WIKIDATA

A free knowledge base that can be read and edited by humans and machines alike

What is WikiData?

- A project by Wikimedia Deutschland

- Launched October 2012

- An interlinked database representing "the sum of all human knowledge"

- Centralising key data about "items"

- Serving data to other Wikimedia projects

- Serving machine-readable data to third parties

- MediaWiki extension ("WikiBase")

- Fifth most active Wikimedia project!
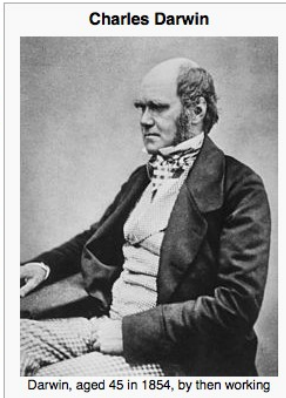
WIkimedia Commons

Charles Darwin

From Wikipedia, the free encyclopedia

Wikidata: Charles Darwin (Q1035), British naturalist, author of "On the origin of species, by means of natural selection"
{{PLURAL:2lAliaslAliases}}: Charles Robert Darwin, Darwin

For other people named Charles Darwin, see Charles Darwin (disambiguation).

Charles Robert Darwin, FRS (12 February 1809 – 19 April 1882) was an English naturalist and geologist,[1] best known for his contributions to evolutionary theory.[1] He established that all species of life have descended over time from common ancestors,[2] and in a joint publication with Alfred Russel Wallace introduced his scientific theory that this branching pattern of evolution resulted from a process that he called natural selection, in which the struggle for existence has a similar effect to the artificial selection involved in selective breeding.[3]

Darwin published his theory of evolution with compelling evidence in his 1859 book *On the Origin of Species*, overcoming scientific rejection of earlier concepts of transmutation of species.[4][5] By the 1870s the scientific community and much of the general public had accepted evolution as a fact. However, many favoured competing explanations and it was not until the emergence of the modern evolutionary synthesis from the 1930s to the 1950s that a broad consensus developed in which natural selection was the basic mechanism of evolution.[6][7] In modified form, Darwin's scientific discovery is the unifying theory of the life sciences, explaining the diversity of life.[8][9]

Charles Darwin

Darwin, aged 45 in 1854, by then working
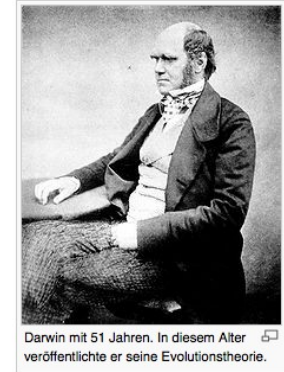
Charles Darwin [Bearbeiten]

Wikidata: Charles Darwin (Q1035), britischer Naturforscher, Begründer der modernen Evolutionstheorie
Alternative Bezeichnungen: Charles Robert Darwin

Darwin ist eine Weiterleitung auf diesen Artikel. Weitere Bedeutungen sind unter Darwin (Begriffsklärung)[BKL] *aufgeführt.*

Charles Robert Darwin (* 12. Februar 1809 in Shrewsbury; † 19. April 1882 in Downe) war ein britischer Naturforscher. Er gilt wegen seiner wesentlichen Beiträge zur Evolutionstheorie als einer der bedeutendsten Naturwissenschaftler.
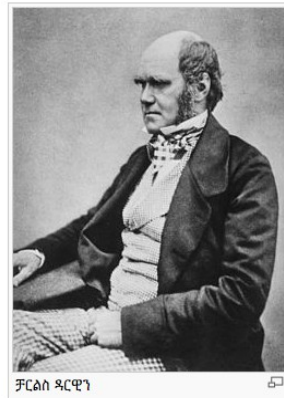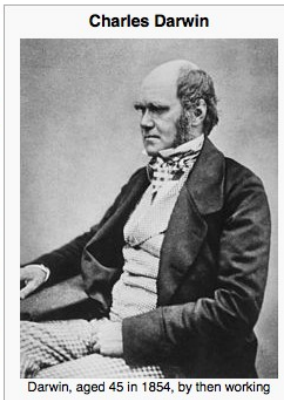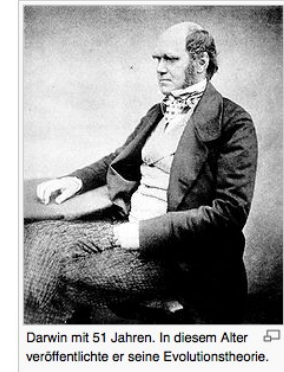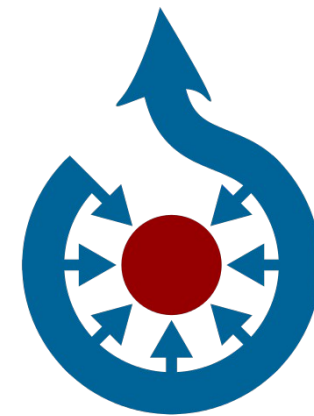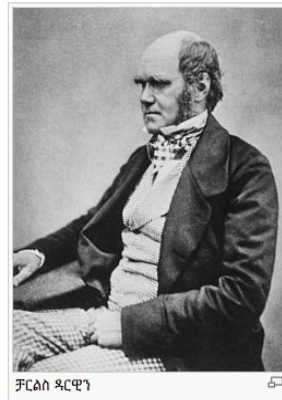
Die Ende 1831 begonnene und fast fünf Jahre andauernde Reise mit der HMS *Beagle*, die den jungen Darwin einmal um die Welt führte, war zugleich Schlüsselerlebnis und Grundlage für sein späteres Werk. Der breiten Öffentlichkeit wurde Darwin erstmals durch seinen 1839 herausgegebenen Reisebericht bekannt. Mit seiner Theorie über die Entstehung der Korallenriffe und weiteren geologischen Schriften erlangte er in wissenschaftlichen Kreisen die Anerkennung als Geologe. Seine Untersuchungen an den Rankenfußkrebsen verschafften ihm Mitte der 1850er Jahre zusätzlich einen angesehenen Ruf als Zoologe und Taxonom.

Bereits 1838 entwarf Darwin seine Theorie der Anpassung an den Lebensraum durch Variation und natürliche Selektion und erklärte so die phylogenetische Entwicklung aller Organismen und ihre Aufspaltung in verschiedene Arten. Über 20 Jahre lang trug er Belege für diese Theorie zusammen. 1842 und 1844 verfasste Darwin kurze Abrisse seiner Theorie, die er jedoch nicht veröffentlichte.

Darwin mit 51 Jahren. In diesem Alter veröffentlichte er seine Evolutionstheorie.

ቻርልስ ዳርዊን

ቻርልስ ዳርዊን (1801-1874 ዓ.ም.) የእንግሊዝ ሥነ ፍጥረት ሊቅ ሲሆን ሕያው ዝርያዎች ሁሉ ከጋራ ወላጅ በዝግመተ ለውጥ እንደ ወረዱ የሚያሳየውን ሳይንት መሠረተ። ይህ ማለት ሰዎች ብቻ ሳይሆን አንስሶቹና ተከሎቹ ሁሉ አንድ ዝርያ ወይ ሌላ ዝርያ በመለወጥ አንድ ወላጅ አንደ ነበራቸው የሚል ነው።
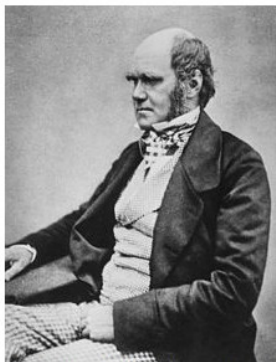
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Centralising file storage

Centralising key data storage

Phases of Wikidata

1. Language/project links (done for some)

2. Statements (in progress)

3. Queries and lists (planned)

Phases of Wikidata
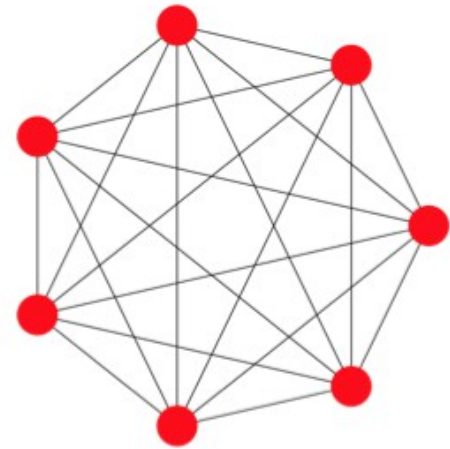
1. Language/project links (done for some)

2. Statements (in progress)

3. Queries and lists (planned)

Currently in phase 2

- Wikipedia

- Wikivoyage

- Wikisource

- Wikimedia Commons (partial)
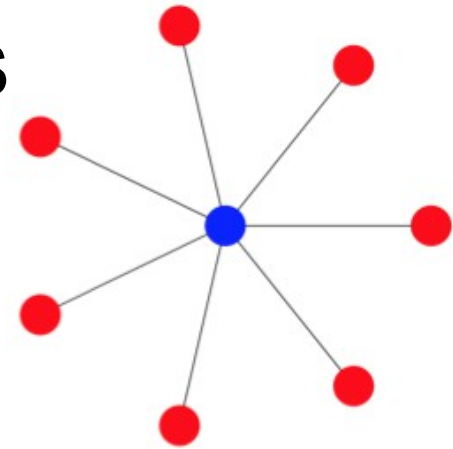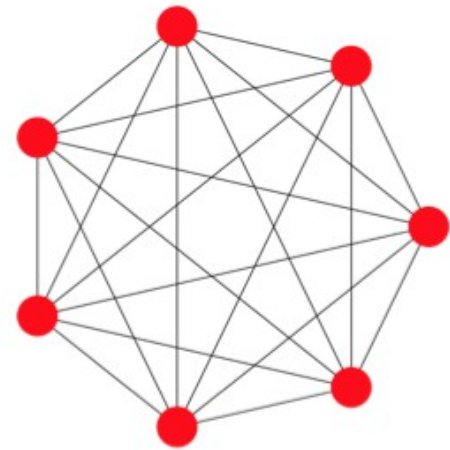
Phase 1 : Language links

- Old : Each Wikipedia article contains links to all other Wikipedia pages about the same topic in different languages

Phase 1 : Language links

- Old : Each Wikipedia article contains links to all other Wikipedia pages about the same topic in different languages

- New : WikiData contains links to all Wikipedia pages about an item
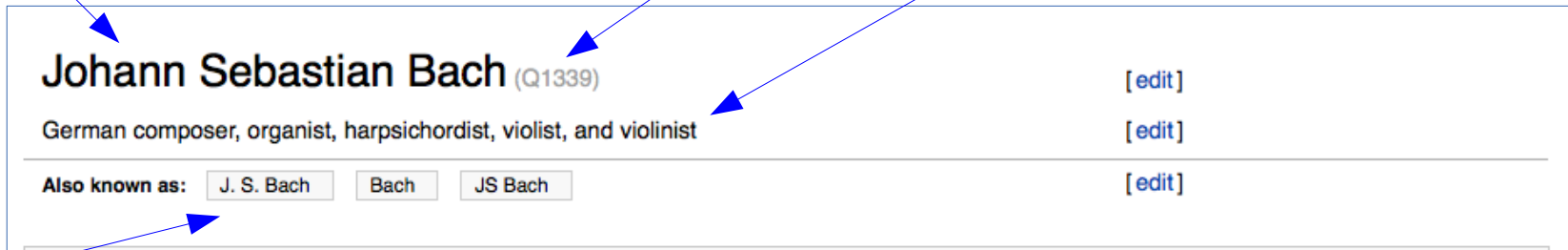
- ca. 250,000,000 language links removed!

Items with statements

Label : One per item, per language

Item ID: one unique identifier "Qxxx" per item

Description : One per item, per language

Johann Sebastian Bach (Q1339) [edit]

German composer, organist, harpsichordist, violist, and violinist [edit]

Also known as: J. S. Bach | Bach | JS Bach [edit]

Alias : Multiple per item, per language

Items with statements

Label : One per item, per language

Item ID: one unique identifier "Qxxx" per item

Description : One per item, per language

Johann Sebastian Bach (Q1339)   [edit]

German composer, organist, harpsichordist, violist, and violinist   [edit]

Also known as: J. S. Bach   Bach   JS Bach   [edit]

Alias : Multiple per item, per language

Statements : Multiple per item, per property

medical condition	blindness q10874	[edit]
	▾ 0 sources	
		[add source]
		[add]
		[add]

Links : One per item, per language/project

Wikipedia pages linked to this item (151 entries)

Language	⬍	Code	Linked page	⬍	
Аҧсшәа		abwiki	Иоганн Себастиан Бах		[edit]
Afrikaans		afwiki	Johann Sebastian Bach		[edit]
Alemannisch		alswiki	Johann Sebastian Bach		[edit]
አማርኛ		amwiki	ዮሐን ሴባስትያን ባከ		[edit]
aragonés		anwiki	Johann Sebastian Bach		[edit]

Phase 2: Statements

Property → award received

Wollaston Medal

point in time — 1859

▼ 2 sources

imported from — English Wikipedia *q328*

imported from — Portuguese Wikipedia *q11921*

Rank

Item reference

Qualifier(s)

Source(s)

Statement

Royal Medal

point in time — 1853

▶ 2 sources

Copley Medal

point in time — 1864

▶ 2 sources

Order of Merit for Arts and Science *q15056034*

▶ 1 source

Fellow of the Royal Society

point in time — January 24 1839 *Gregorian*

▼ 0 sources

Datatypes

Datatypes, depending on property:

- Item reference

- string

- time (precision: from billion years to the second)

- globe coordinate

- URL

- numbers (&precision)

- Commons media

Browse in any language

English

Item | Discussion

Cambridge (Q350)
city and non-metropolitan district in England
Also known as: City of Cambridge

In other languages | Statements | Wikipedia pages linked to this item | Wikisource pag
Wikimedia Commons page linked to this item

Statements

| population | | 122,700±1 |
| | | ▼ 0 sources |

| country | | United Kingdom *q145* |
| | | ▼ 0 sources |

instance of		college town *q1187811*
		▼ 0 sources
		city *q515*
		▼ 0 sources

| image | | KingsCollegeChapelWest.jpg |
| | | ▼ 0 sources |

| is in the administrative-territorial entity | | Cambridgeshire *q23112* |
| | | ▼ 0 sources |

Chinese

項目 | 討論

輸入標籤
（Q350）
輸入描述
亦稱為：

其他語言 | 聲明 | 連至此項目的維基百科頁面 | 進至此項之維基文庫頁面 | 進至此項之維基導遊頁

聲明

| P1082（尚未定義任何標籤。） | | 122,700±1 |
| | | ▼ 0 來源 |

| 國家 | | 英國 *q145* |
| | | ▼ 0 來源 |

性質		Q1187811（尚未定義任何標籤。） *q1187811*
		▼ 0 來源
		城市 *q515*
		▼ 0 來源

| 圖片 | | KingsCollegeChapelWest.jpg |
| | | ▼ 0 來源 |

| 所在行政區 | | 劍橋郡 *q23112* |
| | | ▼ 0 來源 |

Scots

Page | Collogue

Cambridge (Q350)
enter description
Also known as:

In other languages | Statements | Wikipedia pages linked to this item | Wikisource page
Wikimedia Commons page linked to this item

Statements

| P1082 *(No label defined yet)* | | 122,700±1 |
| | | ▼ 0 sources |

| kintra | | Unitit Kinrick *q145* |
| | | ▼ 0 sources |

instance o		Q1187811 *(No label defined yet)* *q1187811*
		▼ 0 sources
		Ceety *q515*
		▼ 0 sources

| image | | KingsCollegeChapelWest.jpg |
| | | ▼ 0 sources |

| is in the admeenistrative unit | | Cambridgeshire *q23112* |
| | | ▼ 0 sources |

Using Wikidata in other projects

- Show a statement value from the current page's item in Wikipedia etc.

- parser function {{#property:PROPERTY}}

- scripts Lua mw.wikibase

- Usually "hidden away" in transcluded template

- Popular on smaller Wikipedias

Metrics

- As of February 2014
- 14 million items (English Wikipedia: <4.5M articles)
- 30 million statements
  - 20 million item references
  - 8 million strings
  - 1 million dates
  - 1 million coordinates
  - 20K quantities (those are new...)

Statements per item over time

WikiData API

- Extension of MediaWiki API
- Full-"text" search
- Request all statements/labels/links etc. for individual items
- Editing via API
- OAuth bindings
- No queries for statements => items!

The Wikidata
tools ecosystem

WikiData Query

- Stand-alone WikiData query server

- Uses data dumps and Recent Changes, updated every 10 minutes

- Keeps all item-to-item links, strings, times, locations in RAM

- Can be queried over HTTP, returns JSON

Query editor

People related to Queen Elizabeth II
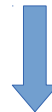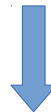
{"status":{"error":"OK","items":17343,"querytime":"463.459ms","parsed_query":"WEB[9682][25,22,40,26,7,9,1038]"},"items":
[346,353,517,720,909,939,989,2677,2685,3044,3301,3910,3911,3925,4652,4723,4924,5073,5076,5201,5220,5236,5351,5658,5679,5683,56
86,5721,6612,6694,7200,7207,7241,7243,7259,7418,7419,7420,7422,7451,7453,7456,7471,7498,7500,7501,7503,7517,7519,7520,7521,752
3,7721,7723,7726,7729,7731,7732,7738,7742,7750,7758,7771,7990,7996,8016,8056,8058,8384,8404,8433,8467,8468,8474,8479,8532,8540
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9341,9345,9439,9458,9682,9685,9696,9700,9701,9703,9717,9722,9738,9743,9746,9749,9753,10479,10633,11673,12860,12967,12971,12973
,12974,12976,14451,14655,14974,14980,15189,15193,15208,15988,16004,16574,16801,17132,17135,17142,17790,18363,18715,18988,19006
,19007,19133,19176,19254,19489,19943,20875,23168,24427,24445,25089,25310,25543,25583,25687,25689,25690,26043,26326,26486,26724
,26731,27492,27606,27613,27932,28414,28468,28495,28530,28531,28984,29000,29001,29017,29039,29152,29179,29324,29442,29574,29711

GeneaWiki

Johann Christian Bach

Wilhelm Friedrich Ernst Bach

Johann Sebastian Bach

Anna Magdalena Bach

Wilhelm Friedemann Bach

Johann Christoph Friedrich Bach

Carl Philipp Emanuel Bach

Maria Barbara Bach

Johann Bernhard Bach

Gottfried Heinrich Bach

Johann Gottfried Bernhard Bach

Johann Michael Bach

Johann Christoph Bach

Maria Elisabeth Lämmerhirt

Johann Sebastian Bach

Catharina Dorothea Bach

Johann Nicolaus Bac

Johann Christoph Bach

Johann Jacob Bach   Ambrosius Bach

Heinrich Bach

Christoph Bach

Johannes Bach

Johann Christoph Bach

Johannes Bach

Johann Ernst Bach

Veit Bach

Johann Aegidius Bach

Philippus Bach

Father of | Mother of | Child of

AutoLists

Tempo-spatial display

- Battles are "part of" Franco-Prussian War

- Battles have date or date range

- Battles have location link or coordinates

- Some have an image

Reasonator

- Improved visualisation
- Special displays by item type (maps for locations, relatives for people)
- Uses statements from related items
- Automatic description
- Iterates property trees (location, species, subclass)
- Timelines, auto-lists, related images
- Quick info in item link hoverboxes
- >100,000 views this month

tools.wmflabs.org/reasonator

Map of all WikiData items

URLs
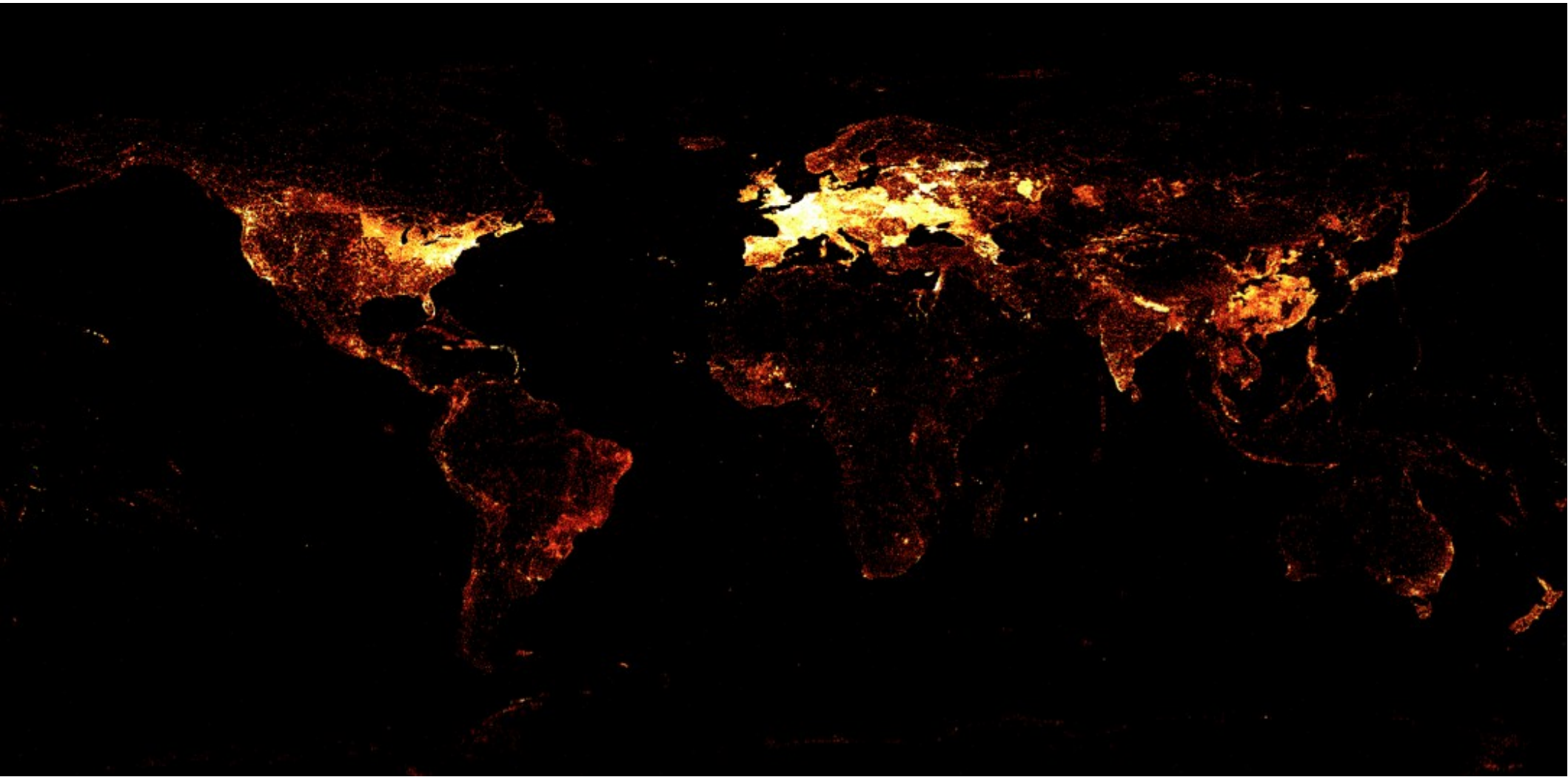
- WikiData http://www.wikidata.org
- WikiData Query http://wikidata-wdq-mm.instance-proxy.wmflabs.org/
- AutoList http://tools.wmflabs.org/wikidata-todo/autolist.html
- Reasonator http://tools.wmflabs.org/reasonator

Concept cloud