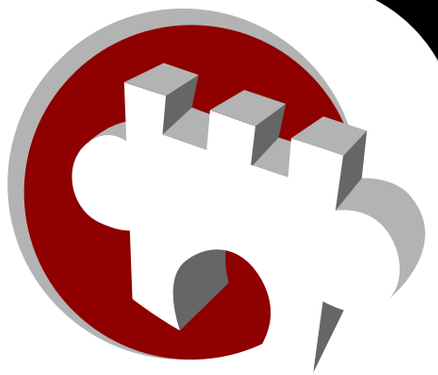


Wikidata as the future of cultural heritage data

For Wiki Loves Monuments and beyond

WikidataCon – 2017-10-28 Gregorian

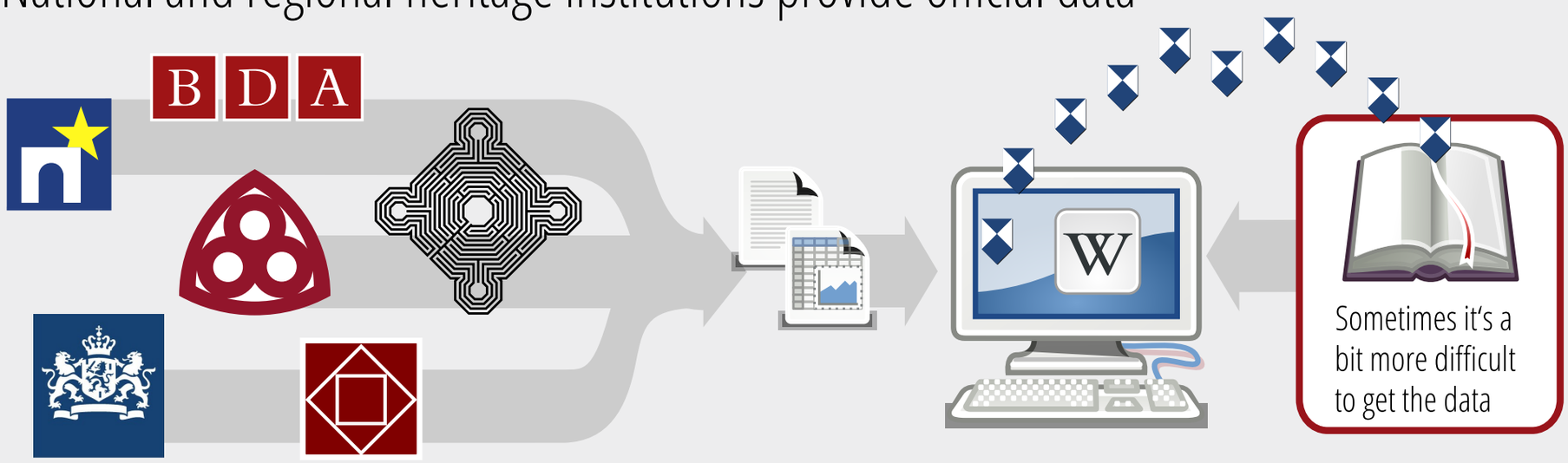
Jean-Frédéric Berthelot – [[User:Jean-Frédéric]] – @JeanFred

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

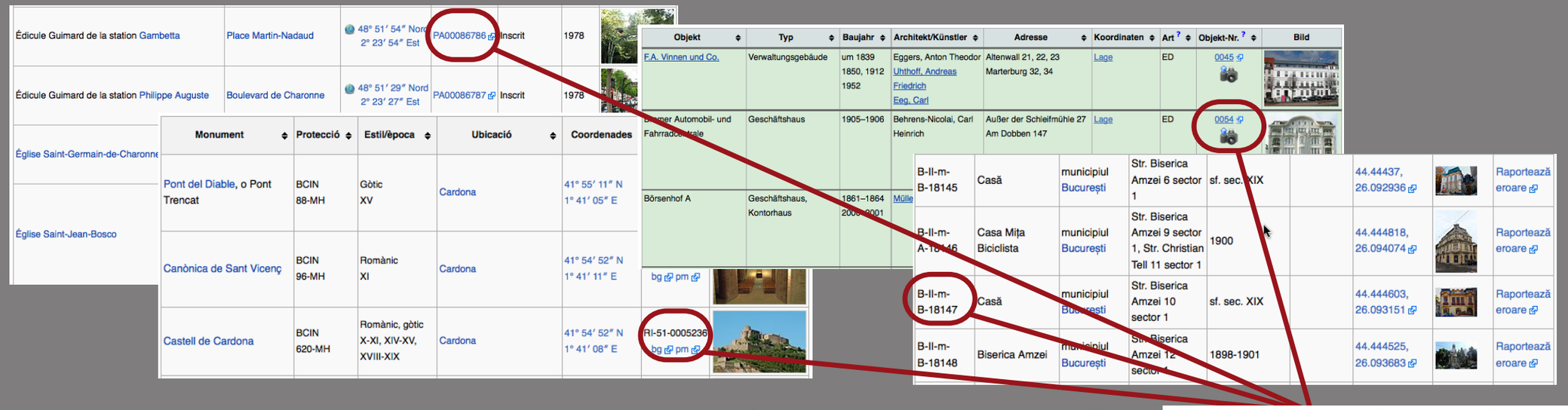
The secret flow behind WIKI loves monuments

Where all the monuments come from:

National and regional heritage institutions provide official data



Busy Wikipedians create monuments lists in Wikipedia



Each monument needs a **unique identifier**

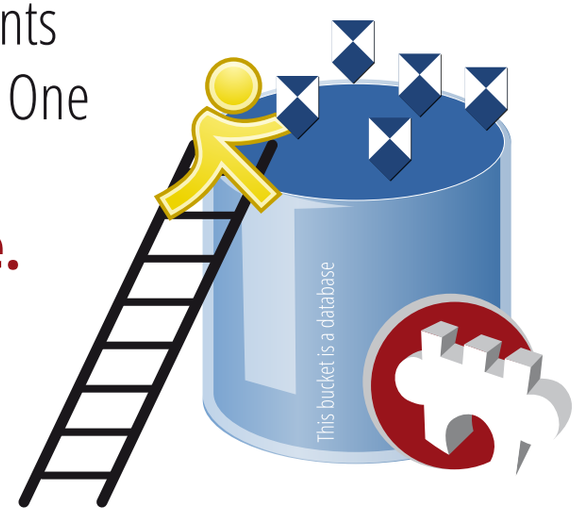
The Wikipedia lists are built with **template** structures.

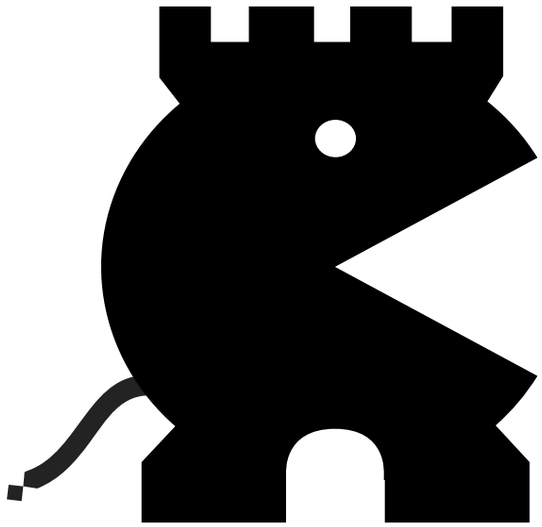
```
{{NRHP row
|pos=
|refnum=
|type=
|article=
|name=
|address=
|city=
|county=
|date=
}}
```

```
{{Tabelrij rijksmonument
| objrijksnr=
| woonplaats=
| adres=
| objectnaam=
| type_obj = G
| architect=
| lat=
| lon=
| image= naam.jp
}}
```

```
{{KRR rida
| number=
| nimi=
| liik=
| aadress=
| omavalitsus=
| NS=
| EW=
| pilt=
| commons=
}}
```

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





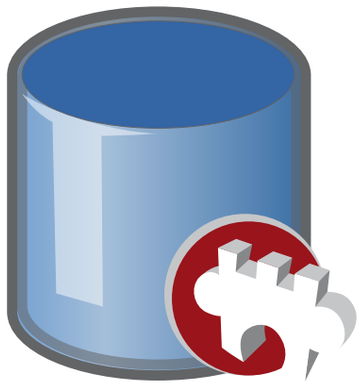
enter **erfgoedbot!**

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.

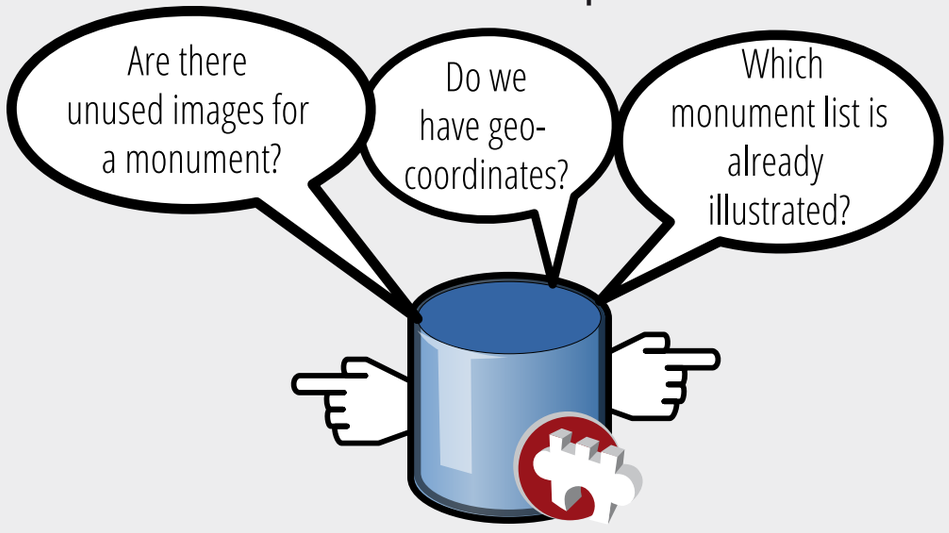
Based on this, erfgoedbot puts them in the correct categories at Wikimedia Commons.

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...



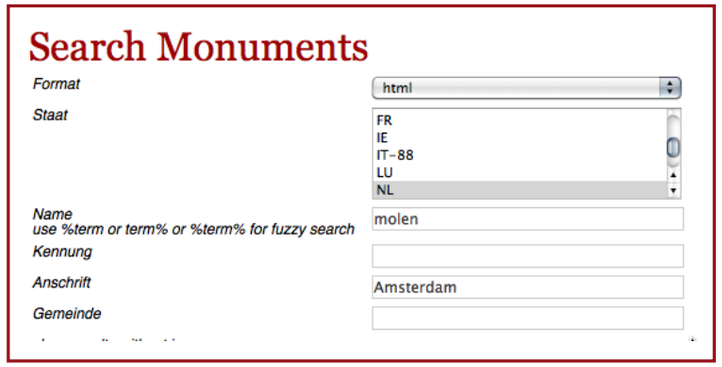
B-II-m-B-19148	Casă	municipiul București	Str. Biserica Amzei 6 sector 1	sf. sec. XIX		44.44437, 26.092936		Raportează eroare
	Casa Mița Biciclista	municipiul București	Str. Biserica Amzei 9 sector 1, Str. Christian Tell 11 sector 1	1900		44.444818, 26.094074		Raportează eroare
	Casă	municipiul București	Str. Biserica Amzei 10 sector 1	sf. sec. XIX		44.444603, 26.093151		Raportează eroare
	Biserica Amzei	municipiul București	Str. Biserica Amzei 12 sector 1	1698-1901		44.444525, 26.093683		Raportează eroare

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

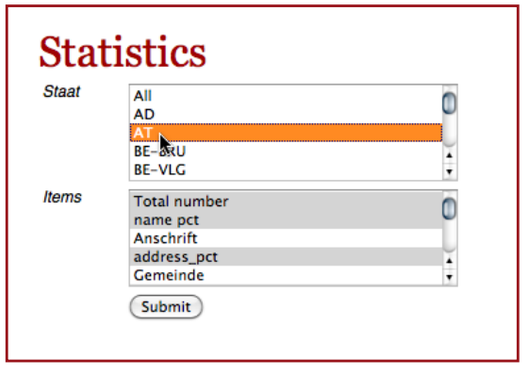


	Adresse	Coordonnées	Notice	Protection	Date	Illustration
	43 rue des Envierges 71 rue de la Mare place Henri-Krasucki	48° 52′ 22″ Nord 2° 23′ 21″ Est	PA00086778	Inscrit	1984	
	Cimetière du Père-Lachaise		PA00086780	Classé	1983	
Charcuterie	108 rue de Bagnolet	48° 51′ 35″ Nord 2° 24′ 12″ Est	PA00086779	Inscrit	1984	IMAGE MANQUANTE Une illustration sous licence libre serait la bienvenue
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 by country, keyword, municipality and more

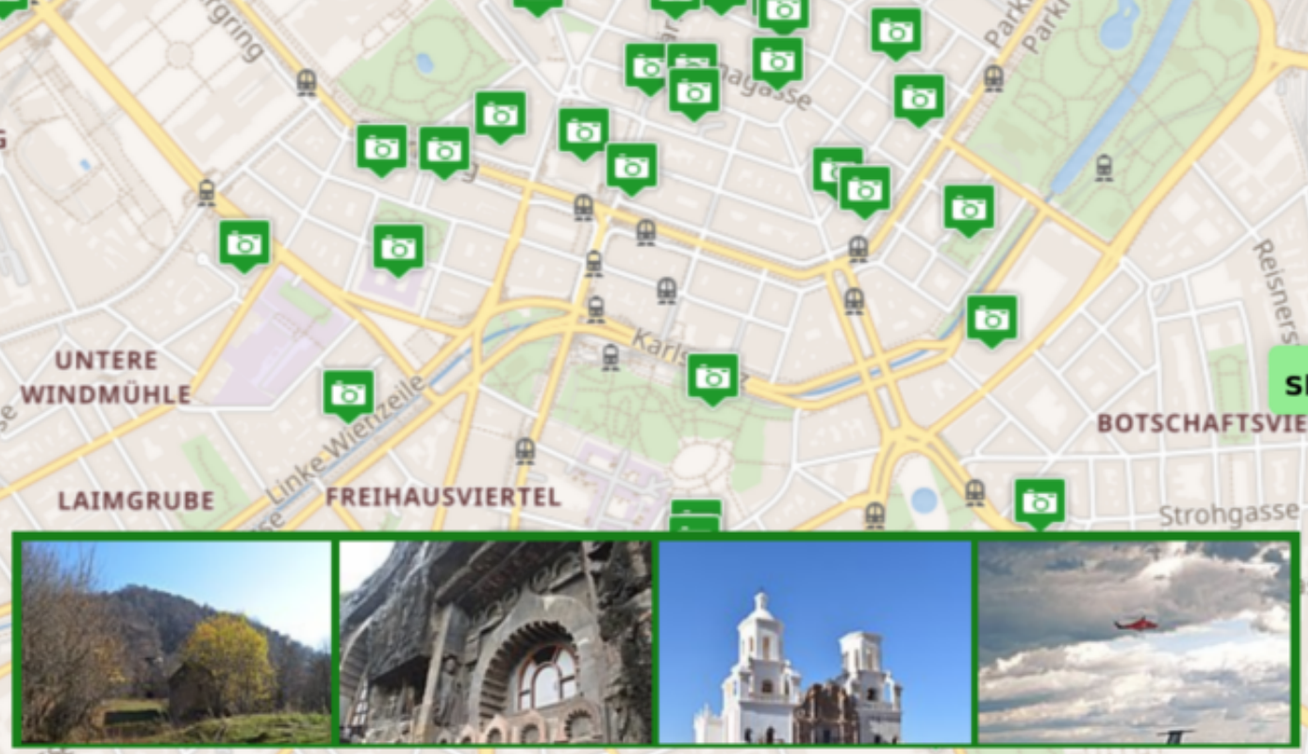


Show helpful statistics for the photo contest

Show monuments on a map

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

Wiki Loves Monuments
September 2017



Show menu

CSV

Share this map!

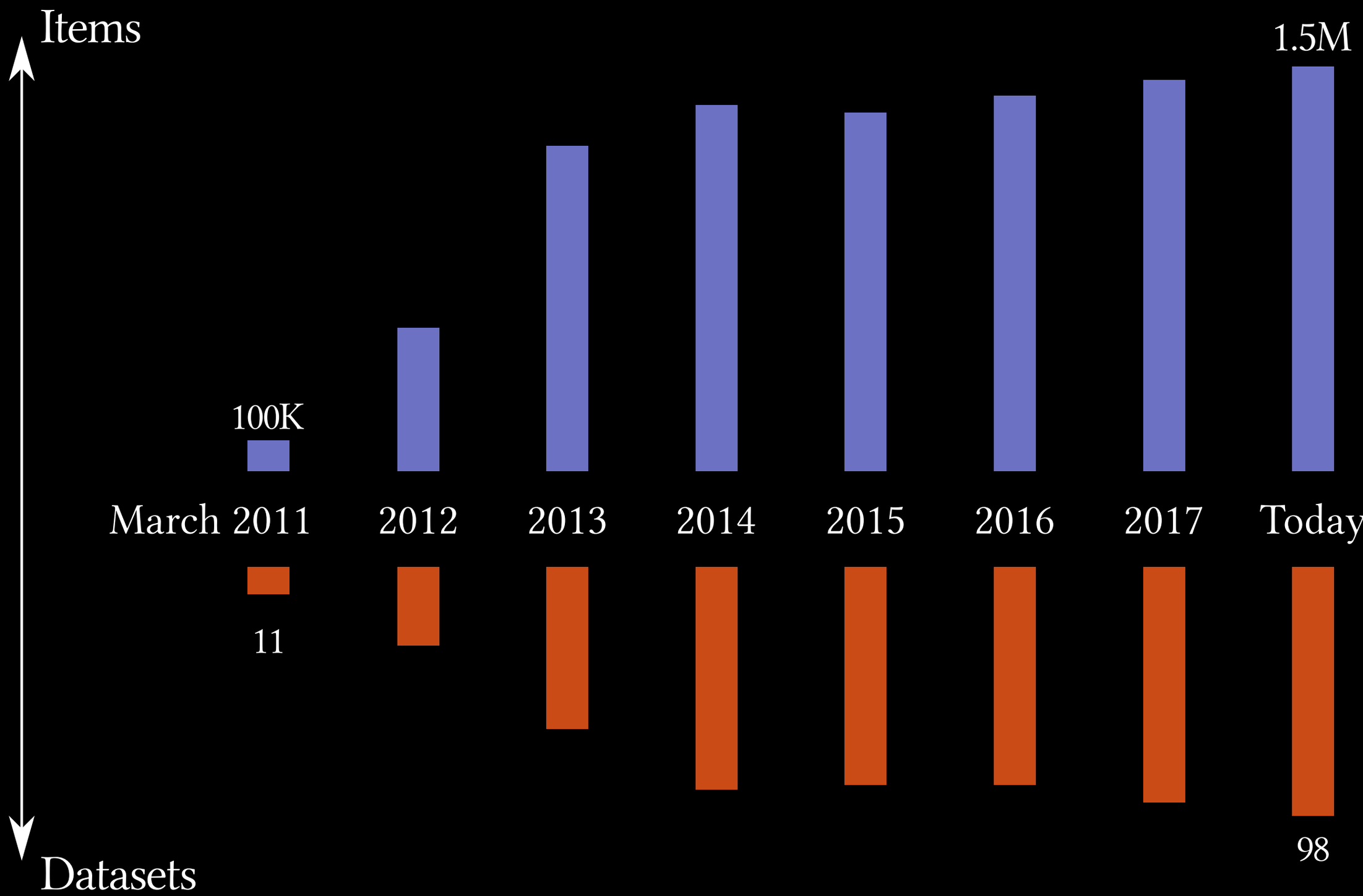
Leaflet | Map data © OpenStreetMap contributors | Monuments database by Wikipedia editors | Source code by emijrp in G

We scaled really well

Chandrasekhar / CC-By-SA

```
{
  "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"
    },
    ...
  ]
}
```


Rainer Halama / CC-By-SA


Items
1.5M
100K
March 2011
2012
2013
2014
2015
2016
2017
Today
11
98
Datasets

Didier Devèze / CC-By-SA

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?

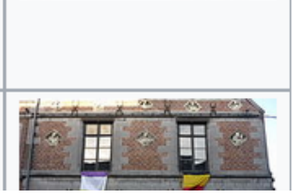
Well…

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	Illustrat
Hôtel de ville				50° 37′ 50″ nord, 3° 46′ 37″ est	51004-CLT-0001-01 [archive]	Téléve

Tom Tom – The Noun Project – CC-By

Centralization

ZeevStein/CC-By-SA

Identifiers

Query service

Constraint checks

Diego Delso, delso.photo, License CC-BY-SA

Ivo Kruusamagi CC-BY-SA

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 municiplality 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	-		Kastastralgemeinde; 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

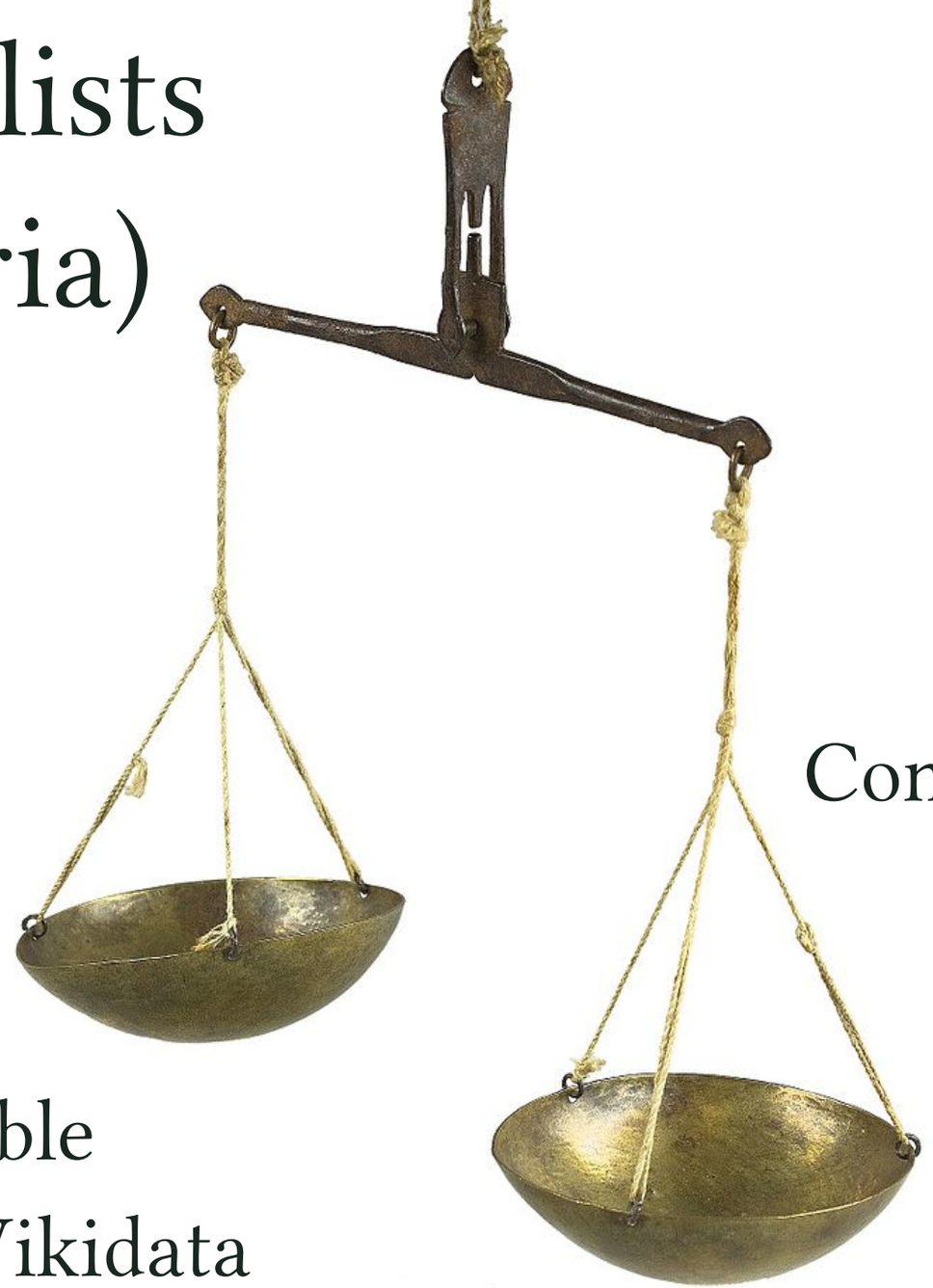
How to surface the data?

Dudule / CC-BY-SA

We harvest Wikidata into the Monuments database

Henry Kellner / CC-BY-SA

Automatic lists (with Listeria)



No existing lists

Not directly editable

No data not on Wikidata

Example: Australia

Manual lists (with Lua)

Combines with existing data

If Listeria not possible

Needs some Lua-fu

Roger Culos / CC-BY-SA

Quick filter
Vienna

868 RESULTS

Type

Image

Wikipedia article

American Bar
Vienna

Augustinian Church
Vienna

Austrian Parliament Building
Vienna

Austrian Postal Savings Bank
Vienna

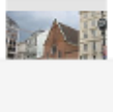
Bank Austria Kunstforum Wien
Vienna

Bartensteingasse
Vienna

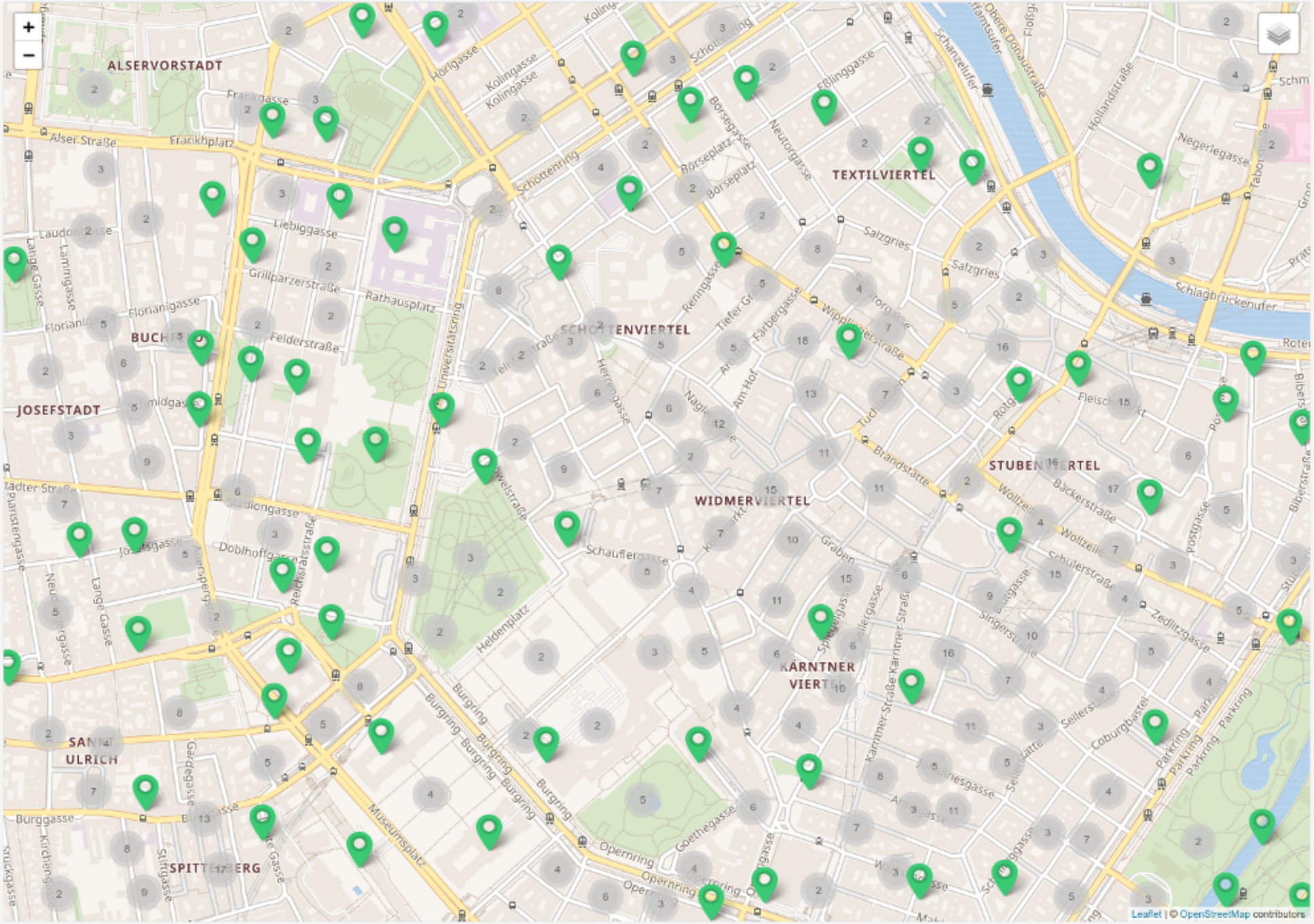
Billrothhaus
Vienna

Burggarten
Vienna

Burgtheater
Vienna



Capuchin Church



Which experience do we want?

Herzi Pinki / CC-By-SA

[[Commons:WLM]]

@wikimonuments