

5 *new* learnings from our research on readers

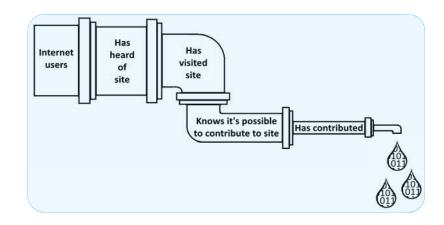
Martin Gerlach, Yu-Ming Liou, Michael Raish (Research)

Why we need research on readers

Readers are experiencing a changing internet



Knowledge gaps propagate along the pipeline of online participation



Understanding **readers' needs and barriers** is key to serve our current & future audiences

Example: Wikipedia's gender gap

Readers: \sim 33% \rightarrow Editors: <15% \rightarrow Content: <20%

Previous research on readers

Previous research work



April 2022 staff meeting presentation https://w.wiki/_vaEQ Today's presentation



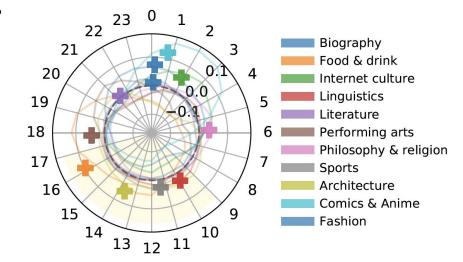
An **expanded Research Team:** ML/AI models, Surveys, Interviews

1: Information needs vary over time

Location of readers matters. What about time?

Challenge: UTC \rightarrow local time of reader

Analysis: 3.5B pageloads in English Wikipedia Overall **circadian rhythm** Mobile peaks in the evening (+50%) **Topic preferences change over time**



Capture engagement beyond pageviews counts Use reading patterns to optimize content delivery (e.g. caching)

2: Much of the existing content is invisible

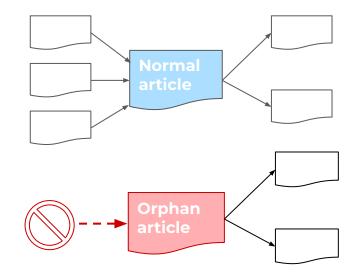
How easy is it to discover relevant articles?

Articles not visible to readers navigating Wikipedia

8.8M orphan articles in all Wikipedias(~15%)

Gender bias (women biographies overrepresented)

New link *leads to* +10% pageviews



Support editors with *de*-orphanization (e.g. via structured tasks) Recommend orphan articles to readers

3: Readability is a major barrier

How easy is it to read and understand written text?

Work: a multilingual model to score readability of Wikipedia articles

Results: Text difficulty > Reading ability English: **58% of articles at grade level ≥9** Majority of content **too difficult for average adult**





Create customizable reading experiences using generative AI to make existing content more accessible to readers

4: Our readers are disproportionately young, educated, and men

Who is reading Wikipedia?

Large-scale reader survey in 23 wikis (80K responses)

Regular snapshots of our readers

↓ age (49% under 30, includes <18)

 \uparrow education (~23% with HS degree or less, 18+ only)

↑ men (~66% identify as men, 18+ only)

Learn more: April staff meeting (Yu-Ming) Understand causes of readership gaps



5: Readers create accounts to read

What motivates readers to create accounts?

Survey + Interviews with **new account holders** >20% didn't know they could edit 20% reason for sign-up: reading Enthusiasm for "individual" features (e.g. create lists) Strong interest in Wikipedia (incl. editing)

| questions. | |
|---|----------------------------|
| Why did you create your account today? | |
| Please select | ~ |
| Have you ever edited Wikipedia? Please select | ~ |
| Wikipedia is available in nearly 300 languages. Are there other languages | ges you read and write in? |
| Add up to 10 languages | |

Raise awareness about how Wikipedia works Support readers in new ways to become contributors

Thank you!

Question? Reach out: mgerlach@, yliou@, mraish@

Thanks to: Formal collaborators (EPFL, Stanford, GESIS), Research, Machine Learning, Growth, Legal

Learn more about the projects

#1 Time https://w.wiki/97oY
#2 Visibility https://w.wiki/4LHD
#3 Readability https://w.wiki/5Kdd
#4 Reader demographics https://w.wiki/9Kqz
#5 New editor survey https://w.wiki/9Kns / Non-editing participation https://w.wiki/9SyW

Credits

- Slide 2: Internet. <u>https://thenounproject.com/icon/internet-2126864/</u> (<u>CC BY 3.0</u>) by ibrandify
- Slide 2: Pipeline of online participation inequalities. <u>https://commons.wikimedia.org/wiki/File:Pipeline_of_online_participation_inequalities.png</u> (<u>CC BY-SA 4.0</u>) by Aaronshaw
- Slide 3: 5 Learnings from Research on Reader Navigation. <u>https://commons.wikimedia.org/wiki/File:(Staff_meeting_2022-04)_Learnings_from_reader_navigation_resear_ch.pdf (CC BY-SA 4.0)</u> by MGerlach_(WMF)
- Slide 4: Typical access time of topics. Figure 9 <u>https://arxiv.org/abs/2305.09497</u> by Tiziano Piccardi
- Slide 6: Logo for Simple English Wikipedia. https://commons.wikimedia.org/wiki/File:Wikipedia-logo-v2-simple.svg (<u>CC BY-SA 3.0</u>) by Odder
- Slide 6: Logo for Vikidia <u>https://commons.wikimedia.org/wiki/File:Logo_Vikidia_2019.svg</u> (<u>CC BY-SA 4.0</u>) by Tinker Bell
- Slide 6: Logo for Txikipedia. <u>https://commons.wikimedia.org/wiki/File:Txikipedia.svg</u> (<u>CC BY-SA 4.0</u>) by Theklan
- Slide 7: Quicksurvey for Global reader survey. Screenshot <u>https://phabricator.wikimedia.org/F37697326</u> by DDeSouza
- Slide 8: Welcome survey.

https://commons.wikimedia.org/wiki/File:Screenshot_of_welcome_survey_2021-01-18.png (CC BY-SA 4.0) by Trizek_(WMF)