### WIKIDATA LAB XXXIII

Mapping of Cultural Heritage

Éder Porto, Wiki Movimento Brasil

#### Who am I?

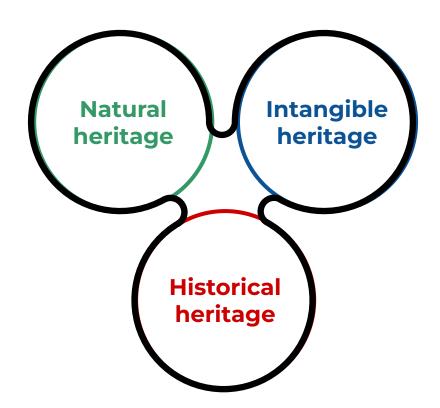
- Applied mathematician;
- Software developer;
- Graphic designer;
- Wikimedian;
- Products & Resources manager at WMB;
- Wiki Loves Monuments Brasil organizer since 2019.



Éder Porto | EPorto (WMB)

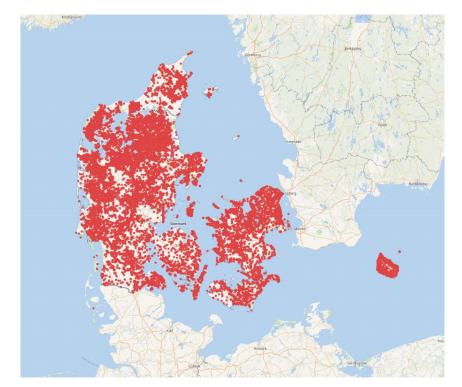
Credits: Sturm/CC-BY-SA 4.0

### **Cultural heritage**

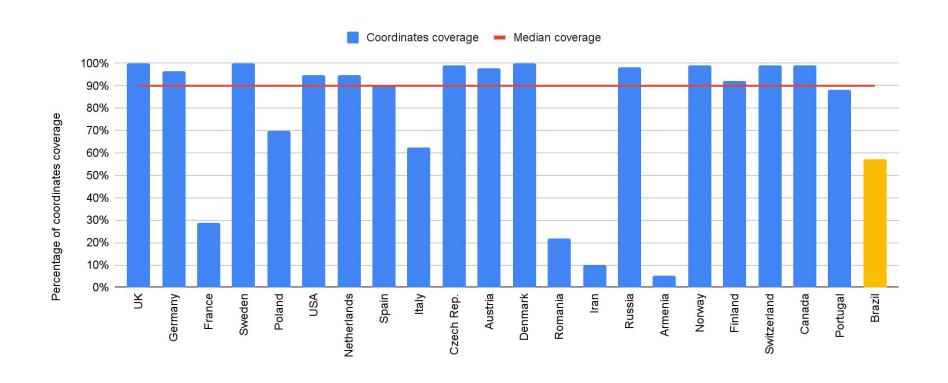


## Status of the coordinates of cultural heritage items on Wikidata

- On Wikidata, there are around 2 million items with the property <u>heritage</u> <u>designation (P1435)</u> set.
- The median coverage of monuments with coordinates on Wikidata is around 90%, based on the countries with more than 1 thousand items on Wikidata.



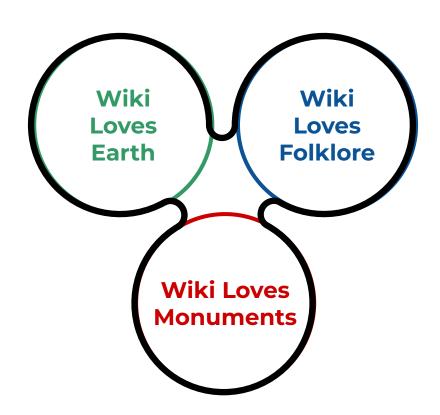
#### Wikidata coordinates coverage of heritage items



### Why are geographic coordinates important

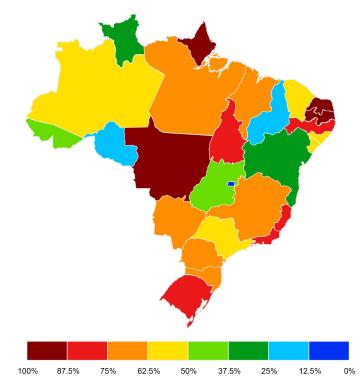
for cultural heritage sites items on Wikidata?

#### **Photographic competitions**



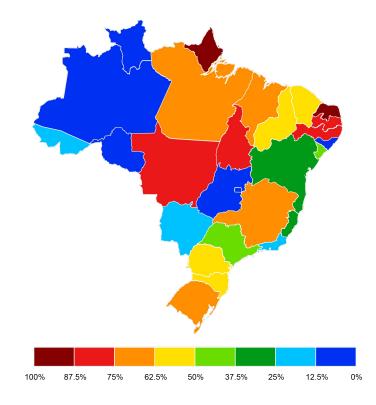
# Brazilian states by percentage of monuments without images in Wikidata

 We have identified a high correlation (0.72) between the number of images and coordinates statements in Wikidata;



## Brazilian states by percentage of monuments without coordinates in Wikidata

 If people can't find the monument in the maps, how will they photograph it?



- A recurrent report we get and face on photographic competitions like these is the localization of the items.
  - Helps photographers to build a itinerary on their walks;
  - Helps organizers to disambiguate possible duplicates;
  - Encourages people to discover and photograph nearby monuments.



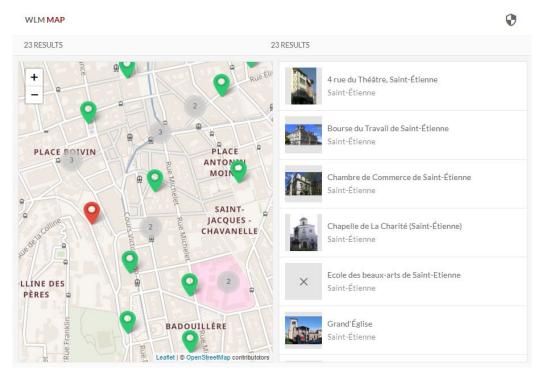
Wikimedia Maps

Segault (2022) evaluates that recurrent photographic contests constitute an effective method of motivate and animate the community.

Oceja and Sierra-Obregón (2018) analyze that this type of competition performs better if it contains gamification elements and improves user experience with the actions in it.

#### Interactive maps

- WLM Italia;
  - Ferdinando Traversa;
- WLM UK;
  - Magnus Manske;
- Monumental (France, Ireland, Poland, Sweden, UK, USA)
  - Paweł Marynowski;
    Stephen LaPorte.



Monumental screenshot/BSD 3-Clause License

#### Interactive maps

- The most popular library to create those kind of maps is Leaflet, a open-source JavaScript library by Volodymyr Agafonkin with support for desktop and mobile devices;
- Allows us to customize practically everything in the map.



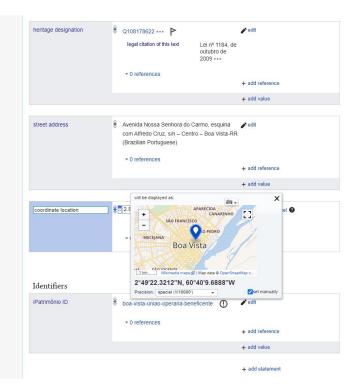
#### **Problems with maps today**

- A workable version of a monuments map on Wikipedia, using the Kartographer extension can be very (VERY!) heavy (the map of the state of Rio de Janeiro, for example, has 1.7 Million bytes!);
  - That's not bandwidth friendly, so it is not adequate to our reality.
  - Is not exactly interactive.

- To improve, maps on Wiki should be (somehow) improved to lower the bandwidth it consumes to open them;
- The interactiveness in maps in general has the potential to improve user experience with the data it shows.

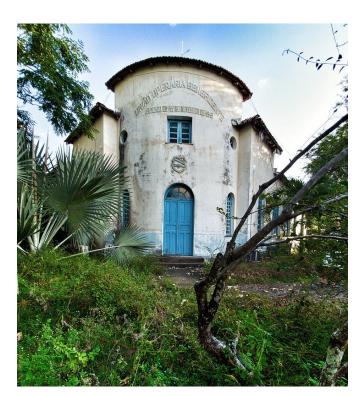
#### Problems with adding coordinates to Wikidata

- There's a barrier in the addition of geographic coordinates on Wikidata. You either do it in the user interface or via quickstatements, which requires another layer of tech knowledge.
- Add a option for the user drag the pin to adjust the precision is a possible feature.



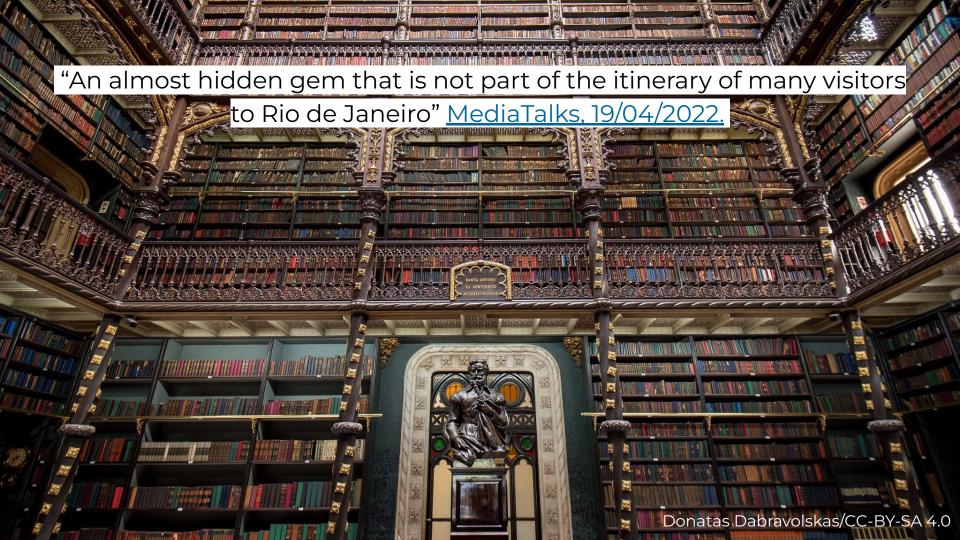
Screenshot of the item Q108178611 on Wikidata.

### First images of a monument in Roraima





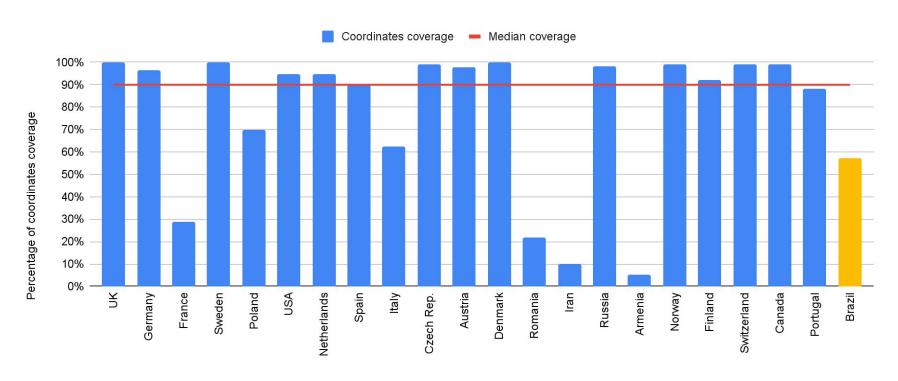
Hudson Gomes Santos/CC-BY-SA 4.0



This year, Wiki Loves Monuments Brasil will have an interactive, mobile friendly, map application

intended to raise the gamification of the contest.

# For this to be meaningful, we need to raise the coordinates coverage



#### How can we do this?

- By adding geographic coordinates in monuments!
  - Register at the event on the Outreach Dashboard!
  - Access the lists of monuments; (<u>https://w.wiki/56os</u>)
  - Search for the localization of a monument (preferably through OpenStreetMap) and copy its coordinates;
  - Paste it on the corresponding cell of the Tabernacle table and save it;
- <u>Live example;</u>

### Thank you!

**Éder Porto** 

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