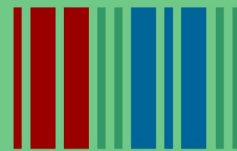


Analyzing and Visualizing Translation Patterns of Wikidata Properties

John Samuel

CPE Lyon

CLEF 2018, Avignon, 10th September, 2018



WIKIDATA



Avignon

From Wikipedia, the free encyclopedia

Coordinates: 43°57′N 4°49′E﻿ / ﻿43.95°N 4.82°E﻿ / 43.95; 4.82

For the regional county municipality in Quebec, see Avignon Regional County Municipality.

Avignon (French pronunciation: [aviˈɲɔ̃]; Latin: *Avenio*; Provençal: *Avignoun*, Occitan: *Avinhon* pronounced [aviˈɲun]) is a commune in south-eastern France in the department of Vaucluse on the left bank of the Rhône river. Of the 90,194 inhabitants of the city (as of 2011), about 12,000 live in the ancient town centre enclosed by its medieval ramparts.

Between 1309 and 1377, during the *Avignon Papacy*, seven successive popes resided in Avignon and in 1348 Pope Clement VI bought the town from Joanna I of Naples. Papal control persisted until 1791 when, during the French Revolution, it became part of France. The town is now the capital of the Vaucluse department and one of the few French cities to have preserved its ramparts.

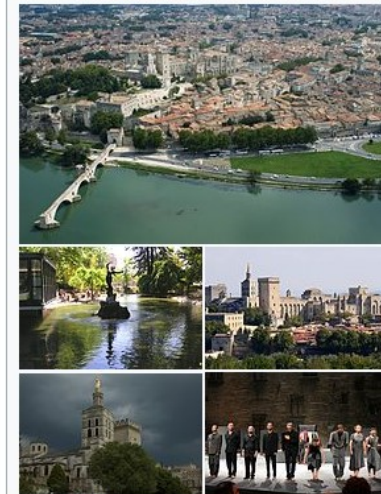
The historic centre, which includes the Palais des Papes, the cathedral, and the Pont d'Avignon, became a UNESCO World Heritage Site in 1995. The medieval monuments and the annual Festival d'Avignon have helped to make the town a major centre for tourism.

Contents [hide]

- 1 Toponymy
- 2 History
- 3 Geography
 - 3.1 Geology and terrain
 - 3.2 Hydrography
 - 3.2.1 Artificial diversions
 - 3.3 Seismicity
 - 3.4 Climate
 - 3.4.1 The mistral
- 4 Demographics

Avignon

Prefecture and commune



Wikipedia Infobox

Avignon

From Wikipedia, the free encyclopedia

For the regional county municipality in Quebec, see Avignon (Quebec).

Avignon (French pronunciation: [aviˈɲɔ̃]; Latin: *Avenio*) is a *commune* in south-eastern France in the *department* of Vaucluse on the left bank of the Rhône river. It is an ancient town centre enclosed by its medieval ramparts.

Between 1309 and 1377, during the *Avignon Papacy*, it was the seat of the popes *Joanna I of Naples*. Papal control persisted until 1793, when it became part of the Vaucluse department and one of the few French towns to remain Catholic.

The historic centre, which includes the *Palais des Papes*, is a *UNESCO World Heritage Site*. The town is now the capital of the Vaucluse department and one of the few French towns to remain Catholic.

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Contents [hide]

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 - 3.4.1 The mistral
- 4 Demographics

Country	France
Region	Provence-Alpes-Côte d'Azur
Department	Vaucluse
Arrondissement	Avignon
Canton	Avignon-1, Avignon-2, Avignon-3
Intercommunality	CA Grand Avignon

Government	
 • Mayor (2014–2020)	Cécile Helle (PS)
Area ¹	64.78 km ² (25.01 sq mi)
Population (2015) ²	92,130
 • Density	1,400/km ² (3,700/sq mi)
Time zone	CET (GMT +1) (UTC+1)
 • Summer (DST)	CEST (UTC+2)
INSEE/Postal code	84007   /84000
Elevation	10–122 m (33–400 ft) (avg. 23 m or 75 ft)

UNESCO World Heritage Site

Official name	Historic Centre of Avignon: <i>Papal Palace</i> , <i>Episcopal Ensemble</i> and <i>Avignon Bridge</i>
Criteria	Cultural: i, ii, iv
Reference	228  
Inscription	1995 (19th <i>Session</i>)
Area	8.2 ha

Avignon is a *commune* in south-eastern France in the *department* of Vaucluse on the left bank of the Rhône river. It is an ancient town centre enclosed by its medieval ramparts.

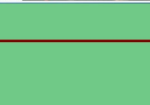
Between 1309 and 1377, during the *Avignon Papacy*, it was the seat of the popes *Joanna I of Naples*. Papal control persisted until 1793, when it became part of the Vaucluse department and one of the few French towns to remain Catholic.

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Coordinates: 43°57′N 4°49′E﻿ / ﻿43.95°N 4.817°E﻿ / 43.95; 4.817

Avignon

Prefecture and commune



Wikipedia Infoboxes

EN

FR

IT

DE

NL

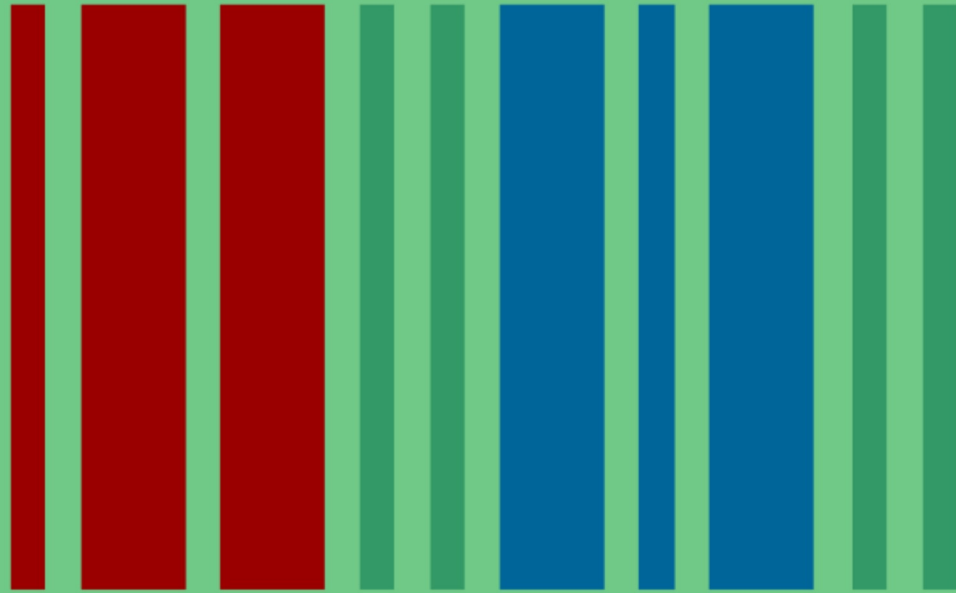
Country	France
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Criteria	Cultural: i, ii, iv
Reference	228@
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Area	8.2 ha

Pays	 France
Région	Provence-Alpes-Côte d'Azur
Département	Vaucluse (prefecture)
Arrondissement	Avignon (chef-lieu)
Canton	Bureau centralisateur de Avignon-1 Avignon-2 Avignon-3
Intercommunalité	Grand Avignon (siège)
Maire Mandat	Cécile Helle 2014-2020
Code postal	84000 / 84140
Code commune	84007
Démographie	
Gentilé	Avignonuais
Population municipale	92 130 hab. (2015) ▲
Densité	1 422 hab./km ²
Population aire urbaine	527 731 hab. (2015)
Géographie	
Coordonnées	 43° 57′ 00″ nord, 4° 49′ 01″ est
Altitude	Min. 10 m Max. 122 m
Superficie	64,78 km ²
Localisation	

Localizzazione	
Stato	 Francia
Regione	 Provenza-Alpi-Costa Azzurra
Dipartimento	 Vaucluse
Arrondissement	Avignone
Cantone	Avignone-1 Avignone-2 Avignone-3
Amministrazione	
Sindaco	Cécile Helle (PS) dal 2014
Territorio	
Coordinate	 43°57′N 4°49′E
Altitudine	122 m s.l.m.
Superficie	64,78 km²
Abitanti	91 451 ^[1] (2009)
Densità	1 411,72 ab./km²
Altre informazioni	
Cod. postale	84000
Prefisso	49
Fuso orario	UTC+1
Codice INSEE	84007@
Nome abitanti	(IT) Avignonesi (FR) Avignonnais (OC) avinhonenc -a
Cartografia	

Region	Provence-Alpes-Côte d'Azur
Département	Vaucluse (Präfektur)
Arrondissement	Avignon
Kanton	Avignon-1 (Hauptort) Avignon-2 (Hauptort) Avignon-3 (Hauptort)
Gemeindeverband	Grand Avignon
Koordinaten	 43° 57′ N, 4° 48′ O
Höhe	10–122 m
Fläche	64,78 km ²
Einwohner	92.130 (1. Januar 2015)
Bevoikerungsdichte	1.422 Einw./km ²
Postleitzahl	84000
INSEE-Code	84007@
Website	www.avignon.fr@
	
Das historische Zentrum rund um den Papstpalast	

Situering	
Regio	Provence-Alpes-Côte d'Azur
Departement	Vaucluse (84)
Arrondissement	Avignon
Kanton	hoofdplaats van 4 kantons: Avignon-Nord, Avignon-Est, Avignon-Sud en Avignon-Ouest
Coördinaten	 43° 57′ NB, 4° 49′ OL
Algemeen	
Oppervlakte	64,80 km²
Inwoners (1 jan. 2011)	90.194 (1.391,9 inw./km²)
Hoogte	10 - 122 m
Overig	
Postcode	84000
INSEE-code	84007
Foto's	
	
Portaal  Frankrijk	

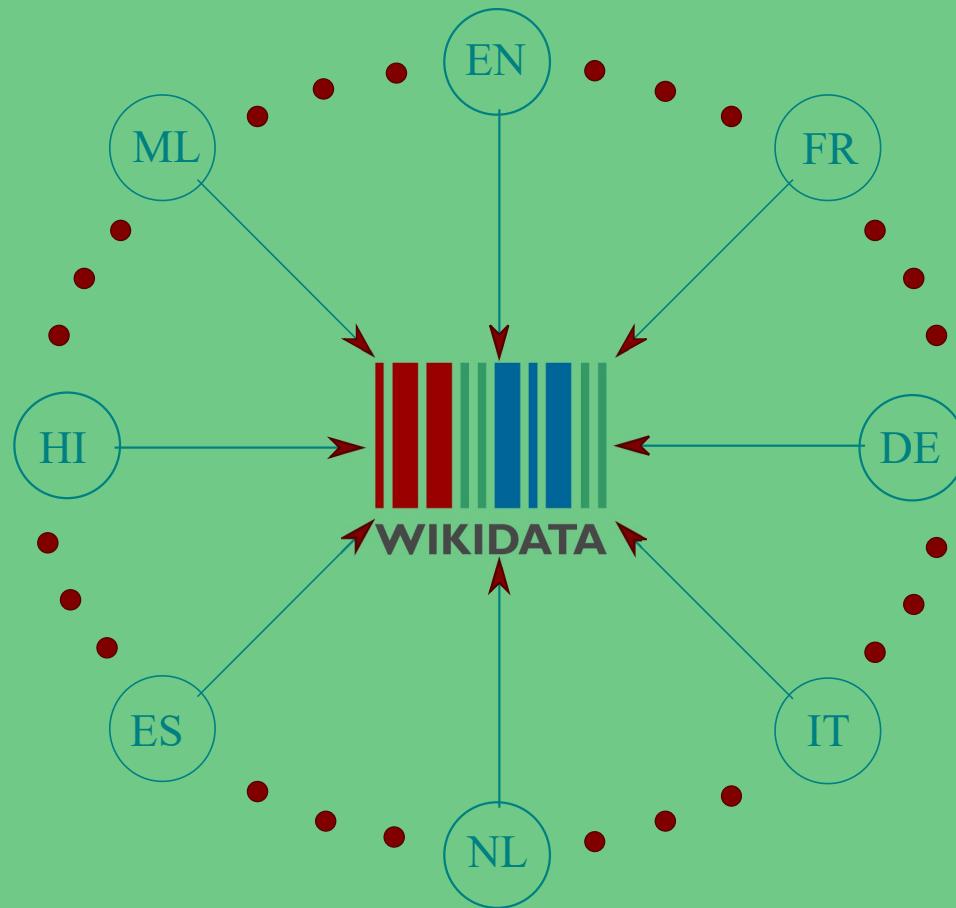


WIKIDATA

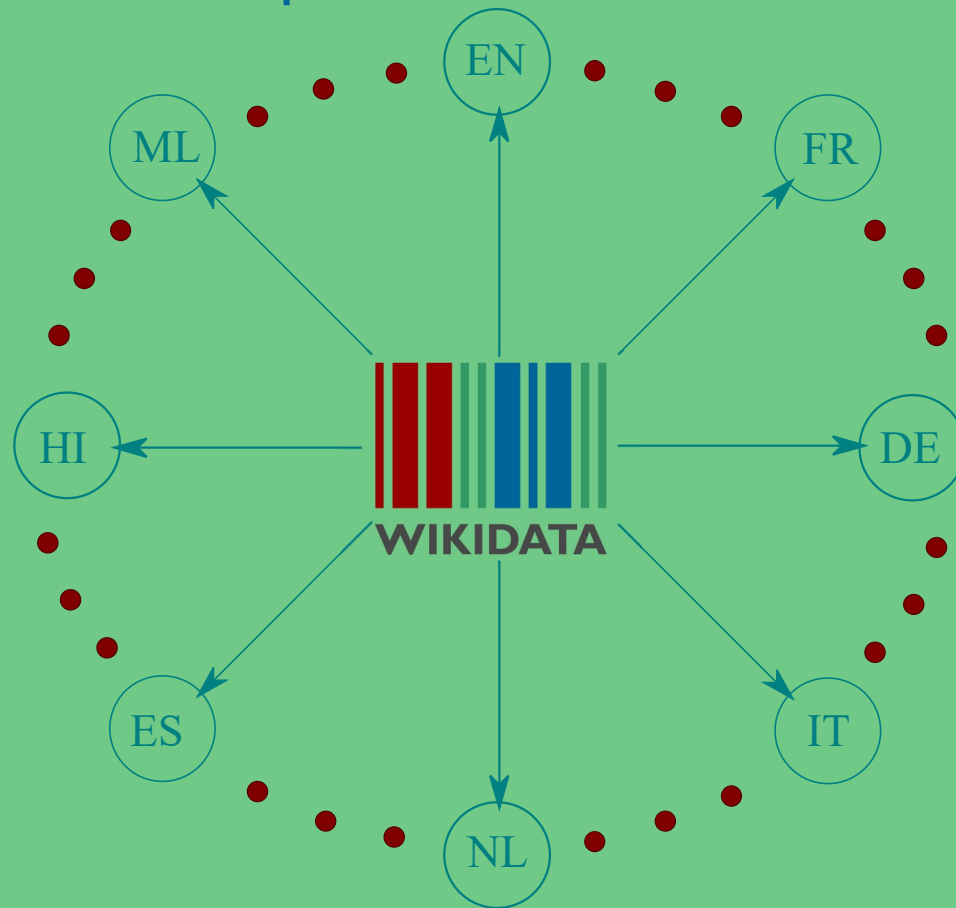
- **Wikidata**
 - Started in year 2012
 - is free, open, linked, structured, collaborative and **multilingual** knowledge base
 - From multi-(sub)domain multilingual Wikipedia sites to a single-domain multilingual website
 - Collaborative Multilingual Multi-domain Ontology development



Wikipedia to Wikidata



Wikidata to Wikipedia



Wikipedia Infobox Properties

Country	France
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Mandat	2014-2020
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Codice INSEE	84007 ↗
Nome abitanti	(IT) Avignonesi (FR) Avignonnais (OC) avinhonenc -a
Cartografia	

Wikidata

Avignon (Q6397)...

commune in Vaucluse, France


▼ In more languages Configure

Language	Label	Description	Also known as
English	Avignon	commune in Vaucluse, France	

All entered languages

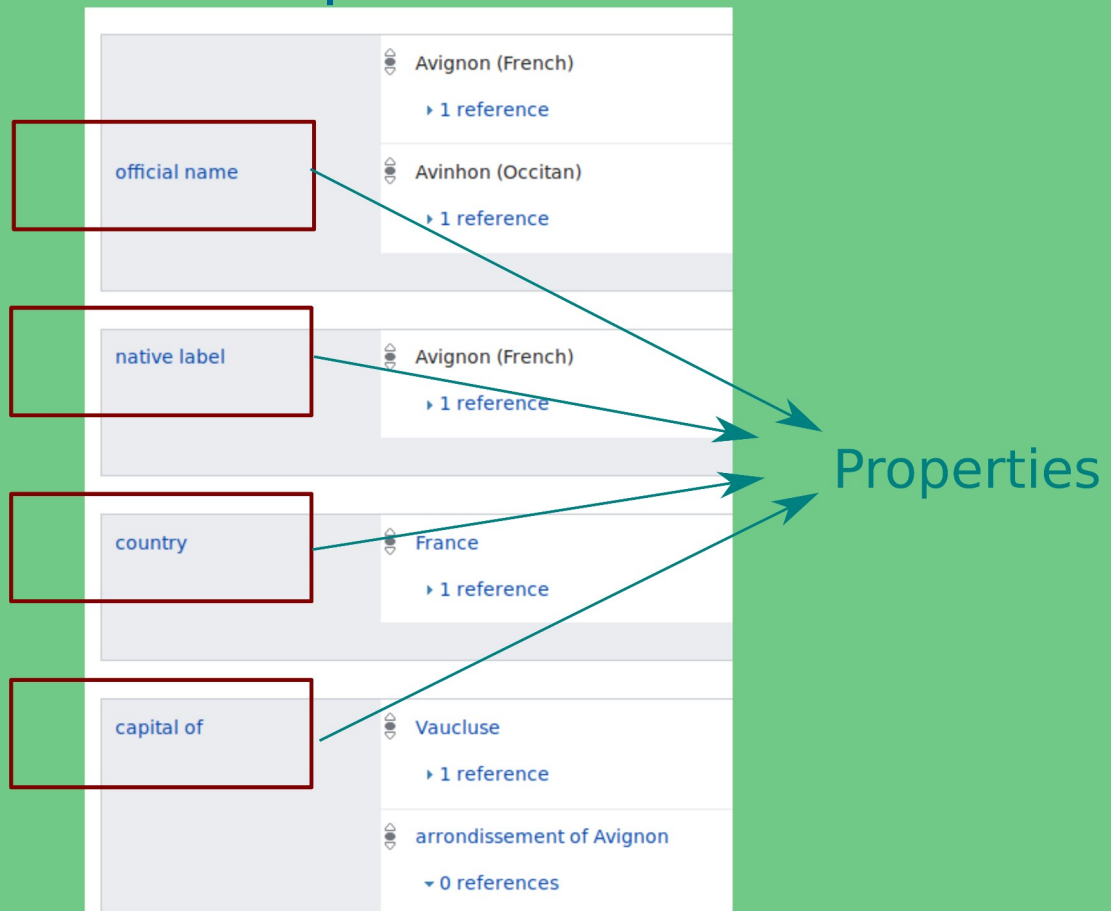
Statements

instance of	commune of France ... edit ▶ 1 reference
	city ... edit ▼ 0 references + add reference + add value

image	 edit
-------	--

Avignon, Palais des Papes depuis Tour Philippe le Bel by JM Rosier.jpg

Wikidata Properties



Wikidata Properties

country (P17)		
sovereign state of this item; don't use on humans		
sovereign state state land		
▼ In more languages Configure		
Language	Label	Description
English	country	sovereign state of this item; don't use on humans
French	pays	État souverain de cet élément
Spanish	país	estado soberano de este elemento
German	Staat	souveräner Staat, in dem sich das Objekt befindet
All entered languages		
Data type		
Item		

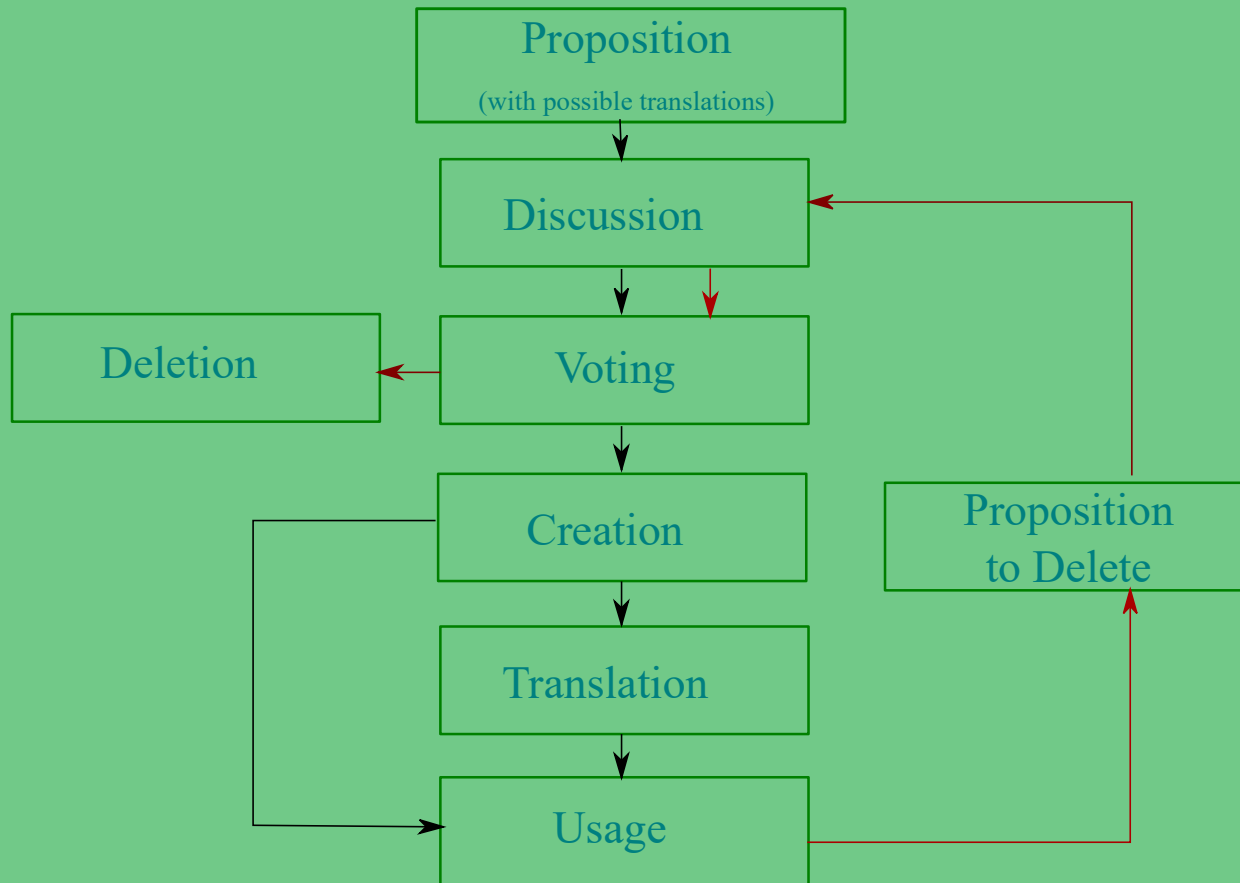
Language

Label

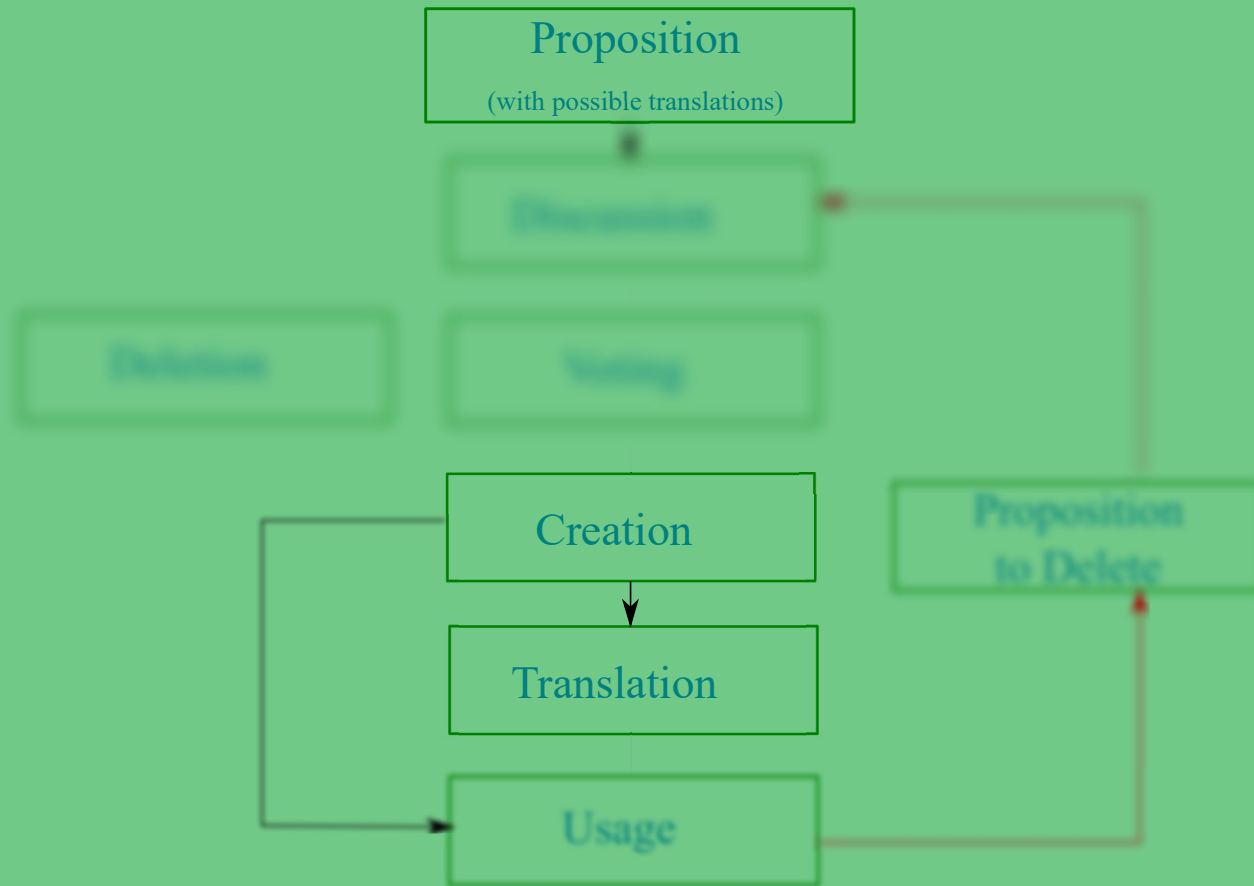
Description

<https://www.wikidata.org/wiki/Property:P17>

Wikidata Properties



Wikidata Properties



P17: Translation History

- (cur | prev) ○ 07:18, 10 January 2018 Llywelyn2000 (talk | contribs) . . (52,090 bytes) (-59) . . (Removed English alias: nation)
- (cur | prev) ○ 07:18, 10 January 2018 Llywelyn2000 (talk | contribs) . . (52,149 bytes) (-23) . . (Changed English description: nation)
- (cur | prev) ○ 04:32, 9 January 2018 Osteologia (talk | contribs) . . (52,172 bytes) (+74) . . (Added Esperanto alias: ŝtato)
- (cur | prev) ○ 18:54, 7 January 2018 Robin van der Vliet (talk | contribs) . . (52,098 bytes) (+62) . . (Added [vo] label: län)
- (cur | prev) ○ 18:54, 7 January 2018 Robin van der Vliet (talk | contribs) . . (52,036 bytes) (+63) . . (Added [io] label: lando)
- (cur | prev) ○ 18:54, 7 January 2018 Robin van der Vliet (talk | contribs) . . (51,973 bytes) (-1) . . (Changed Esperanto label: lando)
- (cur | prev) ○ 17:24, 30 December 2017 Valentina.Anitnelav (talk | contribs) . . (51,974 bytes) (+284) . . (Changed claim: *property constraint (P2302): value type*)
- (cur | prev) ○ 04:29, 25 December 2017 Yasasuru (talk | contribs) . . (51,690 bytes) (+75) . . (Added Sinhala alias: country)
- (cur | prev) ○ 04:29, 25 December 2017 Yasasuru (talk | contribs) . . (51,615 bytes) (+141) . . (Added [si] description: මම ම ආධිපත්‍යය ආයතන ස්වෛරී රාජ්‍යය)
- (cur | prev) ○ 04:29, 25 December 2017 Yasasuru (talk | contribs) . . (51,474 bytes) (+64) . . (Added [si] label: රට)
- (cur | prev) ○ 01:04, 14 December 2017 Pizza1016 (talk | contribs) . . (51,410 bytes) (+273) . . (Added Malay aliases: negeri berdaulat, negara berdaulat, ban)
- (cur | prev) ○ 01:04, 14 December 2017 Pizza1016 (talk | contribs) . . (51,137 bytes) (+213) . . (Added British English aliases: sovereign state, nation, state)

Compare selected revisions

1. **WDProp:**

- Collaborative Multilingual Multi-domain Ontology development: is it possible to achieve a truly multilingual experience?

2. **Goals:**

- Understanding Wikidata property proposal, creation and translation
- Available templates and their usage
- Providing real-time statistics to (multilingual) contributors

WDProp

WDProp

- Languages
- Data types
- Properties
- Property Classes
- Provenance
- Search
- Compare
- Property Discussion
- Wikiprojects
- About

Translation statistics by languages

- [Supported languages](#)
- [Translated Labels](#)
- [Translated Descriptions](#)
- [Translated Alias](#)
- [Overall Translation Statistics](#)
- [Missing Translation Statistics](#)

Navigate properties

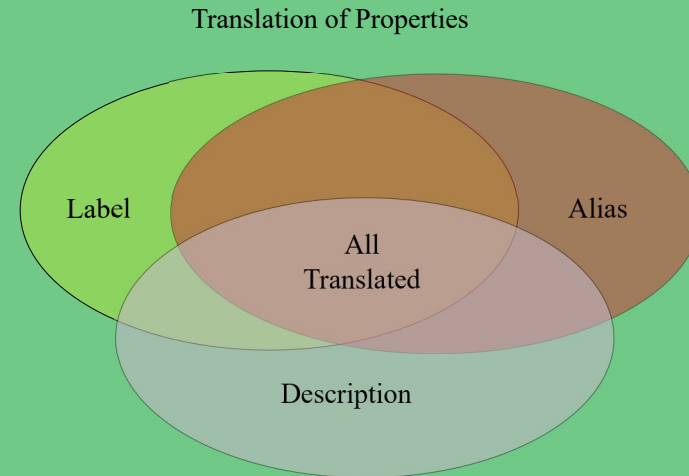
- [Browse all properties](#)
- [Browse by datatype](#)

- **WDProp**

- Get real-time translation statistics
- Navigate supported languages, properties, datatypes, classes
- Compare translation statistics
- Find available properties for an entity
- Uses Wikidata SPARQL endpoints and Mediawiki API

- **URL**

- <https://tools.wmflabs.org/wdprop>



WDProp: Translation path

P17

Path of Translation

Color code: Add Update Remove

Time	L	D	A
2013-02-04T19:43:51Z	en		
2013-02-04T19:44:15Z	it		
2013-02-04T19:44:57Z	fr		
2013-02-04T19:53:48Z	zh		
2013-02-04T19:54:11Z	zh-hans		
2013-02-04T19:54:34Z	zh-hant		
2013-02-04T19:59:44Z	en		
2013-02-04T19:59:59Z	fr		
2013-02-04T20:00:19Z	de		
2013-02-04T20:00:35Z	it		
2013-02-04T20:03:15Z	fi		
2013-02-04T20:04:29Z		fr	
2013-02-04T20:04:35Z	fr		
2013-02-04T20:37:40Z	en		
2013-02-04T21:52:09Z	he		
2013-02-04T22:06:09Z	cs		

P856

Path of Translation

Color code: Add Update Remove

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2013-09-10T22:59:51Z	ko		
2013-09-10T23:37:22Z	fr		
2013-09-11T01:09:22Z	it		
2013-09-11T01:28:08Z		en	
2013-09-11T01:28:13Z	nl		
2013-09-11T01:33:05Z			en
2013-09-11T02:30:53Z	pt		
2013-09-11T02:31:03Z		pt	
2013-09-11T05:07:25Z	es		
2013-09-11T05:09:04Z		es	
2013-09-11T05:39:35Z	fi		
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2013-09-11T06:27:06Z	fa		

P3966

Path of Translation

Color code: Add Update Remove

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2017-05-23T10:22:07Z	nb	nb	
2017-05-23T10:22:08Z			nb
2017-05-23T12:11:09Z	fi		
2017-05-23T14:10:47Z	da		
2017-05-23T17:44:11Z	fr	fr	
2017-05-23T17:44:12Z			fr
2017-05-24T04:25:03Z	es		
2017-05-24T04:25:04Z	de		
2017-05-24T04:25:04Z	it		
2017-05-24T04:25:05Z	nl		

WDProp: Translation path

- [2017-03-25T16:47:19Z](#) ko
- [2017-03-25T16:47:20Z](#) ko
- [2017-03-25T16:47:21Z](#) ko
- [2017-04-19T10:43:37Z](#) bar
- [2017-04-19T10:43:38Z](#) bar bar
- [2017-04-24T14:38:04Z](#) lb
- [2017-05-03T10:30:58Z](#) ky
- [2017-05-14T10:54:19Z](#) ko
- [2017-05-24T10:25:32Z](#) ur
- [2017-06-11T00:21:47Z](#) yo
- [2017-06-11T05:46:49Z](#) te
- [2017-06-11T05:47:18Z](#) te
- [2017-07-03T08:55:27Z](#) tg-cyrl tg-cyrl tg-cyrl
- [2017-07-08T14:21:03Z](#) en
- [2017-07-11T10:26:59Z](#) my my my
- [2017-08-06T10:20:41Z](#) es
- [2017-08-10T04:42:26Z](#) ro
- [2017-08-24T10:27:34Z](#) aeb-arab
- [2017-09-06T19:45:07Z](#) tt
- [2017-09-06T19:45:08Z](#) tt-cyrl
- [2017-09-06T19:45:09Z](#) tt-latn

No label defined (P17)

Revision as of 14:21, 8 July 2017 by [PiotrMahh1](#) (talk | contribs) (Removed [en] label: country) (diff) ← Older revision | Latest revision (diff) | Newer revision → (diff)

sovereign state of this item
sovereign state | nation | state | land

▼ In more languages Configure

Language	Label	Description	Also known as
English	No label defined	sovereign state of this item	sovereign state nation state land
French	pays	État souverain de cet élément	État
Spanish	país	estado soberano de este elemento	estado
German	Staat	souveräner Staat, in dem sich das Objekt befindet	Land

All entered languages

WDProp: Translation path

2014-11-20T15:04:27Z	en
2014-11-30T15:37:28Z	it
2014-11-30T15:37:43Z	it
2014-12-27T04:50:30Z	en
2014-12-27T04:50:49Z	en
2014-12-27T04:51:07Z	en
2014-12-27T04:51:19Z	es
2014-12-27T04:52:13Z	es
2014-12-27T04:52:14Z	es
2014-12-27T04:52:16Z	es
2014-12-27T04:53:30Z	en
2014-12-27T04:53:54Z	en
2014-12-27T04:54:19Z	en
2014-12-27T04:54:37Z	en
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2014-12-27T04:56:17Z	fr
2014-12-27T04:56:18Z	fr
2014-12-27T04:56:19Z	fr
2014-12-27T04:56:54Z	en

Revision as of 04:56, 27 December 2014 (restore) Revision as of 04:56, 27 December 2014 (restore)

66.87.121.14 (talk)

(Removed French aliases: *site officiel*, *URL officielle*, *site web*, *site internet*) (Removed [en])

[← Older edit](#)

description / en **description / en**

Revision as of 04:56, 27 December 2014

No description defined

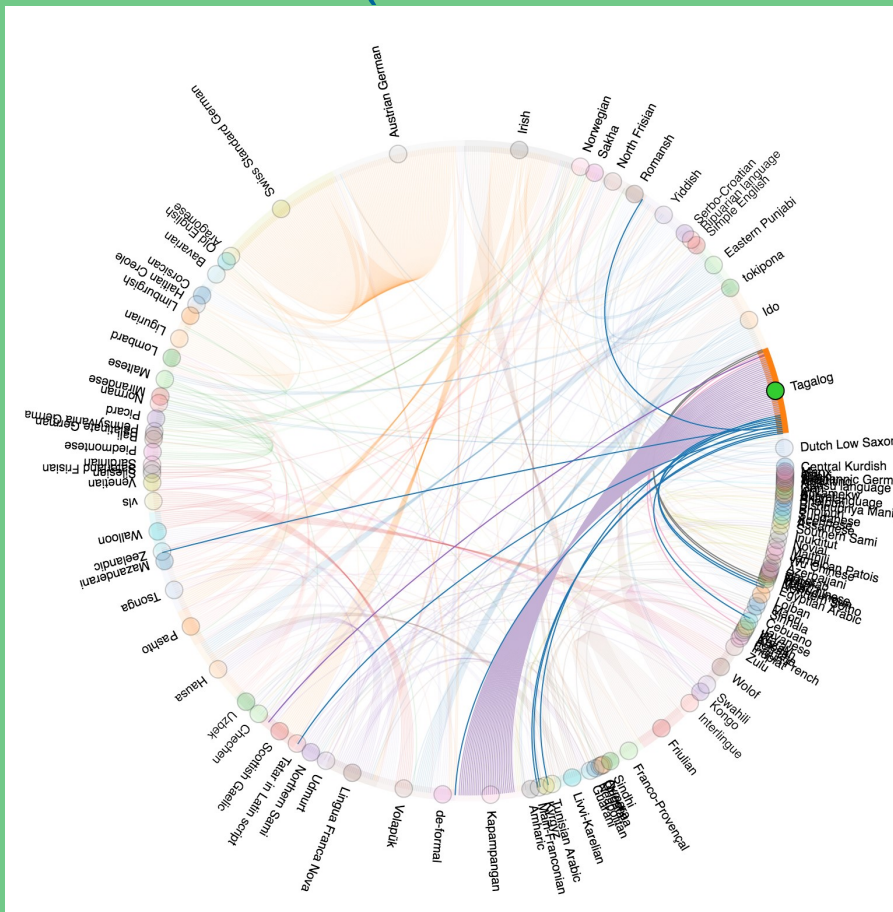
▼ [In more languages](#) Configure

Language	Label	Description	Also known as
English	No label defined	No description defined	
French	No label defined	No description defined	
Spanish	No label defined	No description defined	
German	offizielle Website	URL für die Website des Objektes	Webseite Internetauftritt Website URL Internetseite Homepage

- **Related Works:**

- Multilinguality in Wikidata
- Property label stability in Wikidata
- Linguistic influence patterns in Wikipedia
- Deletion patterns in Wikipedia

Current Work (Work done with Thibaut Chamard)



- **Conclusion:**

- Wikidata properties form the foundation of Wikidata knowledge base
- Though few in number (around 5200) compared to items (around 50 million), their creation and evolution needs to be fully understood
- Recommendation for translation to contributors

References

1. Kaffee, L. A., Piscopo, A., Vougiouklis, P., Simperl, E., Carr, L., & Pintscher, L. (2017, August). A glimpse into Babel: an analysis of multilinguality in Wikidata. In Proceedings of the 13th International Symposium on Open Collaboration (p. 14). ACM.
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Thank you

Questions?