

Wikimania 2019

Libraries in Wikidata Tutorial

by Simon Cobb
(User:Sic19)





Learning objectives

Understand what Wikidata is

Data model for libraries

How to editing Wikidata

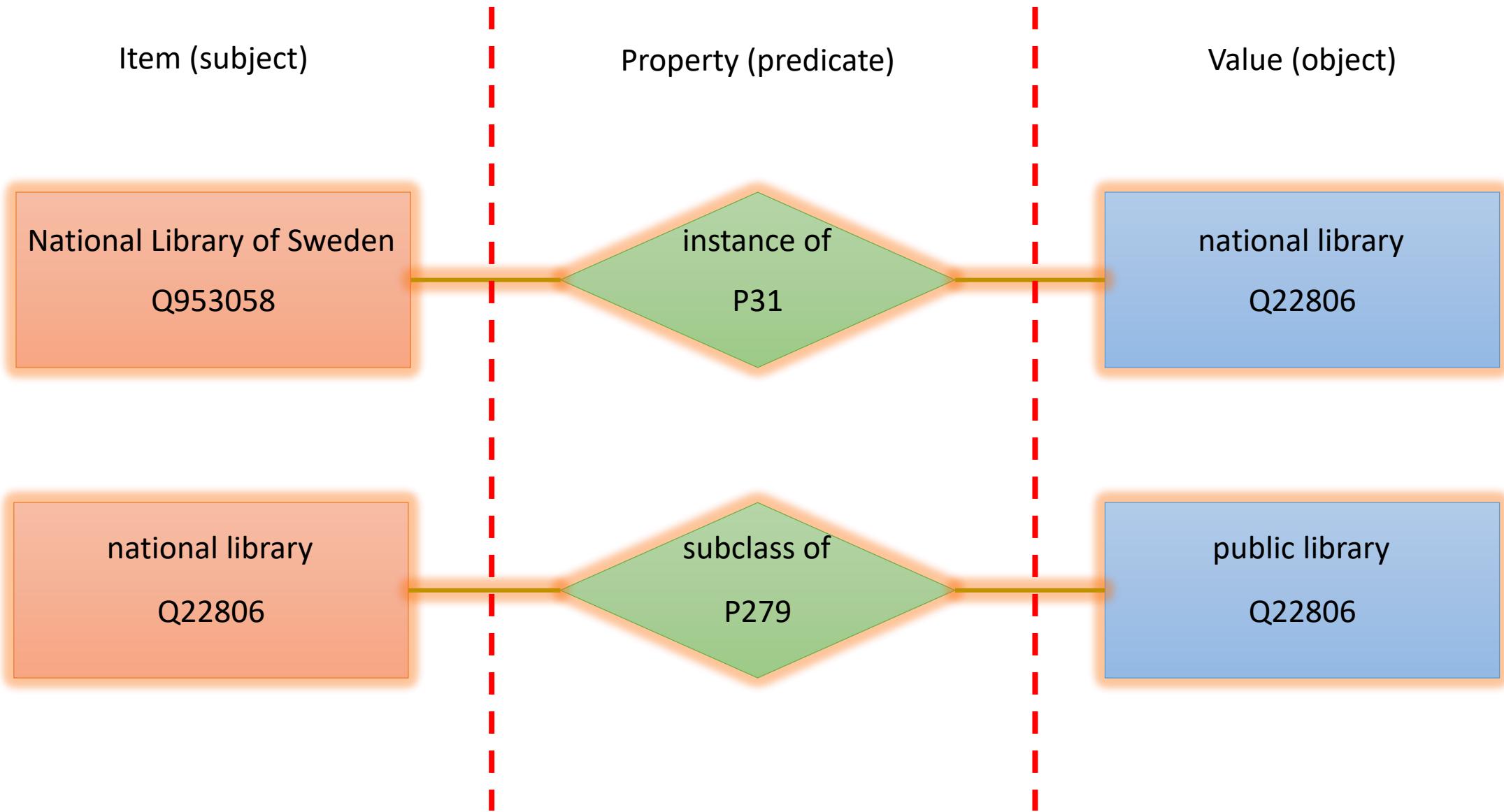
Use the Wikidata query service

Reuse Wikidata in other WMF projects

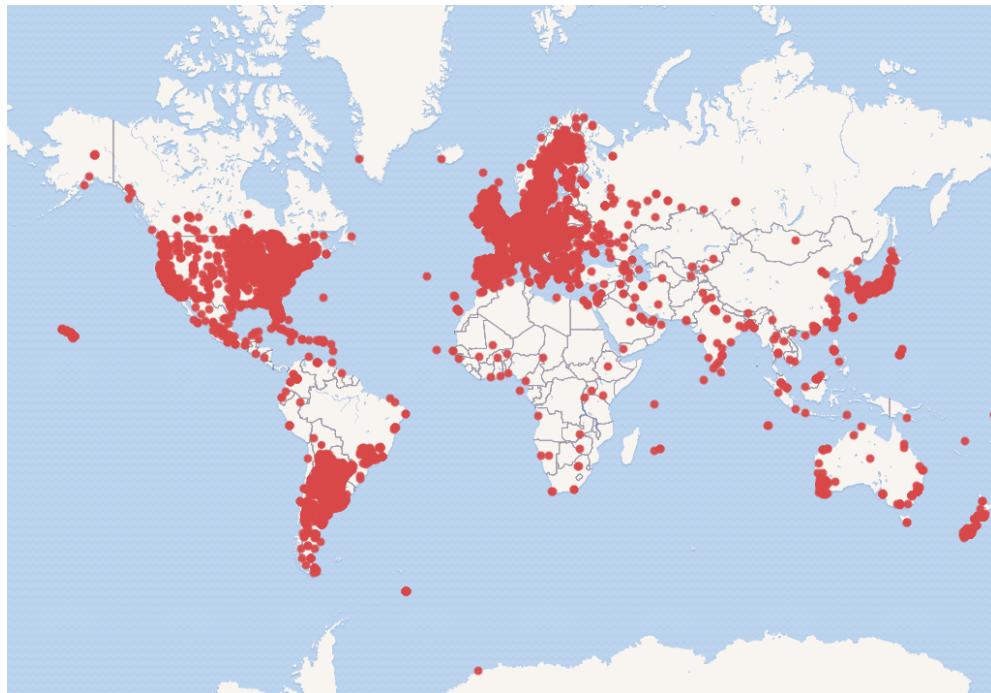
Wikidata is

a free, collaborative, multilingual,
secondary database, collecting
structured data for reuse in
Wikipedia, the other Wikimedia
Foundation projects, and beyond

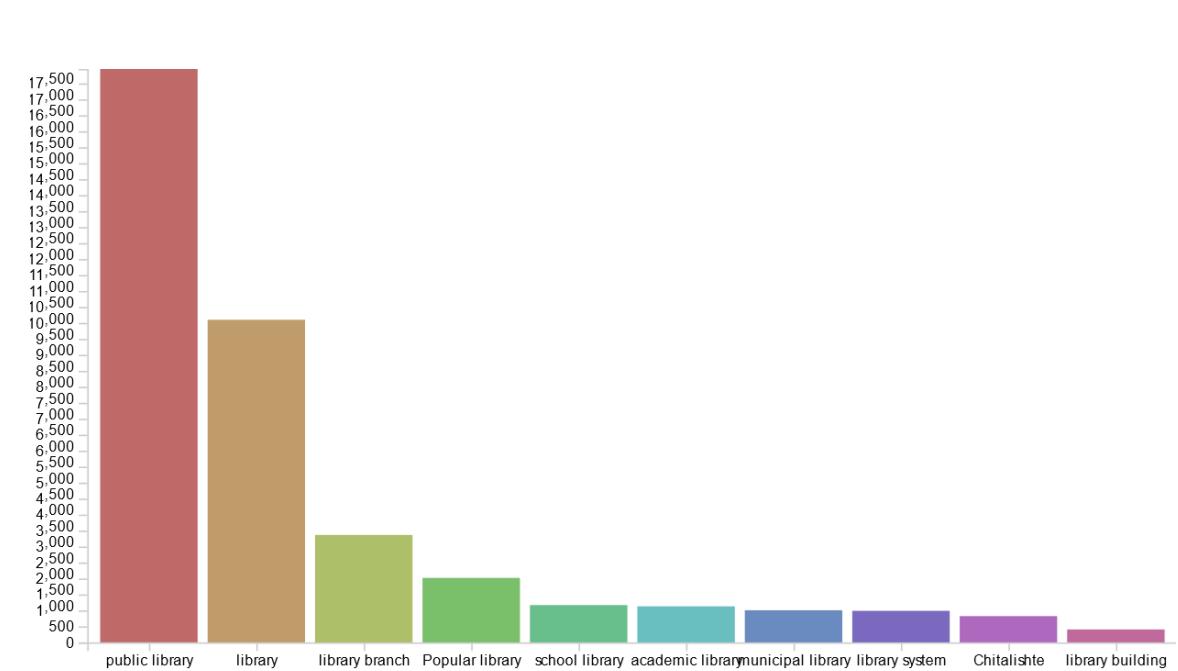
How does Wikidata work?



Libraries in Wikidata



[https://w.wiki/6\\$S](https://w.wiki/6$S)



<https://w.wiki/723>

Editing Wikidata

Main Page Discussion Read View source View history ⭐

library of Search

WIKIDATA

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

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

Print/export
Create a book
Download as PDF
Printable version

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

Main Page Discussion Read View source View history ⭐

library of Search

open

multilingual

Welcome to Wikidata

the free knowledge base with 58,917,731 data items that anyone can edit.

Introduction • Project Chat • Community Portal • Help

Want to help translate? Translate the missing messages.

collaborative

more

containing... library of

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, Wikisource, and others. Wikidata also will provide support to many other sites and services beyond just Wikimedia projects! The content of Wikidata is available under a free license, exported using standard formats, and can be interlinked to other open datasets on the linked data web.

Get involved

Learn about Wikidata

- What is Wikidata? Read the [Wikidata introduction](#).
- Explore Wikidata by looking at a featured showcase item for author [Douglas Adams](#).
- Get started with Wikidata's [SPARQL query service](#).

Contribute to Wikidata

- Learn to edit Wikidata: follow the [tutorials](#).
- Work with other volunteers on a subject that interests you: [join a WikiProject](#).
- Individuals and organisations can also [donate data](#).

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 \(P610\)](#) custom value: [Mount Everest \(Q513\)](#)

Current highlights

- 2019 Tour de Pologne (Q57166055)
- Bærum mosque shooting (Q66363708)
- Rudolf Knörlein (Q66361396)
- [nra conference \(Q65540914\)](#)



library	libraryLabel	typeLabel	countryLabel	article
Q wd:Q12244773	مكتبة البردراني	library	Yemen	< https://ar.wikipedia.org/wiki/%D9%85%D9%83%D8%AA%D8%A8%D8%A9_%D8%A7%D9%84%D8%A8%D8%B1%D8%AF%D9%88%D9%86%D9%8A >
Q wd:Q5754888	Casa de La Estrella	library	Venezuela	< https://es.wikipedia.org/wiki/Casa_de_La_Estrella >
Q wd:Q6396267	Biblioteca pública Morita Carillo	library	Venezuela	< https://es.wikipedia.org/wiki/Biblioteca_p%C3%BAblica_Morita_Carillo >
Q wd:Q6396265	Biblioteca pública Don Luis y Misia Virginia	library	Venezuela	< https://es.wikipedia.org/wiki/Biblioteca_p%C3%BAblica_Don_Luis_y_Misia_Virginia >
Q wd:Q5728086	Biblioteca pública del Zulia	library	Venezuela	< https://es.wikipedia.org/wiki/Biblioteca_p%C3%BAblica_del_Zulia >
Q wd:Q5728073	Biblioteca pública Arturo Uslar Pietri	library	Venezuela	< https://es.wikipedia.org/wiki/Biblioteca_p%C3%BAblica_Arturo_Uslar_Pietri >
Q wd:Q16489691	Biblioteca Jacinto Laguna	library	Uruguay	< https://es.wikipedia.org/wiki/Biblioteca_Jacinto_Laguna >
Q wd:Q4744314	American Law Library	library	United States of America	< https://zh.wikipedia.org/wiki/%E7%BE%8E%E5%BD%6B%E5%8A%5B%E6%96%87%E5%BA%93 >
Q wd:Q7620713	Stowitts Museum & Library	library	United States of America	< https://en.wikipedia.org/wiki/Stowitts_Museum_%26_Library >
Q wd:Q2745969	Legacy Tobacco Documents Library	library	United States of America	< https://nl.wikipedia.org/wiki/Legacy_Tobacco_Documents_Library >
Q wd:Q7988163	Western Philatelic Library	library	United States of America	< https://en.wikipedia.org/wiki/Western_Philatelic_Library >
Q wd:Q7969996	Warren-Newport Public Library District	library district of the United States	United States of America	< https://en.wikipedia.org/wiki/Warren-Newport_Public_Library_District >
Q wd:Q7913779	Van Wormer Library	library	United States of America	< https://en.wikipedia.org/wiki/Van_Wormer_Library >
Q wd:Q7901162	Urshan Gateway Library	library	United States of America	< https://en.wikipedia.org/wiki/Urshan_Gateway_Library >

Libraries to edit -
<https://w.wiki/72M>

Edit a statement

Library of the Stockholm School of Economics (Q18290496)			
library			edit
▼ In more languages			
Language	Label	Description	Also known as
British English	No label defined	No description defined	
Welsh	No label defined	No description defined	
English	Library of the Stockholm School of Economics	library	
Latin	No label defined	No description defined	

All entered languages

Statements

Instance of	library	 edit	
	▼ 0 references	+ add reference	+ add value
country	Sweden	 edit	
	▼ 0 references	+ add reference	+ add value
		+ add statement	

Library of the Stockholm School of Economics (Q18290496)

library

edit

▼ In more languages

Language	Label	Description	Also known as
British English	No label defined	No description defined	
Welsh	No label defined	No description defined	
English	Library of the Stockholm School of Economics	library	
Latin	No label defined	No description defined	

All entered languages

Statements

Instance of 1 academic library 2

publish remove cancel ?

country

+ add value

Add a new statement

Library of the Stockholm School of Economics (Q18290496)

library

▼ In more languages Configure

Language	Label	Description	Also known as
English	Library of the Stockholm School of Economics	library	
British English	No label defined	No description defined	
German	No label defined	Bibliothek	
French	No label defined	bibliothèque	

All entered languages

Statements

instance of

library

▼ 0 references

edit

+ add reference

+ add value

country

Sweden

▼ 0 references

edit

+ add reference

+ add value

+ add statement

Statements

instance of

library

▼ 0 references

edit

+ add reference

+ add value

country

Sweden

▼ 0 references

edit

+ add reference

+ add value

1

2

inception 1909

inception

✓ publish X cancel ? 4

+ 1 reference

remove

imported from Wikimedia p

Swedish Wikipedia

remove

Wikimedia import URL

https://sv.wikipedia.org/w/index.php?title=Handelsh%C3%B6gskolan_i_Stockholms_bibliotek&oldid=45167225

remove

retrieved

2019-08-12

remove

+ add

+ add reference

remove

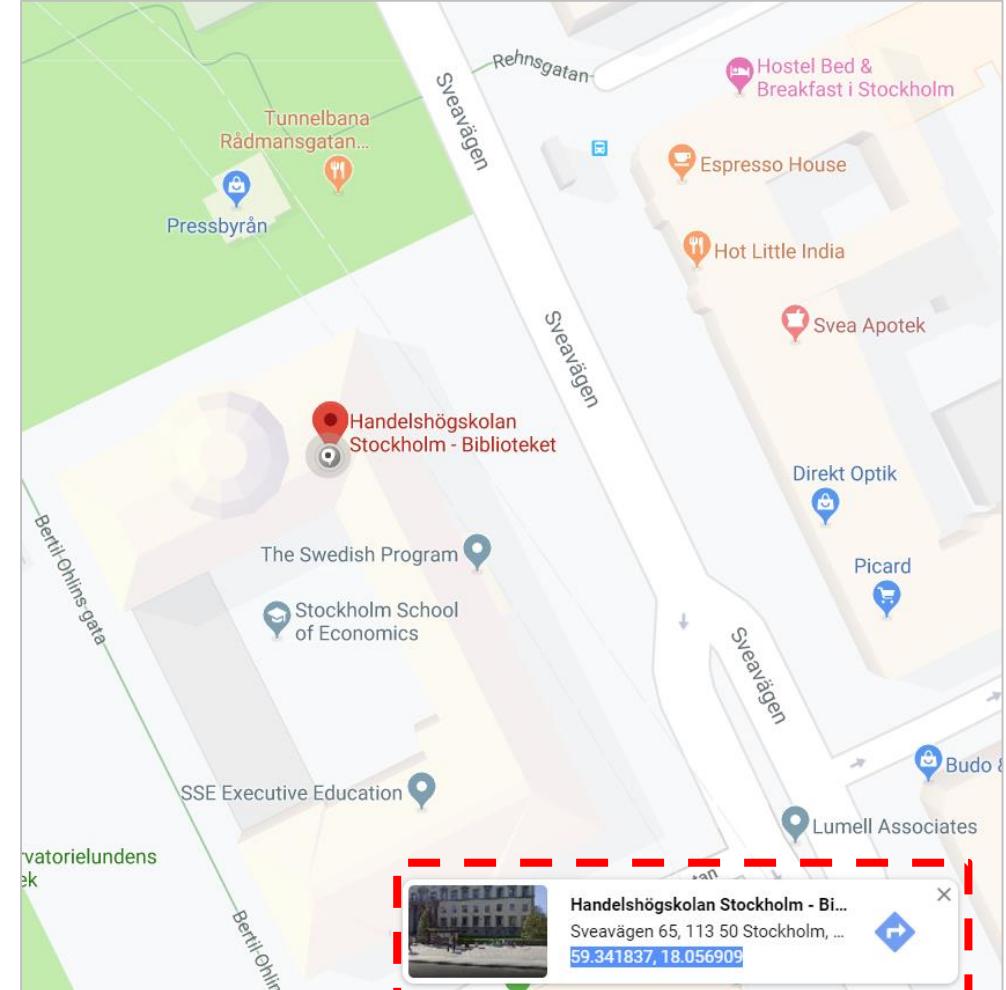
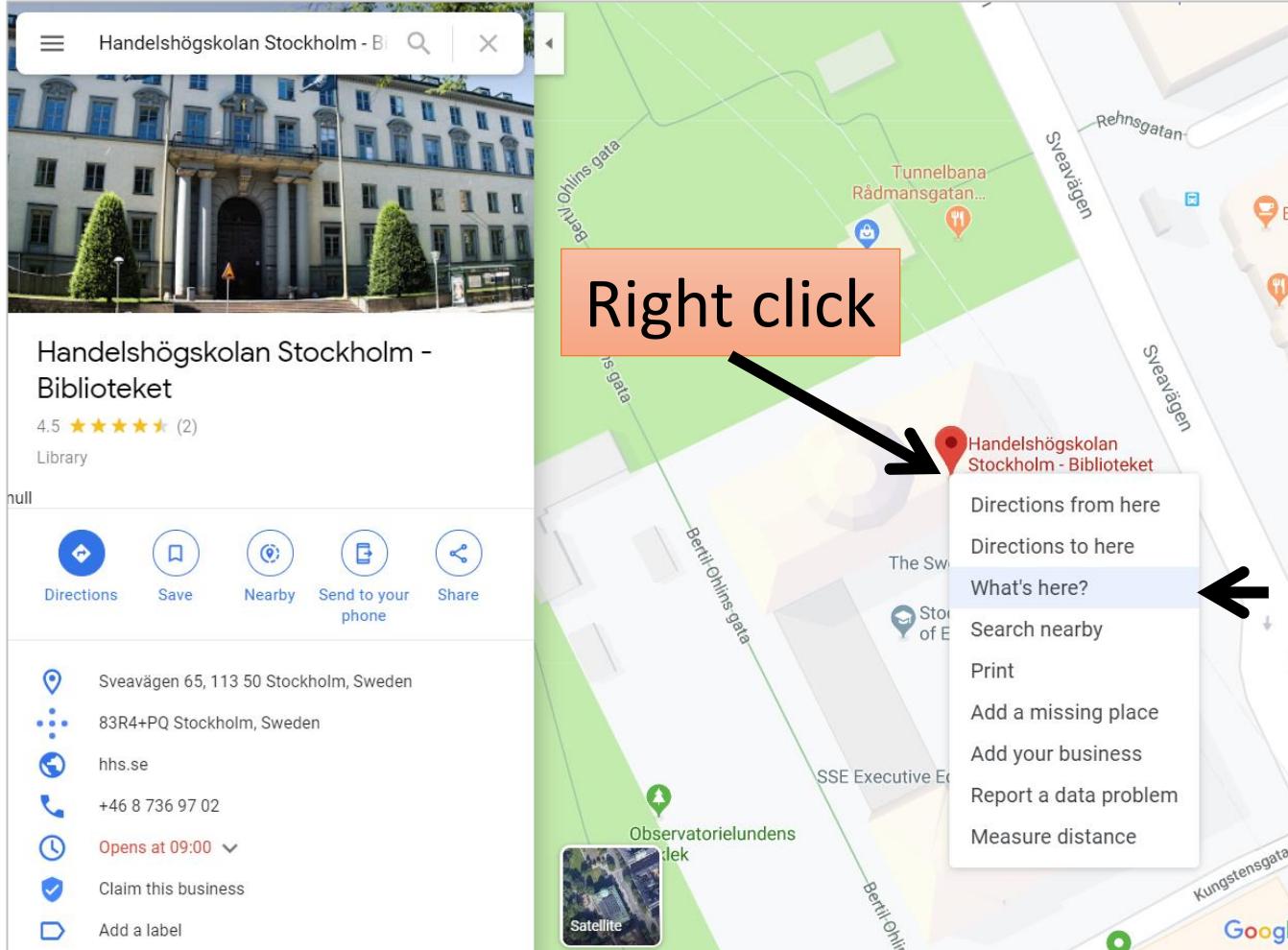
+ add reference

Properties

P17	country	P276	location
P131	located in the administrative territorial entity	P1329	phone number
P856	official website	P84	architect
P6375	located at street address	P127	owned by
P18	image	P137	operator
P361	part of	P149	architectural style
P571	inception	P791	International Standard Identifier for Libraries
P973	described at URL	P213	ISNI
P1435	heritage designation	P214	VIAF ID
P968	e-mail address	P4848	libraries.org ID
P281	postal code	P2002	Twitter username
P463	member of	P2013	Facebook ID
P138	named after		

<https://tools.wmflabs.org/hay/propbrowse/>

Coordinates from Google Maps



The screenshot shows the Wikidata Query Service interface. On the left, there's a vertical toolbar with icons for search, history, and other tools. The main area has a header with "Wikidata Query Service", "Examples", "Help", "More tools", and language settings ("English"). Below the header is a code editor containing a SPARQL query:

```
1 SELECT ?type ?typeLabel ?geoshape WHERE {
2   wd:Q18290496 wdt:P31 ?type ;
3     wdt:P17 / wdt:P3896 ?geoshape .
4   SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en". }
5 }
```

At the bottom, there's a table view of the results:

type	typeLabel	geoshape
wd:Q856234	academic library	<http://commons.wikimedia.org/data/main/Data:Sweden.map>

Below the table, it says "1 result in 253 ms". There are also "Code", "Download", and "Link" buttons.

Wikidata Query Service

<https://query.wikidata.org/>

Which country is the library in?

```
SELECT ?type ?typeLabel ?geoshape WHERE {
  wd:Q65660484 wdt:P31 ?type ;
    wdt:P17 / wdt:P3896 ?geoshape .
  SERVICE wikibase:label { bd:serviceParam wikibase:language "en". }
```

<https://w.wiki/73s>

The screenshot shows the Wikidata Query Service interface. On the left, there is a sidebar with various icons for editing and querying. In the center, a query is entered:

```
1 SELECT ?type ?typeLabel ?geoshape WHERE {
2   wd:Q18290496 wdt:P31 ?type ;
3     wdt:P17 / wdt:P3896 ?geoshape .
4   SERVICE wikibase:label { bd:serviceParam wikibase:language "en". }
5 }
```

Below the query, a results table is displayed:

	typeLabel	geoshape
1	academic library	<http://commons.wikimedia.org/data/main/Data:Sweden.map>

At the bottom of the results table, there are several buttons: 'Grid' (highlighted with a red circle), 'Image grid', 'Graph builder', 'Map' (highlighted with a red arrow), and 'Line chart'. To the right of the table, there are links for 'Code', 'Download', and 'Link'.

Count other libraries within 25 km

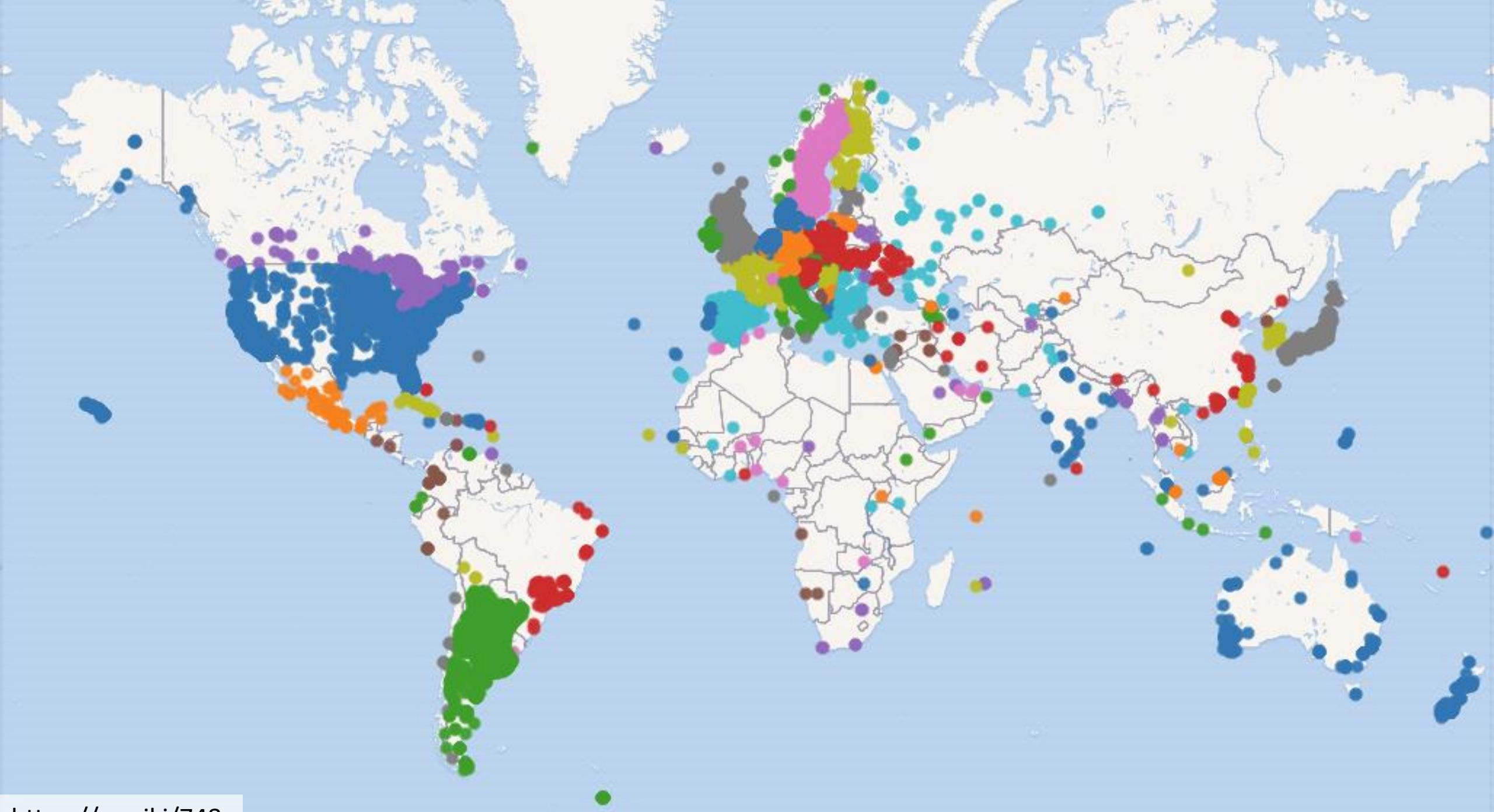
```
SELECT (COUNT(DISTINCT ?place) AS ?count)
WHERE {
    wd:Q65660484 wdt:P625 ?loc .
    SERVICE wikibase:around {
        ?place wdt:P625 ?location .
        bd:serviceParam wikibase:center ?loc .
        bd:serviceParam wikibase:radius "25" .
    }
    SERVICE wikibase:label { bd:serviceParam wikibase:language "en" }
    BIND(geof:distance(?loc, ?location) as ?dist)
    FILTER EXISTS { ?place wdt:P31/wdt:P279* wd:Q7075 . }
}
```

View them on the map

```
#defaultView:Map
SELECT ?place ?placeLabel ?loc ?location
WHERE {
    wd:Q65660484 wdt:P625 ?loc .
    SERVICE wikibase:around {
        ?place wdt:P625 ?location .
        bd:serviceParam wikibase:center ?loc .
        bd:serviceParam wikibase:radius "25" .
    }
    SERVICE wikibase:label { bd:serviceParam wikibase:language "en" }
    BIND(geof:distance(?loc, ?location) as ?dist)
    FILTER EXISTS { ?place wdt:P31/wdt:P279* wd:Q7075 . }
} ORDER BY ?dist
```

Find libraries in Wikidata

```
SELECT ?library ?libraryLabel ?country ?countryLabel
WHERE {
    ?library wdt:P31/wdt:P279* wd:Q7075 ;
              wdt:P17 ?country .
    BIND(?country as ?layer)
    SERVICE wikibase:label { bd:serviceParam wikibase:language "en". }
}
LIMIT 10
```



```
#defaultView:Map

SELECT ?library ?libraryLabel ?countryLabel ?coord ?layer
WHERE
{
    ?library wdt:P31/wdt:P279* wd:Q7075 ;
        wdt:P625 ?coord ;
        wdt:P17 ?country .
    BIND(?country as ?layer)
    SERVICE wikibase:label { bd:serviceParam wikibase:language "en". }
}
```

	Staatliche Bibliothek Passau	< https://commons.wikimedia.org/wiki/Category:Staatliche_Bibliothek_Passau >
Nationalmuseum	Books in the Germanisches Nationalmuseum	< https://commons.wikimedia.org/wiki/Category:Books_in_the_Germanisches_Nationalmuseum >
Municipal Library	Bogdan Petriceicu Hasdeu Municipal Library	< https://commons.wikimedia.org/wiki/Category:Bogdan_Petriceicu_Hasdeu_Municipal_Library >
Vanbiervliet	Esperanto-Fondaĵo Cesar Vanbiervliet	< https://commons.wikimedia.org/wiki/Category:Esperanto-Fondaĵo_Cesar_Vanbiervliet >
hive	HathiTrust	< https://commons.wikimedia.org/wiki/Category:HathiTrust >
Universität Berlin	Iraqi National Library	< https://commons.wikimedia.org/wiki/Category:Iraqi_National_Library >
	Philologische Bibliothek (FU Berlin)	< https://commons.wikimedia.org/wiki/Category:Philologische_Bibliothek_(FU_Berlin) >
	Marxists Internet Archive	< https://commons.wikimedia.org/wiki/Category:Marxists_Internet_Archive >
	Hofbibliothek Donaueschingen	< https://commons.wikimedia.org/wiki/Category:Hofbibliothek_Donaueschingen >
	John C. Hodges Library	< https://commons.wikimedia.org/wiki/Category:John_C._Hodges_Library >
	PADICAT	< https://commons.wikimedia.org/wiki/Category:PADICAT >
	Karl-Preusker-Bücherei	< https://commons.wikimedia.org/wiki/Category:Karl-Preusker-Bücherei >
	Ratsschulbibliothek Zwickau	< https://commons.wikimedia.org/wiki/Category:Ratsschulbibliothek_Zwickau >
	ArXiv.org	< https://commons.wikimedia.org/wiki/Category:ArXiv.org >
	Miguel de Benavides Library	< https://commons.wikimedia.org/wiki/Category:Miguel_de_Benavides_Library >
	Libraries in Rouen	< https://commons.wikimedia.org/wiki/Category:Libraries_in_Rouen >
	Gallica	< https://commons.wikimedia.org/wiki/Category:Gallica >
	King Fahd National Library	< https://commons.wikimedia.org/wiki/Category:King_Fahd_National_Library >
cal and cultural history	Fachbibliothek für Kirchen- und Kulturgeschichte Ziesar	< https://commons.wikimedia.org/wiki/Category:Fachbibliothek_für_Kirchen-_und_Kulturgeschichte_Ziesar >
	Researchgate	< https://commons.wikimedia.org/wiki/Category:Researchgate >
	Project Runeberg	< https://commons.wikimedia.org/wiki/Category:Project_Runeberg >
	Khaldounia	< https://commons.wikimedia.org/wiki/Category:Khaldounia >
	BEIC	< https://commons.wikimedia.org/wiki/Category:BEIC >
	Hennepin County Library	< https://commons.wikimedia.org/wiki/Category:Hennepin_County_Library >

Add an image -

<https://w.wiki/74T>

Structured data on Commons

Category:Middlesbrough Central Library

From Wikimedia Commons

Media in category 'Middlesbrough Central Library'

The following 26 files are in this category, out of 26 total.

Boro Central Library 2011.jpg 800 × 533; 369 KB	CROSSING THE TEES BOOK FESTIVAL (27553561096).jpg 2,134 × 2,848; 1.28 MB	DANIELLE RAMSEY AND VALERIE LAWS AT MIDDLESBROUGH CENTRAL LIBRARY (7410217964).jpg 1,659 × 1,520; 776 KB	Entrance to Middlesbrough public library	Entrance to Middlesbrough Public Library.jpg 3,024 × 4,032; 4.86 MB	Exhibition on migration into Middlesbrough at Middlesbrough Public Library.jpg 3,024 × 4,032; 4.17 MB	Exterior of Middlesbrough Public Library.jpg 4,032 × 3,024; 4.95 MB	Middlesbrough Central Library - geograph.org.uk - 279412.jpg 2,385 × 1,613; 1.07 MB
Middlesbrough public library (2794739593).jpg 1,024 × 768; 242 KB	Middlesbrough public library (28557894766).jpg 1,024 × 773; 221 KB	Middlesbrough public library - plaque (2794743583).jpg 1,024 × 766; 310 KB	Middlesbrough public library entrance to the reference library (28512130831).jpg 1,024 × 768; 171 KB	Middlesbrough public library the reference room (27973400174).jpg 1,024 × 768; 278 KB	Middlesbrough, central library - geograph.org.uk - 796555.jpg 640 × 480; 49 KB	Radiator and card catalogue in Middlesbrough public library reference room (2794736573).jpg 1,024 × 761; 292 KB	Reference room in Middlesbrough public library (28306366720).jpg 1,024 × 773; 306 KB
SHAKESPEARE IN MIDDLESBROUGH STORY BOARDS	SHAKESPEARE STORY BOARDS	SHAKESPEARE STORY BOARDS	WHAT'S NOT TO LIKE?	WORLD BOOK NIGHT - CHRIS DORRISON	WORLD BOOK NIGHT - MIDDLESBROUGH	WORLD BOOK NIGHT - MIDDLESBROUGH	WORLD BOOK NIGHT - MIDDLESBROUGH

Middlesbrough Central Library [Hide]

public library in Middlesbrough



Upload media

Instance of library building, public library

Location Middlesbrough, North East England

Operator Middlesbrough Borough Council

Heritage status Grade II listed building

Date of official opening 8 May 1912

Elevation above sea level 9.378474 m

[Authority control](#) [Hide]

A map showing the location of Middlesbrough Central Library in Middlesbrough, North East England.

Language	Label	Description	Also known as
British English	Middlesbrough Central Library	public library in Middlesbrough	Central Public Library, Middlesb... Central Public Library
Welsh	No label defined	No description defined	
English	Middlesbrough Central Library	public library in Middlesbrough	Central Public Library, Middlesb... Central Public Library
Latin	No label defined	No description defined	

All entered languages



Statements

instance of	central library public library	edit add reference add value

image	 MIDDLESBROUGH CENTRAL LIBRARY (8675283863).jpg 2,385 × 1,613; 1.07 MB	edit add reference add value

Wikipedia (0 entries) edit

Wikibooks (0 entries) edit

Wikinews (0 entries) edit

Wikiquote (0 entries) edit

Wikisource (0 entries) edit

Wikiversity (0 entries) edit

Wikivoyage (0 entries) edit

Wiktionary (0 entries) edit

Other sites (1 entry) edit

commons Category:Middlesbrough Central Library

{{{Wikidata Infobox}}}

Google Knowledge Panel 1

See outside

Wilko
Theaker Ln
Concept Recruitment
Amber Cars
Mistress Ln
ARMLEY

Map data ©2019

Armley Library

Website Directions Save

4.8 ★★★★☆ 5 Google reviews

Library in Leeds, England

Address: 2 Stockhill, Leeds LS12 1UQ

Hours: Closed · Opens 8:30AM Thu ▾

Phone: 0113 378 5670

Suggest an edit

Know this place? Answer quick questions

Ask a question

Questions & answers
Be the first to ask a question

Popular times Wednesdays

9a 12a 3p 6p 9p

Plan your visit
People typically spend up to **1.5 hours** here

<https://www.google.com/search?kgmid=g/11crqkbjfd&kponly&q=Armley%20Library&hl=en>

Wilko
Theaker Ln
Concept Recruitment
Amber Cars
Mistress Ln
ARMLEY

Map data ©2019

Armley Library

محلوظ کریں
ڈائریکشنز
وب سات

لیدز، انگلستان میں لائبریری

باید دیکھیں

بہ: 2 Stockhill, Leeds LS12 1UQ

وقت کار: بند ہو گی۔ کھلتا ہے جمعرات AM 8:30

فون: 0113 378 5670

ایک ترمیم کی تجویز کریں

اس مقام کے بارے میں جانتے ہیں؟ فوری سوالات کے جواب دیں

سوالات اور جوابات
سوال پوچھئے والے پہلے فرد بتیں

مقبول اوقات

اپنے دورہ کو پلان کریں
عام طور پر لوگ یہاں 1.5 گھنٹے تک گزارتے ہیں

<https://www.google.com/search?kgmid=g/11crqkbjfd&kponly&q=Armley%20Library&hl=ur>

Google Knowledge Panel 2

```
SELECT ?name ?english ?swedish WHERE {
  ?lib wdt:P31 wd:Q28564 ;
        wdt:P137 wd:Q6515870 ;
        rdfs:label ?name .
  { ?lib wdt:P2671 ?GKP } UNION { ?lib wdt:P646 ?GKP }
  FILTER(LANG(?name) = "en") .

  BIND(REPLACE("https://www.google.com/search?kgmid=ABC&kponly&q=XYZ", "ABC", ?GKP) AS ?x) .

  BIND(REPLACE(?x, "XYZ", ENCODE_FOR_URI(?name)) AS ?url) .
  BIND(URI(CONCAT(?url, "&hl=en")) as ?english)
  BIND(URI(CONCAT(?url, "&hl=sv")) as ?swedish)
}
```

Google Knowledge Panel 3

Language codes:

<https://sites.google.com/site/tomihasa/google-language-codes>

Google Knowledge Graph ID bookmarklet:

<https://www.upbuild.io/tools/mreid/get.html>