



WIKIDATA

Cristina Sarasua, University of Zurich

Wikipedia vor Ort, ZH - 28.10.2018

Agenda

1. Editing in the Wiki
2. SPARQL queries

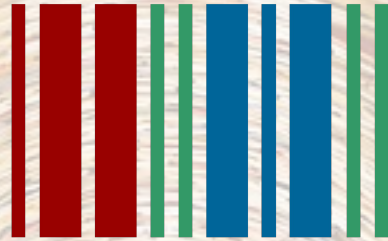
“Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge.”

Jimmy Wales

“Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge.”

Jimmy Wales

... & the power to query ...



WIKIDATA

*The free knowledge base that
anyone can use and edit.*

WikidataCon 2017



**> 51
Million
Data
Items**

Free Structured Data

**> 18K
Active
Editors**

Human Input

**$\frac{1}{3}$ WM
Edits,
1.07B
views**

High Interest & Reliable

**VIAF, OSM
ORCID, ISO
Europeana
...**

Well Connected

**Q37001445
17.08 15:50**

Data Freshness

**RDF
SPARQL
JSON**

Multiple standards

label — **Douglas Adams** (Q42) — item identifier

description — English writer and humorist
 Douglas Noël Adams | Douglas Noel Adams — aliases
 ▶ In more languages

Statements

property — **educated at** — value

rank — **St John's College**

end time	1974
academic major	English literature
academic degree	Bachelor of Arts
start time	1971

qualifiers

rank — **2 references**

statement group — **opened references**

stated in	Encyclopaedia Britannica Online
reference URL	http://www.nndb.com/people/731/000023662/
original language of work	English
retrieved	7 December 2013
publisher	NINDB
title	Douglas Adams (English)

+ add reference

rank — **Brentwood School**

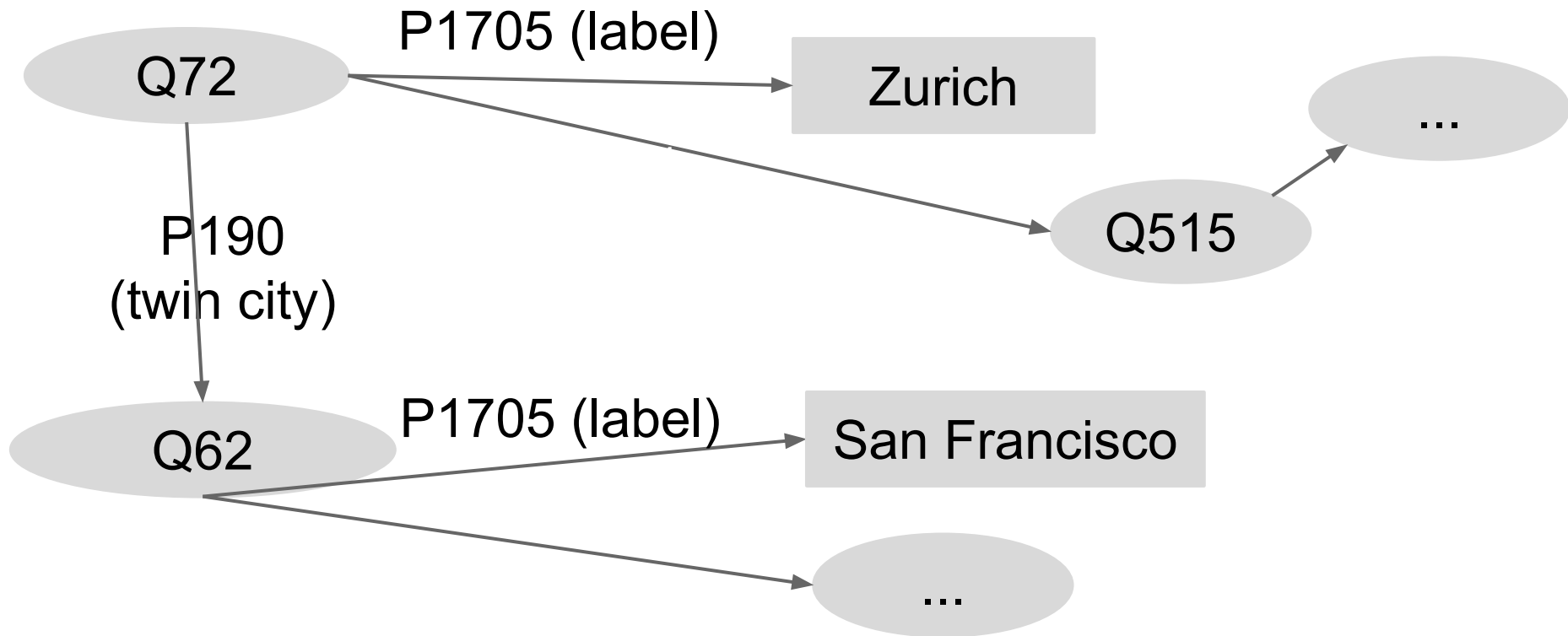
end time	1970
start time	1959

statement group — **collapsed reference**

▶ 0 references

+ add (statement)

A Graph Representation of the data





Editing the wiki

Sandbox Item

Statements

date of birth

 4 October 2018 

 edit

▼ 0 references

+ add reference

+ add value

population



  400,000 ✓ publish  remove cancel ?

point in time  2018  remove

+ add qualifier

▼ 1 reference

 remove

reference URL  https://statistik.zh.ch/internet/justiz_inn/eres/statistik/de/home.html  remove

+ add

+ add reference

+ add value

Editing <https://www.wikidata.org/wiki/Q4115189>

Plurality

population

400,000 ✓ publish remove cancel ?

Preferred rank 2018 remove

Normal rank Valid and up-to-date value + add qualifier

Deprecated rank

▼ 1 reference

remove

reference URL https://statistik.zh.ch/internet/justiz_innere/statistik/de/home.html remove

+ add

+ add reference

200,000 ✓ publish cancel ?

point in time 2018 remove

+ add qualifier

▼ 1 reference

remove

reference URL <https://www.nzz.ch/zuerich/glaubt-man-der-statistik-leben-im-maerz-2020-so-viele-menschen-wie-noch-nie-in-zuerich-id.1357569> remove

+ add

Editing <https://www.wikidata.org/wiki/Q4115189>

Let us ...

Browse: <https://www.wikidata.org/wiki/Q72>

Edit: <https://www.wikidata.org/wiki/Q4115189>

A decorative graphic consisting of two horizontal rows of colored squares. The top row contains three red squares, two green squares, and three blue squares. The bottom row contains three red squares, two green squares, and three blue squares. A light gray horizontal bar is centered over the middle of these squares, containing the text "SPARQL queries".

SPARQL queries

A SPARQL Query

Example: query to retrieve the ID and label of train stations in Zurich

```
select ?item ?itemLabel
```

```
where{
```

```
  ?item wdt:P31 wd:Q55488 .
```

```
  ?item wdt:P131 wd:Q72 .
```

```
  SERVICE wikibase:label {
```

```
    bd:serviceParam wikibase:language "[AUTO_LANGUAGE],en"
```

```
  }
```

```
}
```

What do we want to retrieve?

Restrictions that the data has to satisfy (all of them!)

Let us

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

See Examples:

https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/queries/examples

Vielen Dank!



**Universität
Zürich^{UZH}**

Cristina Sarasua

E-mail: sarasua@ifi.uzh.ch

Twitter: @csarasuagar

<https://ddis.ifi.uzh.ch/>

