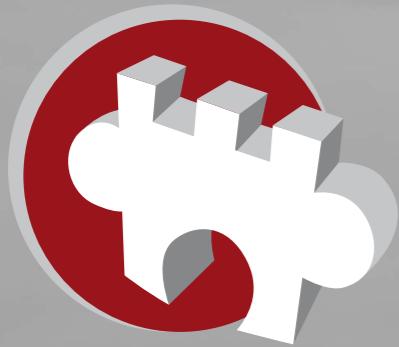


Wikidata as the future of cultural heritage data

For Wiki Loves Monuments and beyond

WikidataCon - 2017-10-28^{Gregorian}
Jean-Frédéric Berthelot - [[User:Jean-Frédéric]] - @JeanFred

Wiki Loves Monuments is a global annual federated low-barrier photo competition focused on freely documenting built cultural heritage (or, monuments).



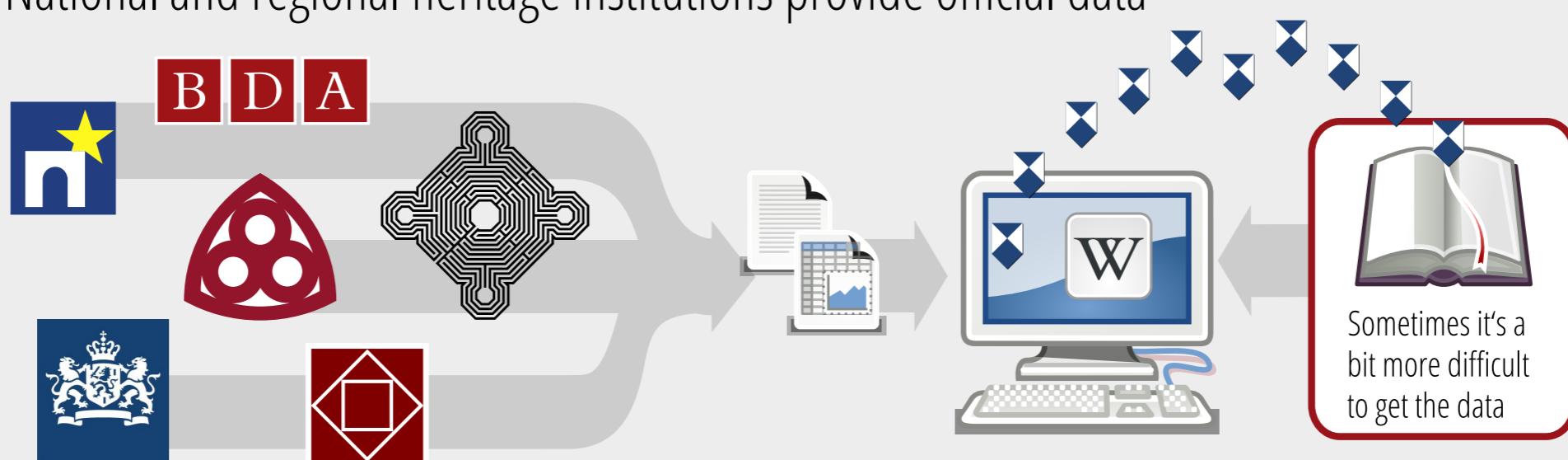
WIKI **loves**
monuments



The secret flow behind WIKI loves monuments

Where all the **monuments** come from:

National and regional heritage institutions provide official data



Busy Wikipedians create monuments lists in Wikipedia

The screenshot shows a table from a Wikipedia page listing various monuments. Several cells containing unique identifiers (e.g., PA00086786, 0045, 0054, RI-51-0005236) are circled in red. A large red arrow points from the top right towards the bottom left, highlighting the consistency of these identifiers across different entries.

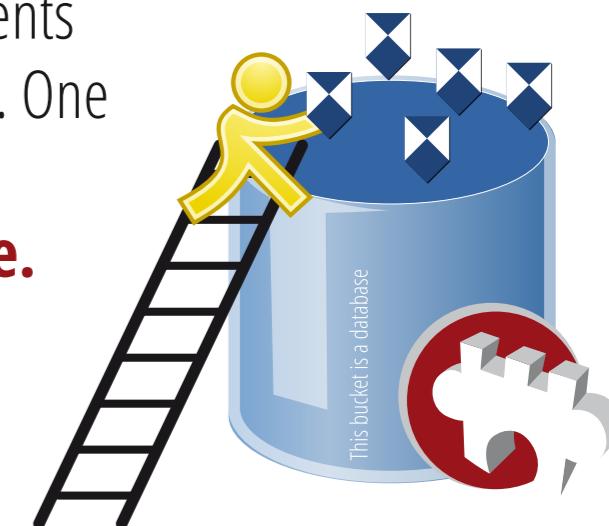
Édifice Guimard de la station Gambetta	Place Martin-Nadaud	48° 51' 54" Nord 2° 23' 54" Est	PA00086786	Inscrit	1978		Objekt	Typ	Baujahr	Architekt/Künstler	Adresse	Koordinaten	Art	Objekt-Nr.	Bild
Édifice Guimard de la station Philippe Auguste	Boulevard de Charonne	48° 51' 29" Nord 2° 23' 27" Est	PA00086787	Inscrit	1978		F.A. Vinnen und Co.	Verwaltungsgebäude	um 1839 1850, 1912 1952	Eggers, Anton Theodor Uhthoff, Andreas Friedrich Egg, Carl	Altenwall 21, 22, 23 Marterburg 32, 34	Lage	ED	0045	
<hr/>															
Monument	Protecció	Estil/època	Ubicació	Coordenades											
Pont del Diable, o Pont Trencat	BCIN 88-MH	Gòtic XV	Cardona	41° 55' 11" N 1° 41' 05" E			Bömer Automobil- und Fahrradzentrale	Geschäftshaus	1905–1906	Behrens-Nicolai, Carl Heinrich	Außer der Schleifmühle 27 Am Dobben 147	Lage	ED	0054	
Canònica de Sant Vicenç	BCIN 96-MH	Romànic XI	Cardona	41° 54' 52" N 1° 41' 11" E			Börsenhof A	Geschäftshaus, Kontorhaus	1861–1864 2008–2001	Mülle					
Castell de Cardona	BCIN 620-MH	Romànic, gòtic X-XI, XIV-XV, XVIII-XIX	Cardona	41° 54' 52" N 1° 41' 08" E	RI-51-0005236										

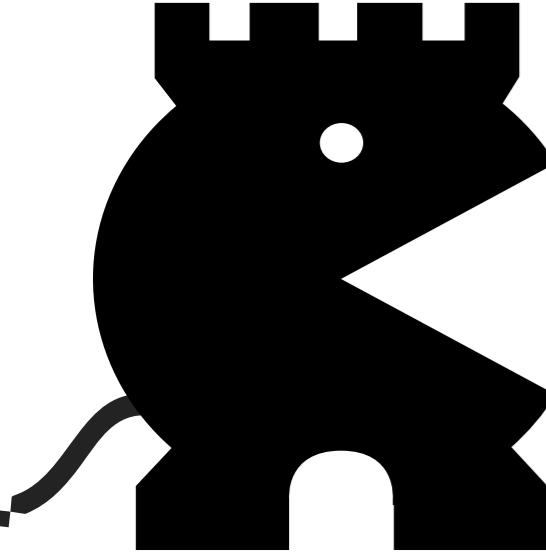
Each monument needs a **unique identifier**

The Wikipedia lists are built with **template structures**.

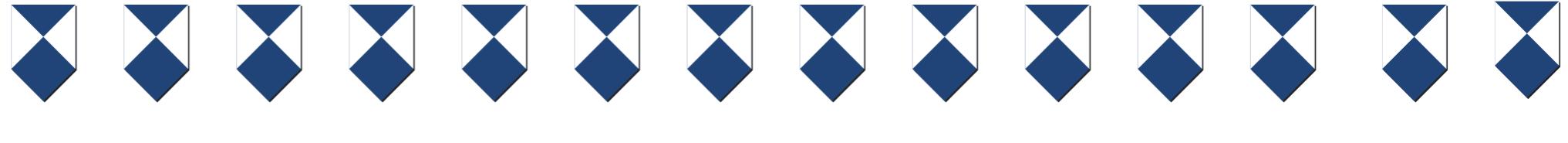
```
{NRHP row
pos=
refnum=
type=
article=
name=
address=
city=
county=
date=
}
{{Tabelrij rijksmonument
objrijksnr=
woonplaats=
adres=
objectnaam=
type_obj = G +
architect=
lat=
lon=
image= naam.jpg
}}
{{KRR rida
number=
nimi=
liik=
aadress=
omavalitsus=
NS=
EW=
pilt=
commons=
}}
```

This allows easy Wiki-editing, and we can import them into our laaaaarge monuments database with all monuments available. One set of lists (e.g. one country) is configured by a tech-savvy person **once**.





enter erfgoedbot!

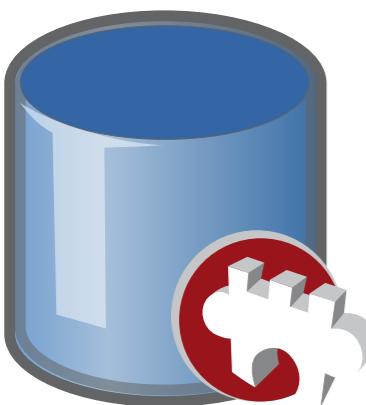


erfgoed is Dutch for “heritage”, and a **bot** is a little program that automates dumb or boring work for us.

erfgoedbot runs at night and harvests the lists at Wikipedia and all the uploaded images with identifiers and updates the laaarge database with this information.

Based on this, erfgoedbot puts them in the correct categories at Wikimedia Commons.

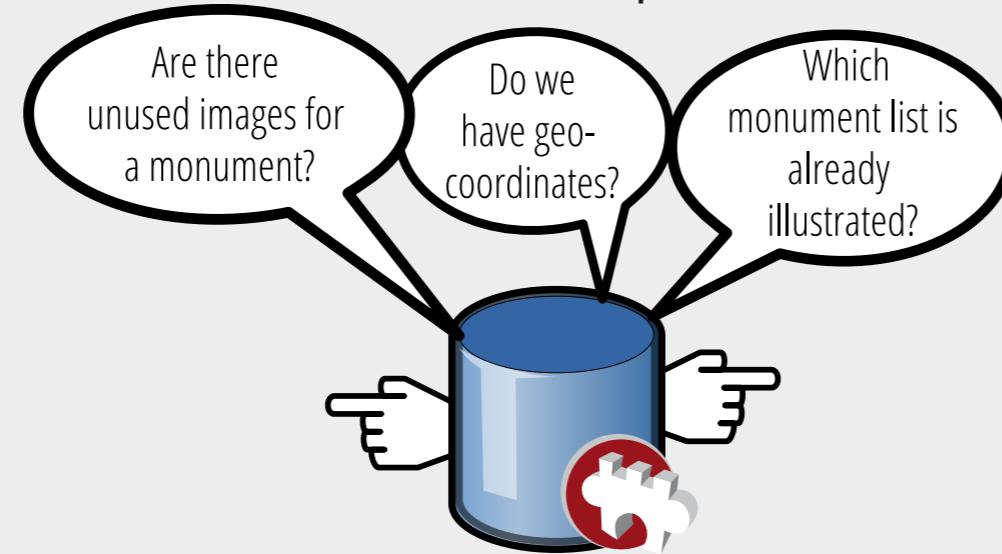
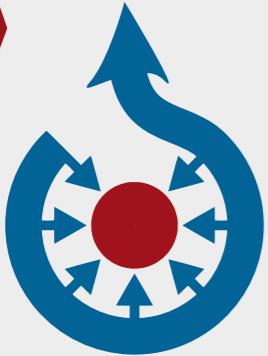
Finally, it provides Wikipedia with information on which momument images are unused so the lists can be completed. And all that while we are sleeping...



B-ii-m-	Casă	municipal București	Str. Biserica Amzei 6 sector 1	s. sec. XIX	44.44457, 26.09296.d		Reportazi erarea.d
	Casa Mită Bicicleta	municipal București	Str. Biserica Amzei 5 sector 1, Str. Christian Tell 11 sector 1	1900	44.444918, 26.094074.d		Reportazi erarea.d
	Casă	municipal București	Str. Biserica Amzei 10 sector 10	s. sec. XIX	44.444603, 26.093151.d		Reportazi erarea.d
	Biserica Amzei	municipal București	Str. Biserica Amzei 12 sector 1	1898-1901	44.444525, 26.093683.d		Reportazi erarea.d



The database connects the **images** on Commons with the **monuments lists** in Wikipedia via the monuments **ID**



	Adresse	Coordonnées	Notice	Protection	Date	Illustration	
43 rue des Enverges 71 rue de la Mare place Henri-Krasucki	48° 52' 22" Nord 2° 23' 21" Est	PA00086778	Inscrit	1984			
Cimetière du Père-Lachaise		PA00086780	Classé	1983			
Charcuterie	108 rue de Bagnolet	48° 51' 35" Nord 2° 24' 12" Est	PA00086779	Inscrit	1984		
Cimetière de Charonne	Boulevard de Charonne	48° 51' 38" Nord 2° 24' 13" Est	PA00086781	Inscrit	1964		

But that's not all ... we can build a lot of fancy tools!

Search Monuments

Format: html

Staat:

- FR
- IE
- IT-88
- LU
- NL

Name: molen

Kennung: Amsterdam

Anschrift: Gemeinde:

Statistics

Staat:

- All
- AD
- AT**
- BE-BRU
- BE-VLG

Items:

- Total number
- name_pct
- Anschrift
- address_pct
- Gemeinde

Submit

Search monuments by country, keyword, municipality and more

Show helpful statistics for the photo contest

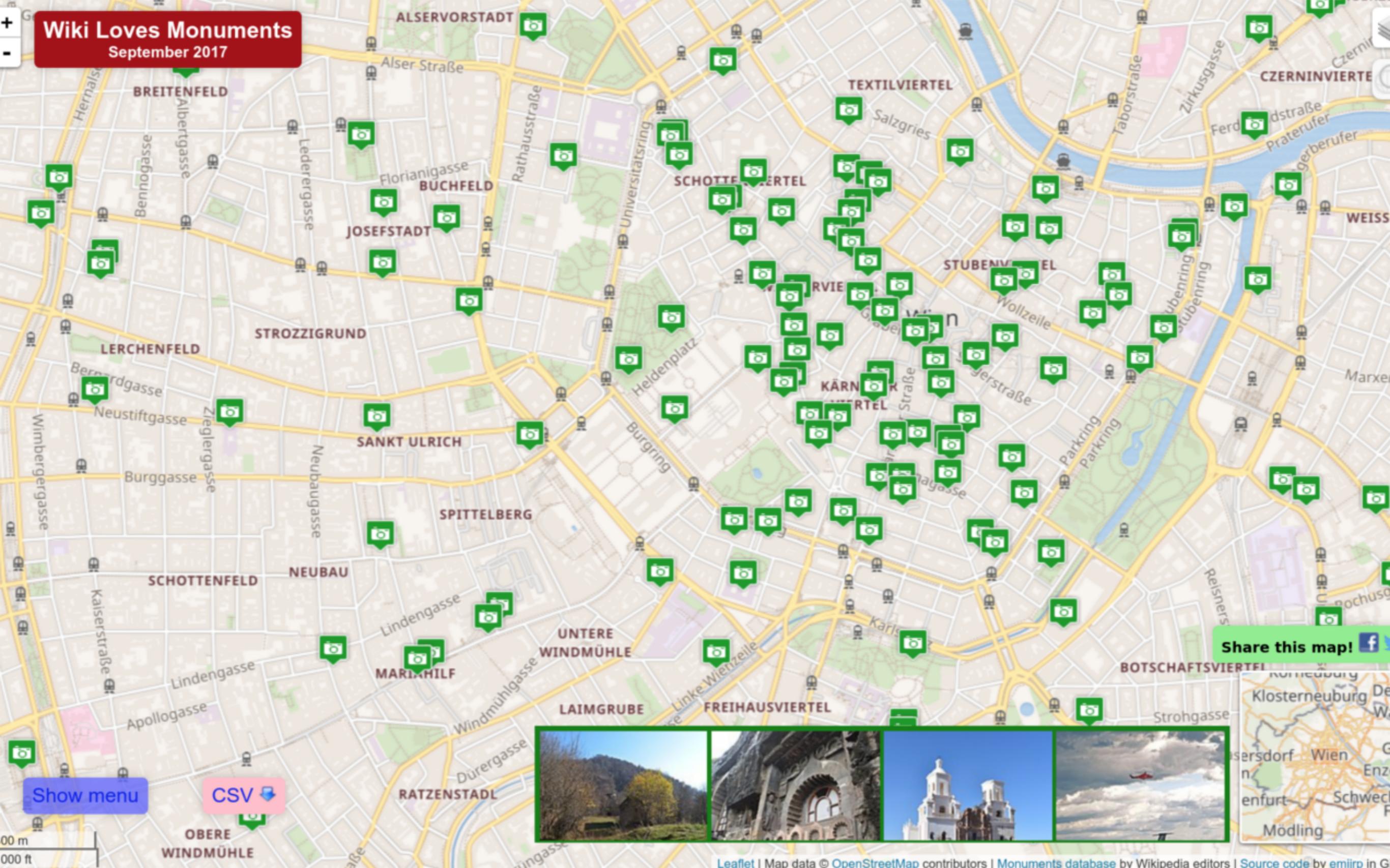


Show monuments on a map



... or walk outside and find monuments with your smartphone

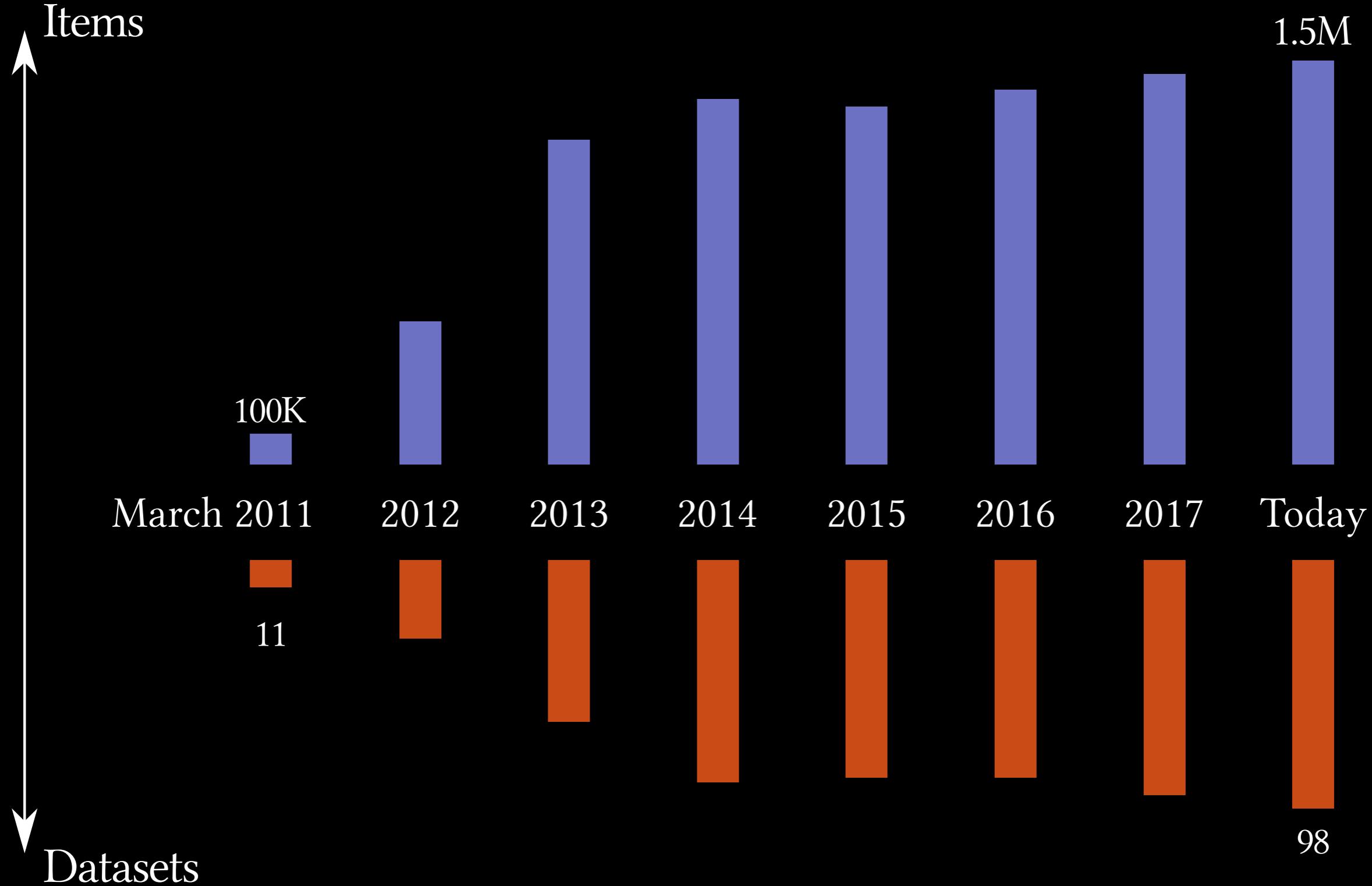
Wiki Loves Monuments
September 2017



We scaled **really** well



```
{  
  "country": "fr",  
  "lang": "fr",  
  "description": "Monuments in France in French",  
  "project": "wikipedia",  
  "namespaces": [  
    0  
,  
    "table": "monuments_fr_(fr)",  
    "truncate": false,  
    "primkey": "notice",  
    "headerTemplate": "En-tête de tableau MH",  
    "rowTemplate": "Ligne de tableau MH",  
    "commonsTemplate": "Mérimée",  
    "commonsTrackerCategory": "Cultural heritage monuments in France with known IDs",  
    "commonsCategoryBase": "Monuments historiques in France",  
    "unusedImagesPage": "Projet:Monuments historiques/Images de monuments français non utilisées",  
    "imagesWithoutIdPage": "Projet:Monuments historiques/Images de monuments français sans identifiant",  
    "registrantUrlBase": "http://www.culture.gouv.fr/public/mistral/merimee_fr?ACTION=CHERCHER&FIELD_1=REF&VALUE_1=%s",  
    "fields": [  
      {  
        "dest": "tri",  
        "source": "tri",  
        "default": "0"  
      },  
      {  
        "dest": "monument",  
        "source": "monument"  
      },  
      ...  
    ]  
}
```



A wide-angle photograph of a grand, classical-style hall. The floor is made of light-colored tiles arranged in a complex, geometric pattern of red and white. A single, tall, thin statue stands on a small, light-colored rectangular pedestal in the center of the room. The walls are made of large, light-colored stone blocks, and there are many tall, fluted columns supporting an upper level. The lighting is dramatic, coming from above and creating strong shadows on the floor and walls.

We brought **order** to the data

Templates are great.

Everyone loves them.

Right?

Templates are great.

Everyone loves them.

Right?

Error:Post-expand-template-inclusion-category

```
 {{Monument
|name=Stephansdom
|imatge=Stefansdom.jpg
}}
```

Identifier?

Well...

List of protected heritage sites in Ath

From Wikipedia, the free encyclopedia

Duplication

This table shows an **overview of the protected heritage sites in the Walloon town Ath. This list is part of Belgium's national heritage.**

Object	Year/architect	Town/section	Address	Coordinates	Number	Image
City Hall (nl) (fr)		Aat		 50.630585°N 3.777075°E	51004- CLT-0001-01 Info 	
old house (nl) (fr)						

Liste du patrimoine immobilier classé d'Ath

Cette page regroupe l'ensemble du **patrimoine immobilier classé de la ville belge d'Ath**.

Objet	Année de construction / Architecte	Adresse	Section communale	Coordonnées	Numéro d'inventaire	Illustration
Hôtel de ville				 50° 37' 50" nord, 3° 46' 37" est	51004- CLT-0001-01  [archive]	 



An aerial photograph of a small town or city center, likely Be'er Sheva, situated in a vast agricultural region. The town is densely packed with buildings, including residential houses, larger industrial structures, and greenhouses. It is surrounded by a patchwork of agricultural fields, mostly dry land, with some green crops visible. A network of roads connects the town to the surrounding farmland.

Centralization



Identifiers
Query service

Constraint checks



A photograph of a railway track leading through a dense green forest towards a tunnel entrance. The tracks are made of metal rails and wooden sleepers, curving slightly to the right. The surrounding vegetation is lush and varied, with different shades of green. A white rectangular box with rounded corners is positioned in the upper right area of the image, containing the text "Import data to Wikidata".

Import data to
Wikidata

[[d:Wikidata:WikiProject WLM/Mapping tables]]

Step 1. Implicit values [edit]

Implicit data				
required	field name	value	Wikidata property	comment
Y	heritage status	Denkmalgeschütztes Objekt (Q1188447)	heritage designation (P1435)	
Y	country	Austria (Q40)	country (P17)	
Y	wikiproject	de.wikipedia		used for getting wikidata items from wikilinks
Y	is a(n)		Can be either ensemble of buildings (Q1497375) or a subclass of architectural structure (Q811979), bodendenkmal (Q22969563)?	More specific P31 mappings are attempted through /types.

Step 2. analyze and map specific data [edit]

Step 2.1 monuments_all - harmonized data for all countries [edit]

required	heritage field	example value	Wikidata property	Conversion	comment
Y	country	AT			
Y	lang	de			
Y	id	12591	Cultural heritage database in Austria ObjektID (P2951)		numerical, will change to URIs in the near future, old ids will be mapped, new objects will only get new URI.
Y	project	wikipedia			
	adm0	at	-		
	adm1	at-1 ... at-9			state of Austria (Q261543) by iso-code; can have a multi-value; can be extracted from municipality object
	adm2	Bezirk Wels-Land / Wiener Neustadt			It is either «Bezirk <name>» for district of Austria (Q871419) or just «<name>» for statutory city of Austria (Q262882); can have a multi-value
Y	adm3	Breitenfurt bei Wien	located in the administrative territorial entity (P131)	map free text municipality name to an item	can have a multi-value; The target items must have instance of (P31) municipality of Austria (Q667509)
Y	adm4	Dörfl bei Ochsenburg	-		Katastralgemeinde; can have a multi-value
Y	name	Kommunaler Wohnbau, Straßenbahner-Wohnheim	New property needed to be proposed (tomorrow)	# monument_article	may contain wiki syntax, as given by BDA data provider, immutable
	adress	Johann-Hoffmann-Platz 10-15			text only, skip all html / wiki syntax. immutable
Y	municipality				can have a multi-value; = adm3
Y	lat		coordinate location (P625)		Combines the value of both lat and lon lat & long might be missing, if unknown.
Y	lon		see lat		see lat
	image		image (P18)		parameter: Foto
	commonscat		Commons category (P373)		
	monument_article	Ostfriedhof (Innsbruck)			no label (Q24707863)
	source				internal for the mechanism; WP version used for data extraction
	registrant_url				internal for the mechanism; as long as the BDA data is as it is, always empty.
	changed		see comment		internal for the mechanism; if statements are sourced then this might be useful to store



How to
surface
the data?

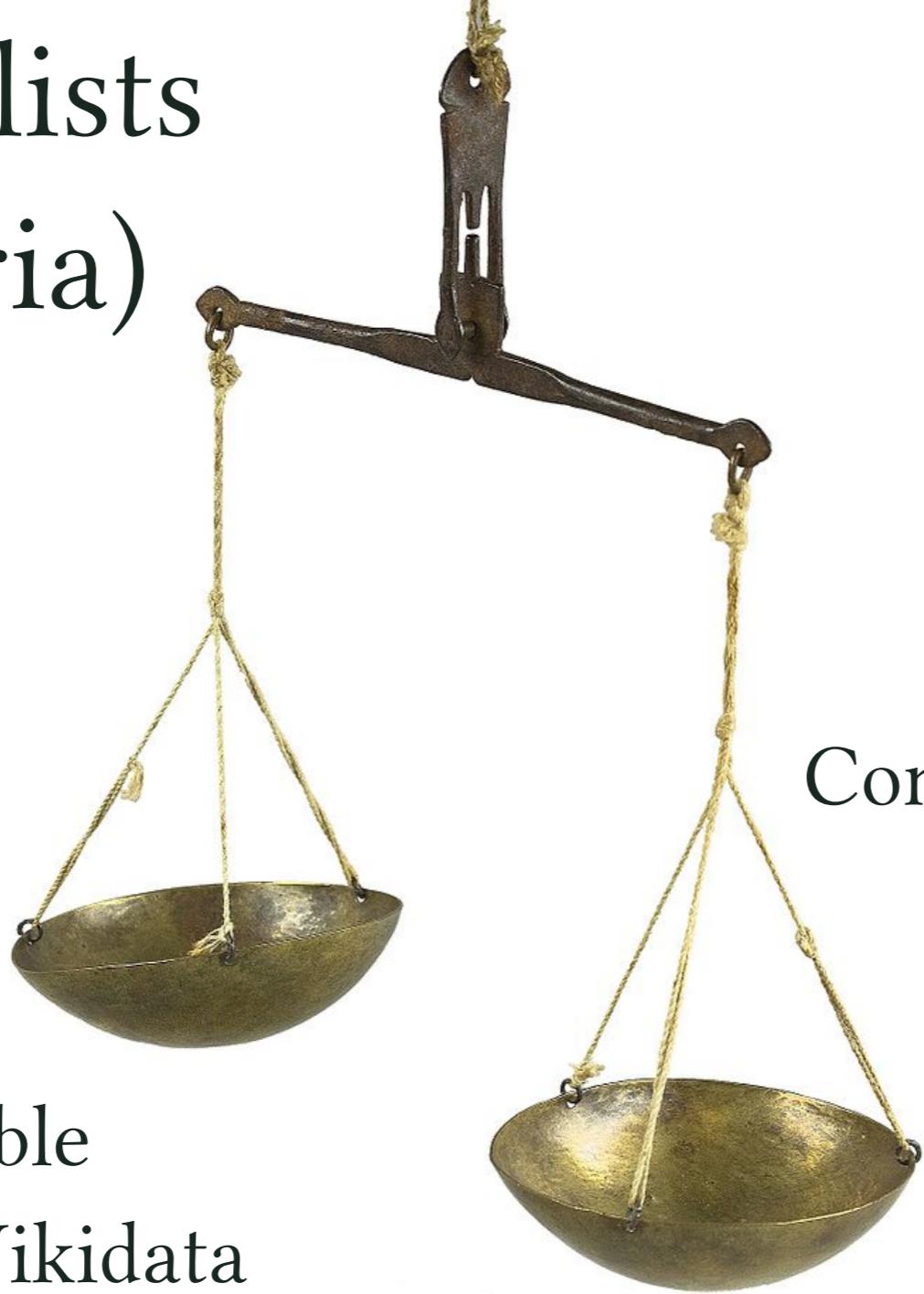




We harvest Wikidata into
the Monuments database

Automatic lists (with Listeria)

Manual lists (with Lua)



No existing lists

Not directly editable

No data not on Wikidata

Example: Australia

Combines with existing data

If Listeria not possible

Needs some Lua-fu

Quick filter

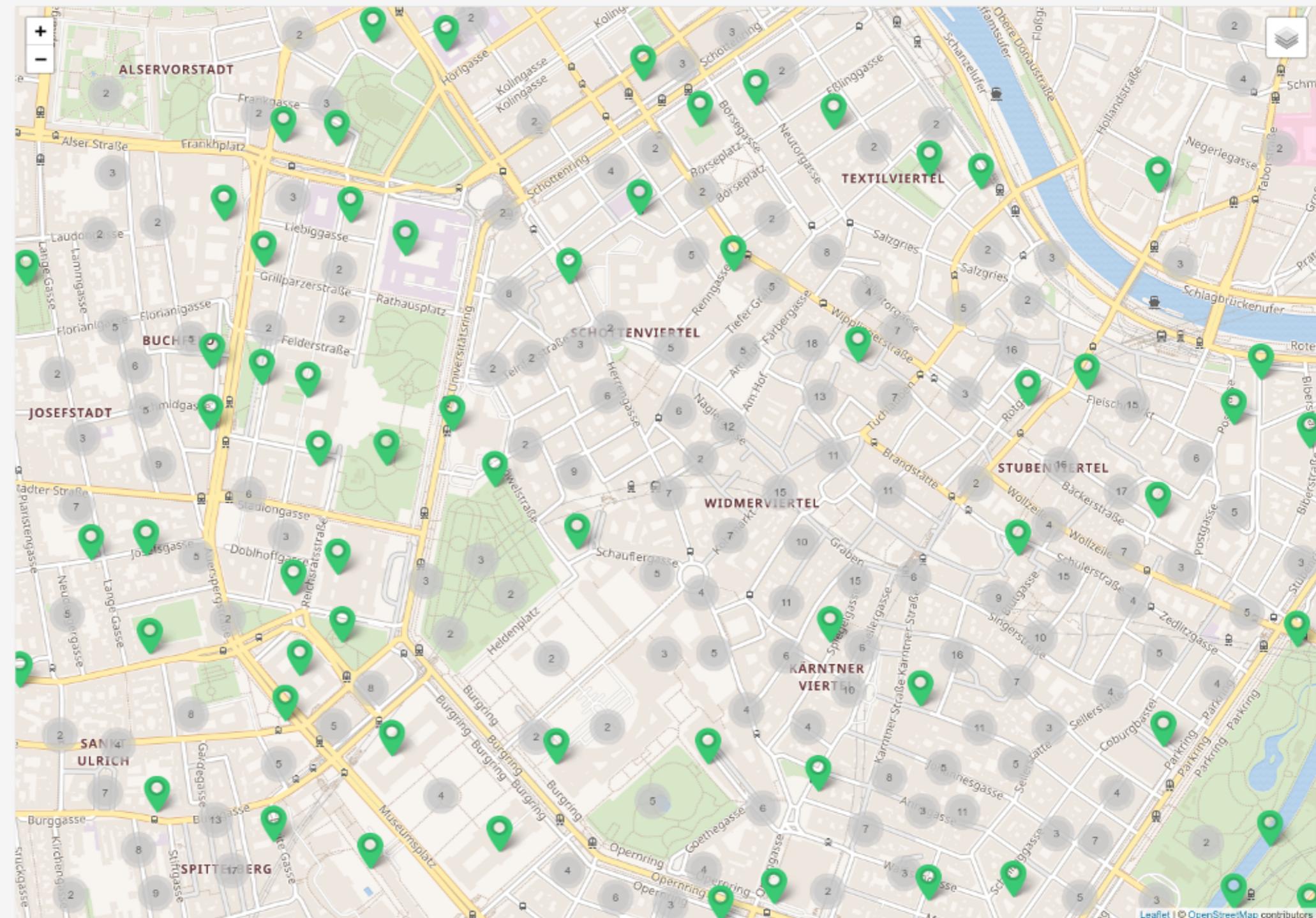
Vienna

868 RESULTS

Image

Wikipedia article

Type

American Bar
ViennaAugustinian Church
ViennaAustrian Parliament Building
ViennaAustrian Postal Savings Bank
ViennaBank Austria Kunstforum Wien
ViennaBartensteingasse
ViennaBillrothhaus
ViennaBurggarten
ViennaBurghtheater
ViennaCapuchin Church
Vienna

Which experience do we want?





[[Commons:WLM]]
@wikimonuments



