

Multilingual Ranking of Wikipedia Articles

with Quality and Popularity Assessment
in Different Topics



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Multilingual Wikipedia

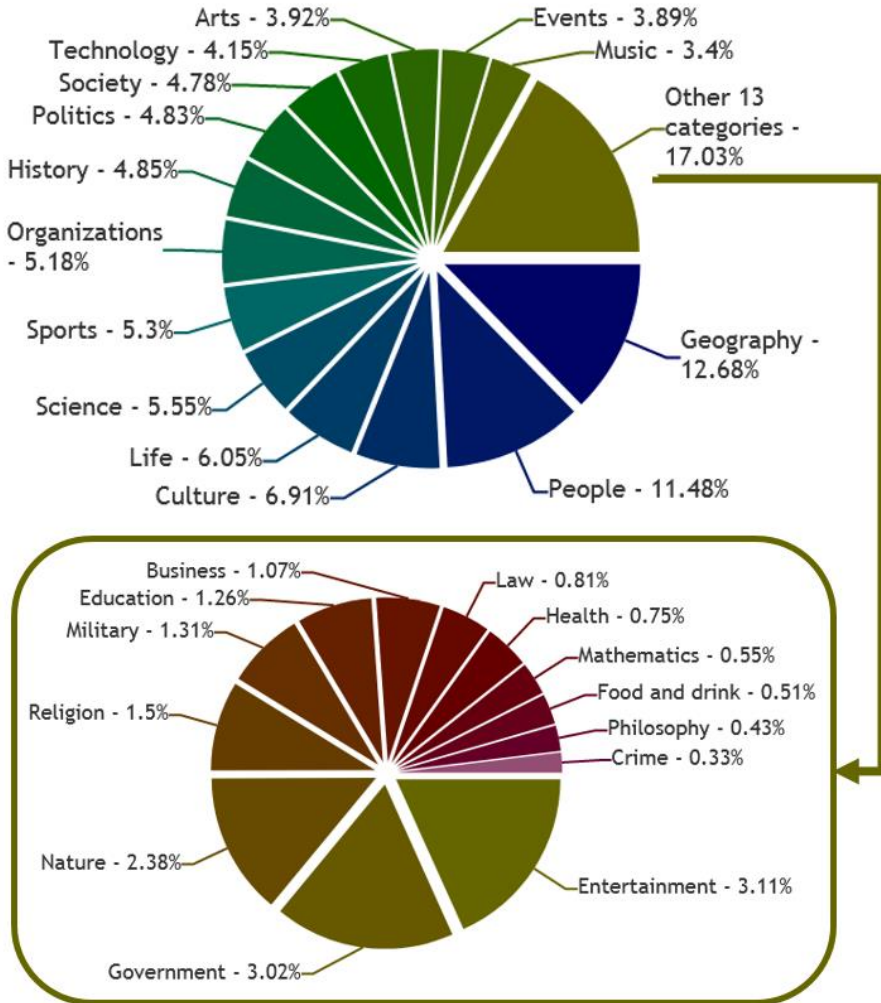
- Quality and popularity of information about the same topic depends on language
- Popularity can be measured from reader' and authors' point of view
- To assign articles to various topics it is possible to use different approaches
- There are over 10 million categories in Wikipedia

Categories

To classify the articles to one of the 27 main categories we took into account over 400 million links from articles to over 10 million categories and over 26 million links between categories in 55 Wikipedia language versions.

Figure presents resents how over 39 million Wikipedia articles distributed among 27 main categories.

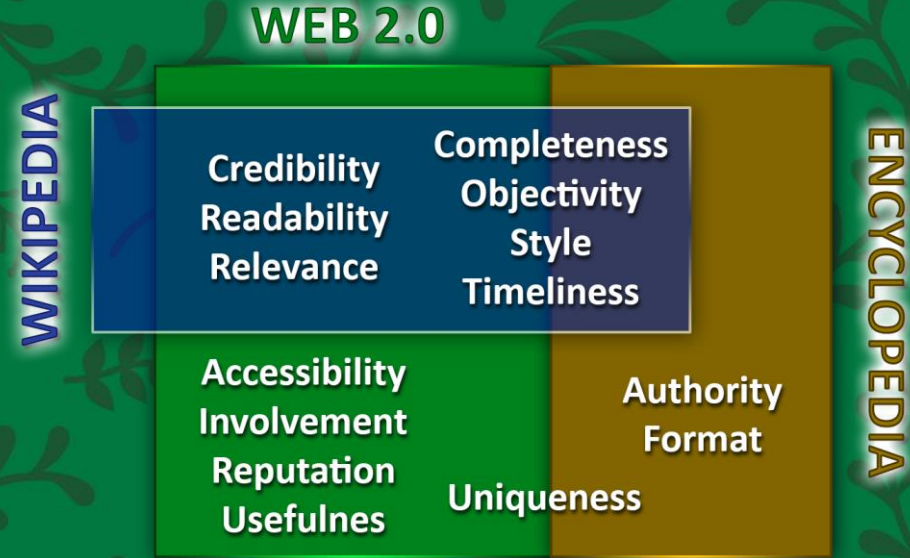
Source: <https://doi.org/10.20944/preprints201905.0144.v2>



Quality

- Wikipedia quality dimensions overlap with some of traditional encyclopedia and Web 2.0 documents:
- completeness, credibility, objectivity, readability, relevance, style, timeliness.


Source: <https://doi.org/10.20944/preprints201905.0144.v2>



Popularity

- Measures reflecting the demand for information contained in it by the readers and Wikipedia authors.
- Based on these measurements, we can compare not only different articles between each other, but also the language versions of the selected article

Source: <https://wikirank.net/en/Stockholm>

#	Language	Relative award	Relative popularity
1	English Stockholm		100
2	German Stockholm		32.339
3	Russian Стокгольм		32.0063
4	Swedish Stockholm		21.5549
5	Spanish Estocolmo		17.1686

#	Language	Relative award	Relative AI
1	Swedish Stockholm		100
2	English Stockholm		80
3	Russian Стокгольм		30
4	Esperanto Stokholmo		20
5	Portuguese Estocolmo		20

Local & Global measures

$$PopGlobal(article) = \sum_{lang=1}^n PopLocal_{lang}(article),$$

where *PopLocal* means local popularity of the article, *lang* is the index of specific language version and *n* is number of the language versions of the selected article.

$$GlobalAI(article) = \left| \bigcup_{lang=1}^n Authors_{lang}(article) \right|,$$

where *Authors* means a set of authors' names, *lang* is the index of specific language version and *n* is the number of language versions of the article.

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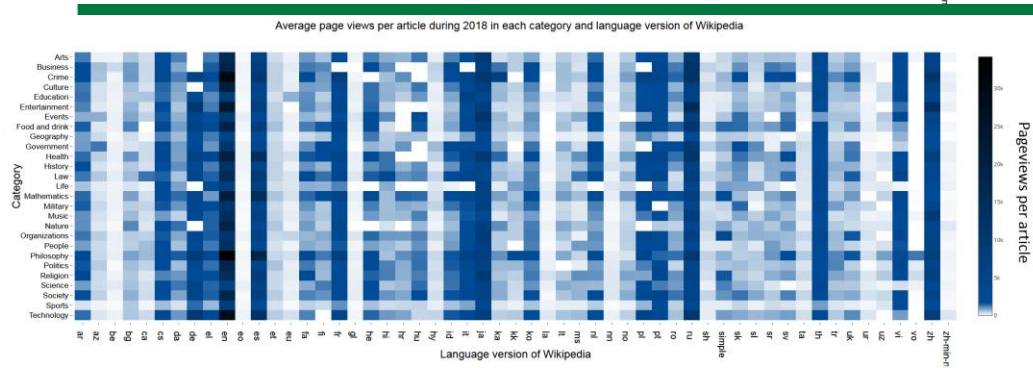
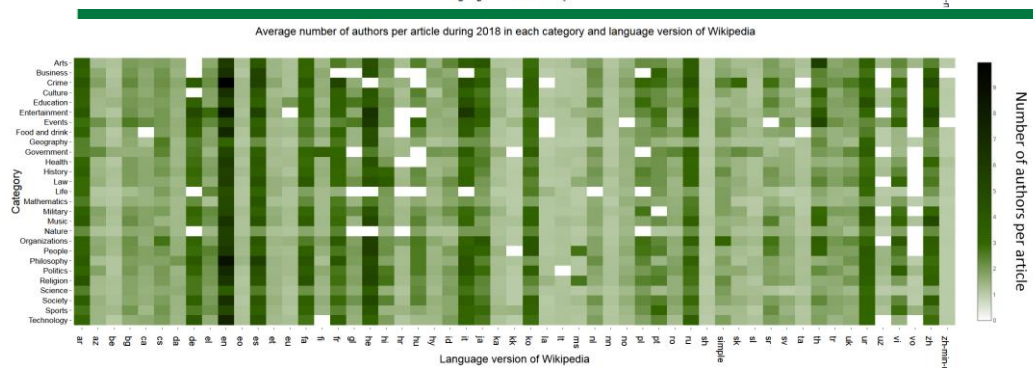
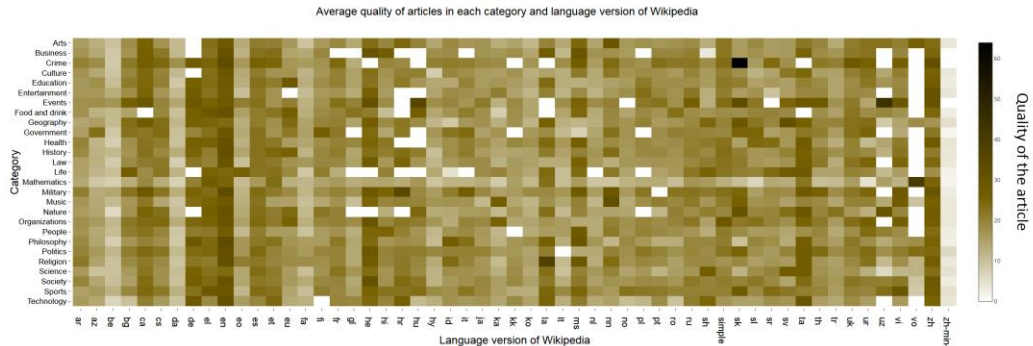
Assessment

We extracted over 100 million values of features characterizing articles in all analyzed languages. Articles were grouped to 27 main categories.

These values were then used to calculate the measures:

- quality (**yellow heat map**),
- authors' interest (**green heat map**),
- popularity (**blue heat map**).

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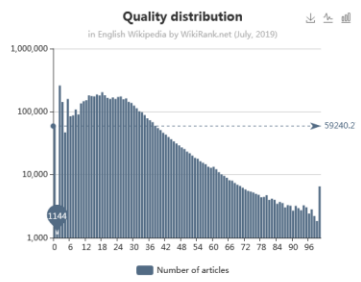
English Wikipedia

WikiRank.net ver. 0.97

Popular articles in June 2019 (1-100)

#	Changes	Title	Quality
1	+2	Deaths in 2019	81.5385
2	+3	Chernobyl disaster	94.157
3	+99997	Various	26.0564
4	+425	2019 FIFA Women's World Cup	86.3042
5	-4	Avengers: Endgame	100.0
6	+4	Chernobyl (miniseries)	70.5677
7	-3	Bible	91.2285
8	+1	ES Networks	54.4565
9	-7	List of highest-grossing films	89.5636
10	+14	Keanu Reeves	85.1488
11	+24	Aladdin (2019 film)	89.3461
12	+62	Dark Phoenix (film)	87.6923

Global statistics



About WikiRank

The project is intended for automatic relative evaluation of the articles in the various language versions of Wikipedia. At the moment the service allows to compare over 38 million Wikipedia articles in 55 languages. Quality scores of articles are based on Wikipedia dumps from July, 2019. When calculating current popularity and AI of articles data from June 2019 was taken into account. For historical values of popularity and AI

WikiRank

- Local rankings of Wikipedia articles in different languages.
- Global rankings, including specific topics.
- Quality and popularity measures of each of over 39 million Wikipedia articles.

Stockholm

WikiRank.net ver. 0.97

Stockholm

Stockholm - capital of Sweden. Use Q506250 for the administrative territorial entity. Article 'Stockholm' in English Wikipedia has **89.8624** points for quality, **1182** points for popularity and **8** points for Authors' Interest (AI). The article contains, among others metrics, 125 references and 38 sections. This article has the best quality in English Wikipedia. However, this article is the most popular in current language version.

The highest Authors' Interest rank from 2002:

- EN 3412th place in the rating of English Wikipedia.
- 1804th place in the multilingual rating of all topics.
- 3875th place in the multilingual rating of Global Authors' Interest.

The highest popularity rank from 2006:

- Local (English): **#307** in October 2002
- Global: **#394** in June 2004

The highest Authors' Interest rank from 2006:

- Local (English): **#2068** in June 2010
- Global: **#1168** in June 2015

There are 55 language versions for this article in WikiRank database (of the considered 55 Wikipedia language editions).

The quality and popularity assessment was based on Wikipedia dumps from July 1, 2019 (including reference history and pageviews for previous years). Query time 0.0461 sec.

The table below shows the language versions of the article with the highest quality.

Scores

Quality: **89.8624**

Local AI (English): 8

Global AI: 41

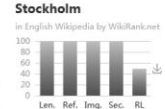
Local popularity (English): 34494

Local popularity - daily: 1182

Global popularity: 105979

Global popularity - daily: 3493

Quality measures



Popularity rank history



AI rank history



Related info

- [Measures for Quality Assessment of Articles and Infoboxes in Multilingual Wikipedia](#) (2019)
- [Enrichment of multilingual Wikipedia based on quality analysis](#) (Wikimedia CEE Meeting 2018)
- [Relative Quality and Popularity Evaluation of Multilingual Wikipedia Articles](#) (2017)



THANK YOU!



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