Results 21 - 40 of 668'. Below this are filter buttons for Type, Creator, Movement, Genre, Based on, Subject heading, Depicts, Exhibition, and Collection, with 'Type' currently selected. A dropdown menu for 'Minimum' is open at value 1. Below the filters is a navigation bar with 'Previous' and 'Next' buttons, and a 'Random' button. The main content area displays a grid of nine artwork thumbnails, each with a title and a result count. The thumbnails are:

- wayside cross**: 411 results. An image of a stone cross with intricate knotwork patterns.
- fresco**: 405 results. An image of a fresco depicting figures in a洞穴-like setting.
- archaeological artifact**: 390 results. An image of a white, rectangular stone relief sculpture.
- illuminated manuscript**: 370 results. An image of a colorful, detailed medieval manuscript page.
- series of creative works**: 344 results. An image of a painting showing a landscape with trees and a path.
- pastel**: 325 results. An image of a pastel painting of a winter scene with snow-covered fields and trees.
- polyptych**: 288 results. An image of a polyptych painting showing two figures in elaborate robes.
- woodcut print**: 277 results. An image of a woodcut print depicting a scene with figures and architectural elements.
- group of paintings**: 261 results. An image of a series of paintings showing multiple figures in a narrative scene.

# Histropedia - The Louvre collections



# Wikidata query service (WDQS)

Wikidata Query Examples Prefixes Tools Help English

```
1 #1933 book burning locations
2 #defaultView:Map
3 SELECT ?item ?name ?coord ?image WHERE {
4     wd:Q3927614 wdt:P276 ?item .
5     OPTIONAL { ?item wdt:P625 ?coord .}
6     OPTIONAL { ?item wdt:P18 ?image .}
7     SERVICE wikibase:label {
8         bd:serviceParam wikibase:language "en" .
9         ?item rdfs:label ?name
10    }
11 }
```

Query Helper [Find](#) Nazi book burnings location [Show](#) coordinate location , image Limit

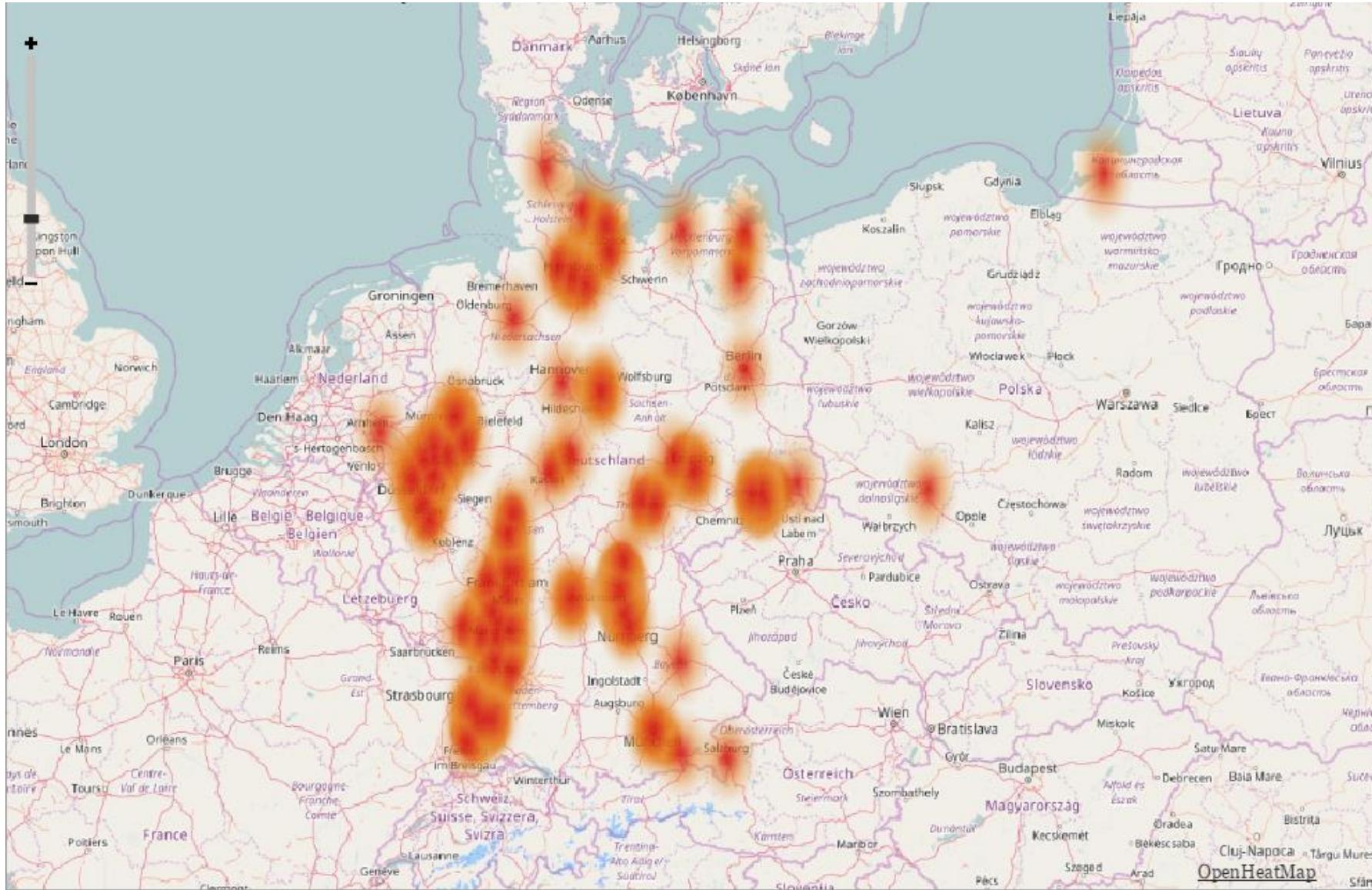
Press [CTRL-SPACE] to activate auto completion. Data updated [a few seconds](#) ago

Run Clear 80 Results in 320 ms Display Download Link

Königsplatz  
Point(11.5652777777 48.145555555)  
wd:Q561084

<http://tinyurl.com/y6vecxvv>

# Reuse data – 1933 book burning locations heat map



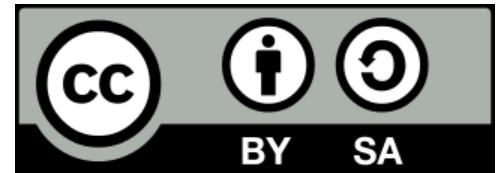
# Thank you!

Any questions?

Contact details:

[https://www.wikidata.org/wiki/User\\_talk:Sic19](https://www.wikidata.org/wiki/User_talk:Sic19)

This work is licensed under a Creative Commons Attribution-  
ShareAlike 4.0 International License  
<http://creativecommons.org/licenses/by-sa/4.0/> (CC BY-SA 4.0).



# Start editing Wikidata

Wikidata tours:

- <https://www.wikidata.org/wiki/Wikidata:Tours>

A Gentle Introduction to Wikidata for Absolute Beginners:

- Video - <https://www.youtube.com/watch?v=eVrAx3AmUvA>
- Slides – [https://commons.wikimedia.org/wiki/File:Wikidata\\_-\\_A\\_Gentle\\_Introduction\\_for\\_Complete\\_Beginners\\_\(WMF\\_February\\_2017\).pdf](https://commons.wikimedia.org/wiki/File:Wikidata_-_A_Gentle_Introduction_for_Complete_Beginners_(WMF_February_2017).pdf)

An Ambitious Wikidata Tutorial:

- Video - [https://commons.wikimedia.org/wiki/File:An\\_Ambitious\\_Wikidata\\_Tutorial\\_\(all\\_parts\).webm](https://commons.wikimedia.org/wiki/File:An_Ambitious_Wikidata_Tutorial_(all_parts).webm)
- Slides - [https://commons.wikimedia.org/wiki/File:An\\_Ambitious\\_Wikidata\\_Tutorial.pdf](https://commons.wikimedia.org/wiki/File:An_Ambitious_Wikidata_Tutorial.pdf)

Need help?

- [https://www.wikidata.org/wiki/Wikidata:Project\\_chat](https://www.wikidata.org/wiki/Wikidata:Project_chat)

# More information about Wikidata

Wikidata introduction:

- <https://www.wikidata.org/wiki/Wikidata:Introduction>

Structured data:

- [https://www.wikidata.org/wiki/Help:About\\_data](https://www.wikidata.org/wiki/Help:About_data)

Help portal:

- <https://www.wikidata.org/wiki/Help:Contents>

Community portal:

- [https://www.wikidata.org/wiki/Wikidata:Community\\_portal](https://www.wikidata.org/wiki/Wikidata:Community_portal)

List of properties:

- <https://www.wikidata.org/w/index.php?title=Special>ListProperties>

Wikidata API:

- <https://www.wikidata.org/w/api.php>

# Tools

- <https://www.wikidata.org/wiki/Wikidata:Tools>
- <https://tools.wmflabs.org/hay/propbrowse/>
- <https://tools.wmflabs.org/wikidata-game/>
- <https://angryloki.github.io/wikidata-graph-builder/>
- <https://tools.wmflabs.org/wikishootme>
- [https://tools.wmflabs.org/wikidata-todo/quick\\_statements.php](https://tools.wmflabs.org/wikidata-todo/quick_statements.php)
- <http://tools.wmflabs.org/wikidata-todo/tree.html>
- [https://tools.wmflabs.org/wikidata-todo/missing\\_images.html](https://tools.wmflabs.org/wikidata-todo/missing_images.html)

Wikidata reconciliation service (OpenRefine):

- <https://github.com/OpenRefine/OpenRefine/wiki/Reconciliation>

# Wikidata query service

Introduction:

- [https://www.wikidata.org/wiki/Wikidata:SPARQL\\_query\\_service/A gentle introduction to the Wikidata Query Service](https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/A_gentle_introduction_to_the_Wikidata_Query_Service)

User manual:

- [https://www.mediawiki.org/wiki/Wikidata\\_query\\_service/User Manual](https://www.mediawiki.org/wiki/Wikidata_query_service/User_Manual)

Help portal:

- [https://www.wikidata.org/wiki/Wikidata:SPARQL\\_query\\_service/Wikidata Query Help](https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/Wikidata_Query_Help)

SPARQL tutorial:

- [https://www.wikidata.org/wiki/Wikidata:A beginner-friendly course for SPARQL](https://www.wikidata.org/wiki/Wikidata:A_beginner-friendly_course_for_SPARQL)

SPARQL queries:

- [https://www.wikidata.org/wiki/Wikidata:SPARQL\\_query\\_service/queries](https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/queries)
- [https://www.wikidata.org/wiki/Wikidata:SPARQL\\_query\\_service/queries/examples](https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/queries/examples)

# Share your data

## General information:

- [https://www.wikidata.org/wiki/Wikidata:Data donation](https://www.wikidata.org/wiki/Wikidata:Data_donation)
- <https://blog.wikimedia.org/2016/08/23/wikidata-glam/>

## Case studies:

- [https://www.wikidata.org/wiki/Wikidata:Flemish art collections, Wikidata and Linked Open Data/Whitepaper](https://www.wikidata.org/wiki/Wikidata:Flemish_art_collections,_Wikidata_and_Linked_Open_Data/Whitepaper)
- [https://www.wikidata.org/wiki/Wikidata:WikiProject Cultural heritage/Reports/Ingesting Swiss heritage institutions](https://www.wikidata.org/wiki/Wikidata:WikiProject_Cultural_heritage/Reports/Ingesting_Swiss_heritage_institutions)

## Projects:

- [https://www.wikidata.org/wiki/Wikidata:WikiProject sum of all paintings](https://www.wikidata.org/wiki/Wikidata:WikiProject_sum_of_all_paintings)
- [https://www.wikidata.org/wiki/Wikidata:WikiProject Cultural heritage](https://www.wikidata.org/wiki/Wikidata:WikiProject_Cultural_heritage)