- User: Joris Darlington Quarshie
- Community Manager
- African Wikimedia Technical Community

INTRODUCTION TO WIKIDATA

https://commons.wikimedia.org/wiki/File:JimmyWalesJI5.jpg

Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge. That's what we're doing

-- Jimmy Wales (https://en.wikiquote.org/wiki/Jimmy_Wales#Quotes)

Data

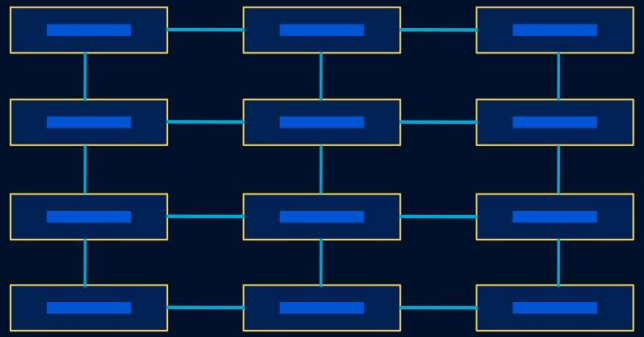
Collection of Information
a set of values of subjects

UNSTRUCTURED DATA

- Text -> Article, Poem, Script, Storyboard
- Images
- Audio,
- Video
- Smell, Taste

STRUCTURED DATA

- List
- Table
- Comma Separated Values
- Database
- Linked Data



STRUCTURED DATA

TWO KEY PROBLEMS

1. Dated data; lacking triggers; repetitive work
2. Inflexible ways of lateral queries of knowledge (Categories and their limitations)

TWO KEY PROBLEMS

One solution

An editable central storage for **structured and linked data**, on a wiki, under a free license.

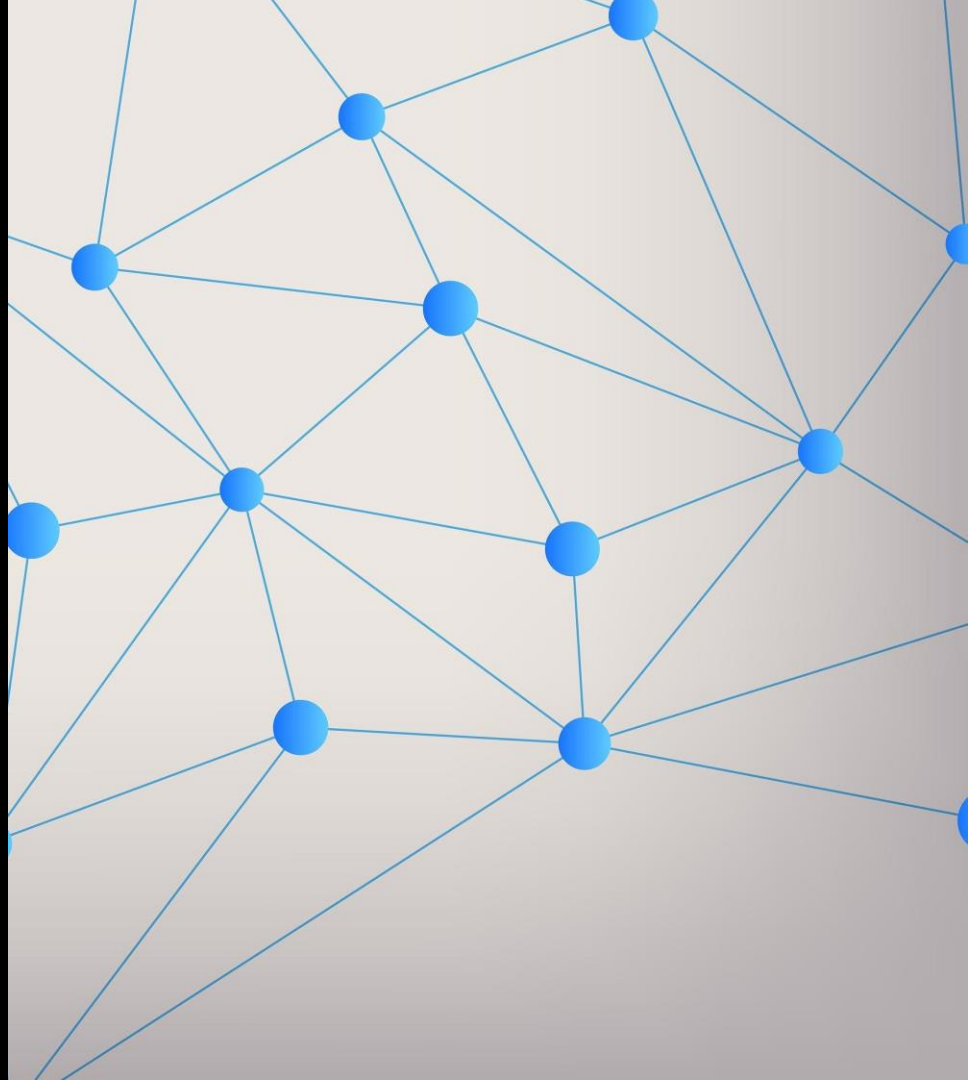
(AKA **Wikidata**)

In short:

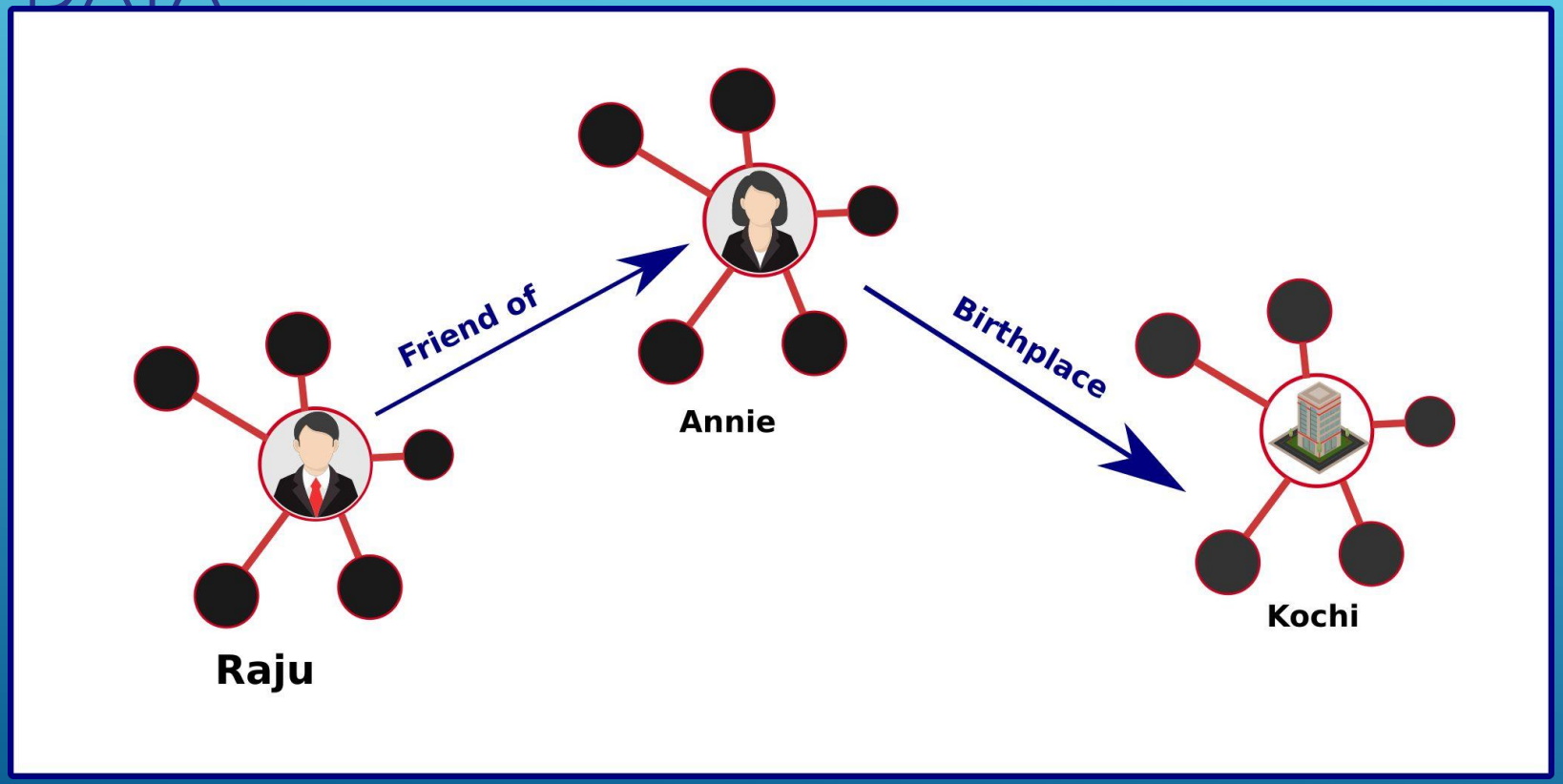
Wikidata is <3

Linked Data

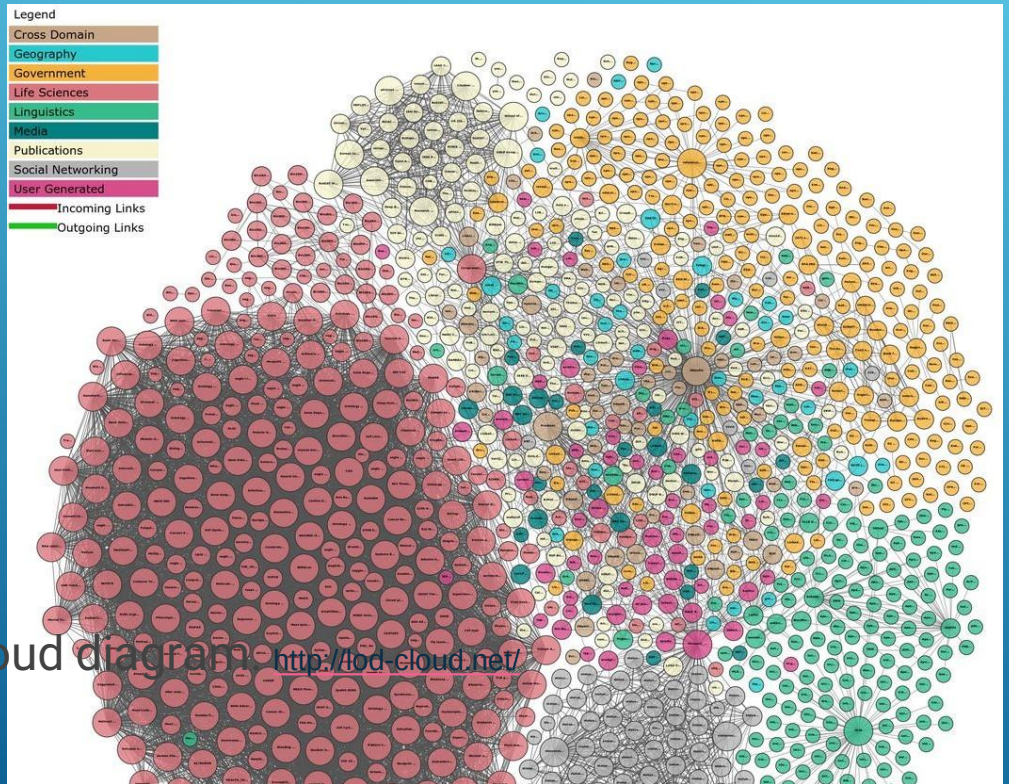
One Data point is connected to another data through a condition

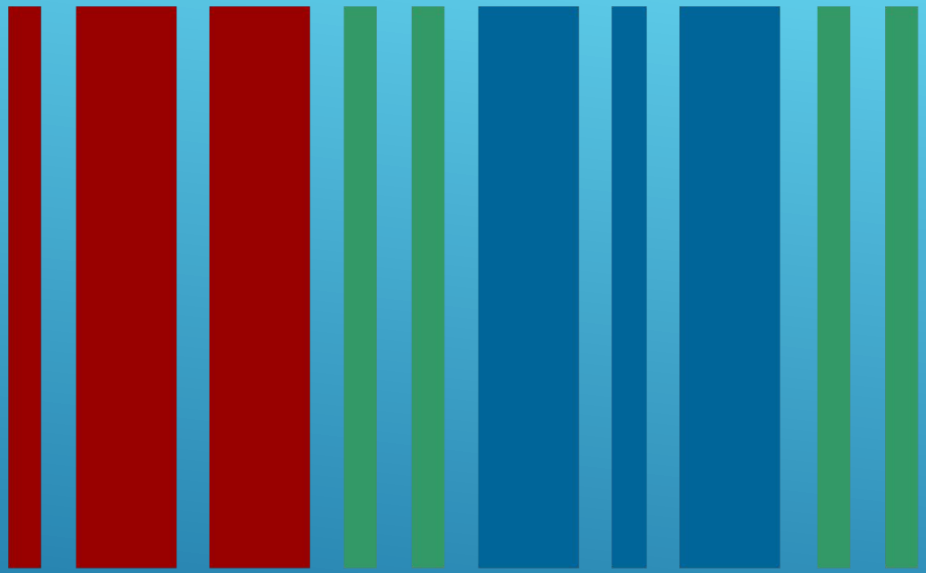


LINKED DATA



Linking Open Data cloud diagram - http://lod-cloud.net/





WIKIDATA

www.wikidata.org

WHAT IS WIKIDATA?

- Editable
- Structured and Linked Data Warehouse
- Available with Free License (CC0)

WHAT IS WIKIDATA?

- Pure Free Software, Pure free data (CC0) - Do whatever you want. No Questions asked
- Open and editable by anyone, including the ontology
- A sister project of Wikipedia, by Wikimedia
- Multilingual support from the first day
- More and more practically used in digital humanities

STRUCTURED AND LINKED DATA

- Structured data: Each unit of information is described by three: **subject, predicate, and object or as Wikidata says: item, property, value.**
    - Each three can be further specified with restrictions - for other three (time period, context, source, point of view ...)
- Data statements link to each other, enabling discovery and reasoning.

A BRIEF INSIGHT

- Universe (Q1)
- Ghana(Q668)
- Accra(Q1006240)
- and / instance of(P31) <- Property

ITEM: EARTH (Q2)

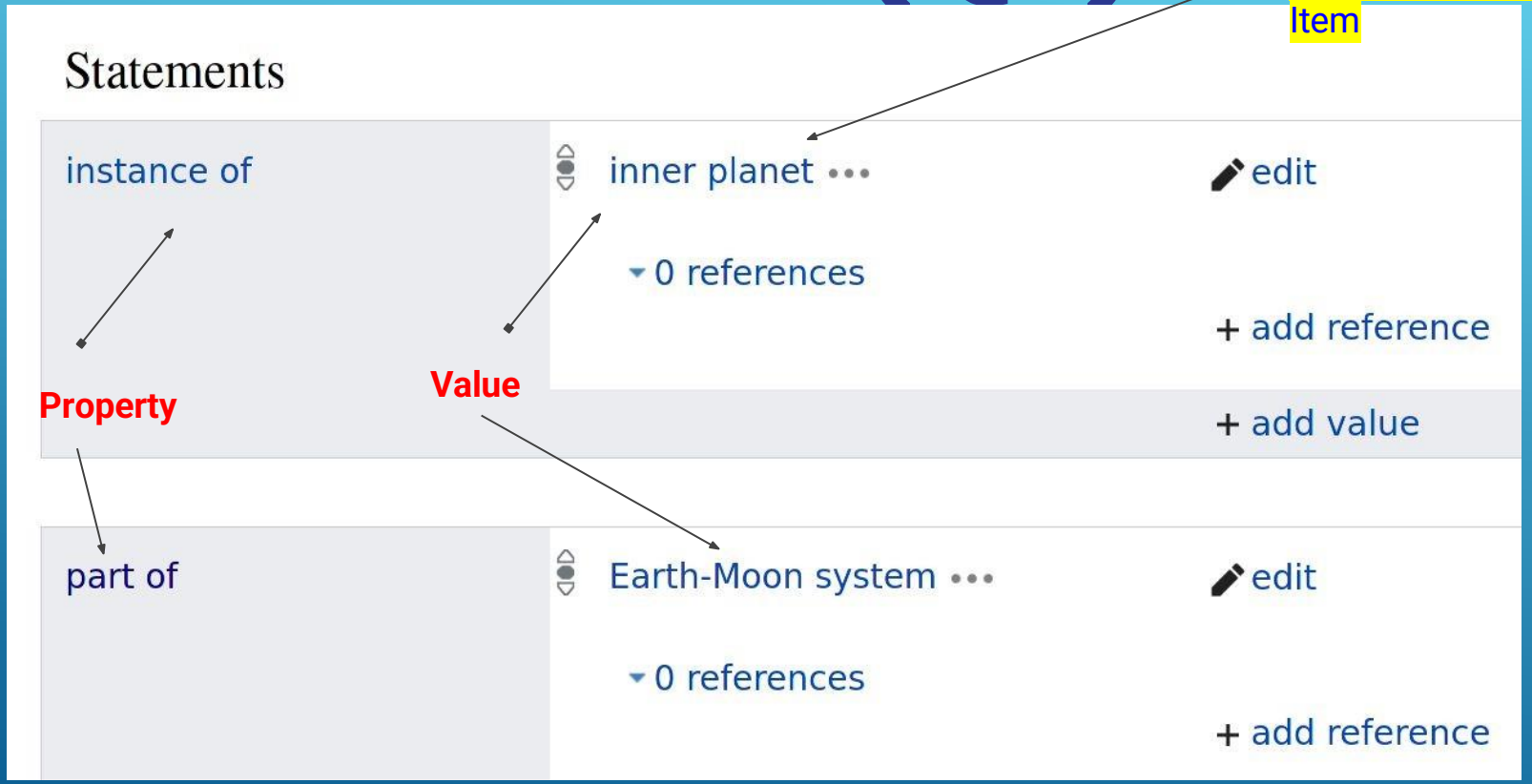


IMAGE OF EARTH

edit

Планета Земли фотография КА Юноны.jpg

640 × 480; 32 KB

vehicle	Juno •••
distance from Earth	0.06457 astronomical unit •••
point in time	26 August 2011 •••

edit

The Earth seen from Apollo 17.jpg

3,000 × 3,002; 6.21 MB

point in time	7 December 1972 •••
media legend	Dünya'nın Apollo 17'den görünüşü (Turkish) Sininen marmorikuula, kuuluisa kuva Maasta vuodelta 1972. (Finnish) Jorden sedd från Apollo 17 (Swedish)
distance from Earth	29,000 kilometre •••

STRUCTURE OF WIKIDATA

We have a Q (item)

Q have a property P

P have a value Another Q

This is called a Statement

Statement = Item --> Property --> Value

STATEMENT = ITEM --> PROPERTY --> VALUE

Earth --> highest-point --> Mount Everest

Mount Everest --> elevation above sea level --> 8848 meters

Earth --> deepest point --> Challenger Deep

Challenger Deep --> elevation above sea level --> -10,994±1 metre

Earth -->

highest-point: Mount Everest

deepest point: Challenger Deep

Challenger Deep -->

elevation above sea level: -10,994±1 metre

Mount Everest -->

elevation above sea level: 8848 meters

Earth (Q2) --> highest-point (P610) --> Mount Everest (Q513)

Mount Everest (Q513) --> elevation above sea level (P2044) --> 8848 meters

Earth (Q2) --> deepest point (P1589) --> Challenger Deep (Q459173)

Challenger Deep (Q459173) --> elevation above sea level (P2044) --> -10,994±1 metre

ONLY NUMBERS NOW.

Q2 --> P610 --> Q513

Q513 --> P2044 --> 8848 meters

Q2 --> P1589 --> Q459173

Q459173 --> P2044 --> -10,994±1 meters

WHY NUMBERS?

Labels are ambiguous:

What is London?

City in England, City in Canada,

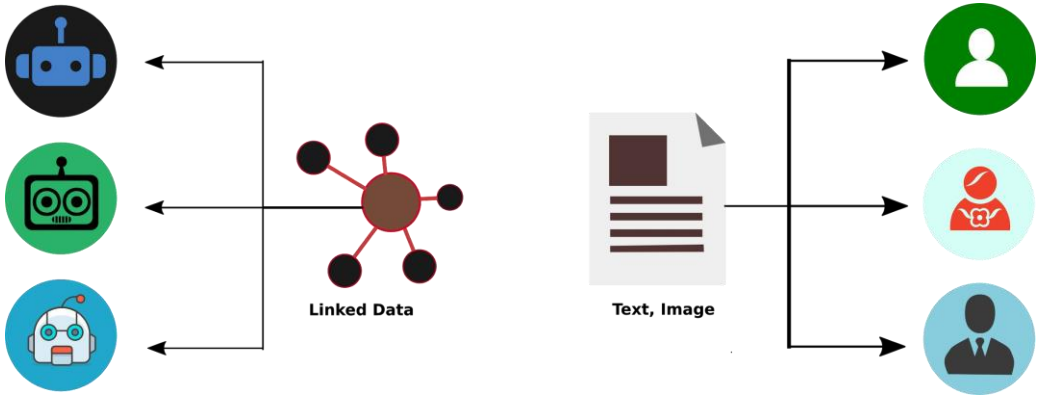
family name,

personal name, movie company, hotel?

Why Numbers ?

Language-neutral - not everybody speaks English!

Robot-friendly (robots love numbers ;)



SO WHAT IS IN WIKIDATA ?

Universe (Q1)

Pencil (Q14674)

Happy Birthday to You (Q167545)

global warming (Q7942)

Palakkad (Q1006240)

God (Q190)

parish church (Q317557)

ice cream (Q13233)

friendship (Q491)

Everything in the Universe or Beyond

EDIT WIKIDATA

Create an account

Login

Find an Item

Add Data

LET'S TEACH WIKIDATA

SOME THINGS!

https://www.wikidata.org/wiki/Q546374

https://www.wikidata.org/wiki/Special:NewItem

CONTRIBUTING TO WIKIDATA ON YOUR COMMUTE!

THE WIKIDATA GAME

Semi-automates micro-decisions and make incremental improvement of Wikidata super-fun.

https://tools.wmflabs.org/wikidata-game

https://tools.wmflabs.org/wikidata-game/distributed

MIX AND MATCH

- Match Wikidata entities to external databases' entities

https://tools.wmflabs.org/mix-n-match/

https://tools.wmflabs.org/mix-n-match/?mode=sitestats&catalog=92 (coverage of members of the Royal Society)

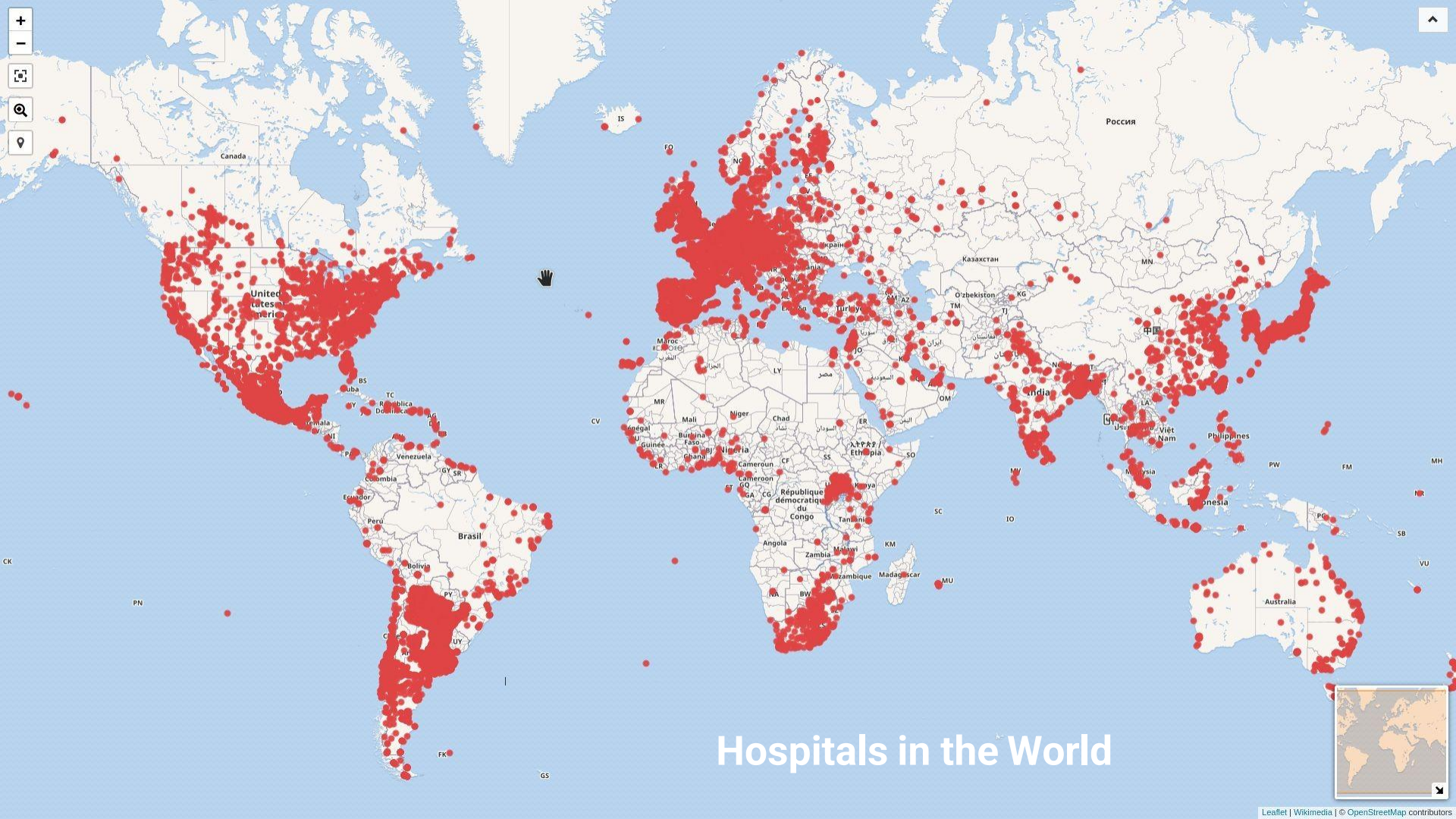
WIKIDATA ON TOOLHUB

QUERYING WIKIDATA

* query Wikidata using [[SPARQL]]

* Wikidata will tell you everything it knows, but no more

*The more data and the more links in Wikidata, the more useful it becomes (so contribute!)


Hospitals in the World
Leaflet | Wikimedia | © OpenStreetMap contributors

RUN THIS

https://w.wiki/JgW

Go to -> https://query.wikidata.org

```
#Map of hospitals

#added 2017-08

#defaultView:Map

SELECT * WHERE {

  ?item wdt:P31/wdt:P279* wd:Q16917;

        wdt:P625 ?geo .

}
```

Map is Free

VIDEO TRAINING

Video by Asaf Bartov

https://www.youtube.com/watch?v=eVrAx3AmUvA

http://bit.ly/wikidatavideo

Wikidata, Knowledge Graphs, and Beyond

Denny Vrandecic, founder of Wikidata.

https://www.youtube.com/watch?v=Oips1aW738Q

PRESENTATIONS

Wiki + data = Wikidata, and why you should care - https://w.wiki/bzA

Beyond the basics - Intermediate Wikidata techniques - https://w.wiki/bzB

WDQS and SPARQL – WikidataCon 2017 - https://w.wiki/bzC

NOW THAT YOU HAVE THE POWER. THIS IS JUST A BEGINNING.

QUESTIONS ?

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- Photo of Jimmy Wales by Joi Ito - https://commons.wikimedia.org/wiki/File:JimmyWales.JI5.jpg
- Linking Opendata Cloud Diagram - https://commons.wikimedia.org/wiki/File:Lod-cloud_2019-03-29.png
- Crotos art browser - http://zone47.com/crotos/?l=en
- Histropedia - http://histropedia.com/timeline/
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