Supporting tools for a diversified Wikipedia

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The RENDER Project - Motivation

• WWW offers the possibility to publish, to share and to retrieve huge amounts of information
• large number of viewpoints, opinions, and background information
• increasing number of filtering mechanisms to pre-process the available data according to personalized preferences or settings
• difficult to get an all-embracing overview of a topic

→ information is inaccessible or it is a time consuming process
The RENDER Project - Goals

• Develop methods, techniques, software and data sets which enable users to understand, to describe, to process and to make use the diversity of knowledge and information

• To verify the scalability and use of the research, results will be applied in three case studies

→ WMDE is one of these use case partners
The RENDER Project - Partners
Diversity in Wikipedia

WP articles are usually written by multiple editors, who may be biased towards a certain point of view→ necessary that either editors can transcend their personal point of view, or that a multitude of editors covers the significant points of view

Diversity is a necessity for high-quality Wikipedia articles!
Diversity aspects for Wikipedia

The most important aspects of diversity:

• Neutrality
• Fact coverage
• Timeliness

Besides these parameters RENDER takes editor behaviour and interaction (KIT) into account.
Wikipedia Use Case - Goals

• Supporting Wikipedia editors in maintaining and improving the site, and to support readers in understanding the quality and biases of a given article.

• Tools and extensions to support editors in the management, understanding, and decision-making about complex and heated controversies on Wikipedia.

• We want Wikipedia to offer high quality articles on both highly visible and as well as on more obscure topics.
Wikipedia Use Case Scenarios

**Main Goal:** Improvement of the quality, the value and the trustworthiness of Wikipedia by supporting Wikipedia users (readers and editors)

- **Display warnings** to the reader when detecting bias
- Notify authors that an article **needs to be updated**
- **Lower the barrier** for readers to extend and/or correct articles
- Provide the analysis results for researchers
Supporting Tools

Tools to support readers/editors/administrators:

• **Article Statistics and Quality Monitor (ASQM):** support in particular readers

• **Task List Generator:** editors concerning problems of the content
Supporting Tools - Architecture

Scheduler
Precomputes results

Analysis Tools

Statistics

RENDER / JSI / KIT

Results

WebAPI
Provides precomputed and results on demand

Wikipedia Databases

RENDER Database

Visualization/Frontend

Task List Generator
- certain category/topic
- certain lack/flaw

ASQM
- specific article/page
Hi and welcome to the RENDER Toolkit Page!

Here you can test and play with different tools. These are developed in the context of the research project RENDER (Reflecting Knowledge Diversity). In this project, Wikimedia Deutschland is a use case partner.

The tools provide an insight into the different analyses of diversity in Wikipedia, which are implemented within the project. For more information about the project, please visit RENDER on Meta-Wiki or the project website.

The whole toolkit as well as the tools are in a continuous process of development. We are looking forward to receiving suggestions, feedback or ideas on the discussion page concerning RENDER on Meta-Wiki or by email.

http://toolserver.org/~RENDER/toolkit/
Article Statistics Quality Monitor

- Statistics and quality/diversity measures for a certain article
- Modular architecture to extend with further analysis tools and/or available scores
- By providing these information the user/reader can understand the collaborative editing process, detect lacks in an article and gets the information to cure these problems
- Intended to turn readers into authors

Article Statistics Quality Monitor (ASQM)

<table>
<thead>
<tr>
<th>Statistics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status: Featured article since 19/01/2007</td>
</tr>
<tr>
<td>First edit: 2002-07-09 16:11 (Ben-Zin)</td>
</tr>
<tr>
<td>Recent edit: 2012-06-28 14:15 (Matthiasb)</td>
</tr>
<tr>
<td>Number of references: 57</td>
</tr>
<tr>
<td>Number of pictures: 53</td>
</tr>
<tr>
<td>Number of edits: 2618</td>
</tr>
<tr>
<td>Number of unique editors: 1113 (526 IPs)</td>
</tr>
<tr>
<td>Number of views (last 30 days): 28644</td>
</tr>
<tr>
<td>Number of views (yesterday): 1204</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RENDER Analysis:</th>
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<tbody>
<tr>
<td>Fact coverage: View page ratings</td>
</tr>
<tr>
<td>Neutrality: View page ratings</td>
</tr>
<tr>
<td>Timeliness: View page ratings</td>
</tr>
<tr>
<td>Editor Interaction: more information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further Assessment Scores:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wikibu.ch: 10/10 more information</td>
</tr>
<tr>
<td>Article feedback score:</td>
</tr>
<tr>
<td>* Trustworthy: 4.0 more information</td>
</tr>
<tr>
<td>* Objective: 4.3 more information</td>
</tr>
<tr>
<td>* Complete: 3.6 more information</td>
</tr>
<tr>
<td>* Well-written: 4.3 View page ratings</td>
</tr>
</tbody>
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http://de.wikipedia.org/wiki/Potsdam
Article Statistics and Quality Monitor

Challenge: Where and how to include?
Currently: Inclusion as gadget
BUT: Readers are not aware of edit or history view buttons
What about anonymous users?
Article Statistics and Quality Monitor

Demo (inclusion as gadget, not published yet):

Task List Generator

- User can choose one specific topic, a preferred category or the intersection of categories.
- User can select a specific lack she wants to cure e.g. all articles with a neutrality problem.

<table>
<thead>
<tr>
<th>Biased articles</th>
<th>Neutrality score: X</th>
<th>Neutrality score: Y</th>
<th>Neutrality score: Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verotoxin-producing Escherichia coli</td>
<td>More information</td>
<td>More information</td>
<td>More information</td>
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<tr>
<td>Michael Jackson's health and appearance</td>
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<td>2018 Winter Olympics</td>
<td></td>
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<td>...</td>
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</table>
Task List Generator

How to provide this service?

• Request form
  – results via e-mail
  – results on the user page or on QA-pages of WikiProjects
Get in touch with us!
render@wikimedia.de

• Are you an **editor**? Which features could support you and your work?

• Are you a **developer** and your tool is about information diversity?

• Would you like to **test** our tools?

• Do you know of **additional research or tools** that are relevant for the project?
Questions? Suggestions? Notes?

Visit us:
At the Wikimedia Deutschland booth in the Continental Ballroom

Contact us:
angelika.adam@wikimedia.de
render@wikimedia.de

Get more Information:
https://meta.wikimedia.org/wiki/RENDER
http://toolserver.org/~RENDER/toolkit/
http://render-project.eu