## **DISCUSSION NOTES**

Please write clearly so that others can read what you have written! Use only this side of the paper. Use more paper if you need it.

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DISCUSSION TOPIC:	BREAKOUT SPACE: 3
	TIME:1800
PARTICIPANTS: Lydia Pintscher, Aaron Halfaker, Florian Schmidt, Bence Damokos, Marius Hoch, Oliver Stegen, Hogne Neteland, Thomas Pellissier-Tanon, Mykola Kozlenko, Man Jai Lee, Yusuke Matsubara, Leon Liesener, Michal Buczynkski, Galder Gonzalez	CONVENOR: Aaron Halfaker

## **KEY POINTS:**

- AI is already used in WM projects, e.g. ORES, a vandalism fighting tool, recommending system for articles, detecting aggressive messages (on talk pages). Vandalism detection tool already works with 31 wikis.
- the goal is to minimize the work for the community, so they can focus on other topics
- Interest in Technological solutions for non-English Wikipedia & interest in Minority languages and translation
- "How AI can help Wikipedia"
- "How can Wikipedia help AI"
  - Can Wikidata as a structured data platform support AI? Similar to "can wikipedia help AI?"
    - Depends on the AI. Knowledge bases are great for certain types of AI.
- WQS could be referred as something like "Indexing AI" -> a more or less usual question can give the answer from Wikidata based on indexes.
- What about bias?
  - word2vec has a gender bias (e.g. pilot female = stewardess)
  - there is a bias in the world → the people in our space are a biased sample of the world → our rules are biased in certain ways
    - AI can only work on some stages and humans must work on others. E.g. humans need to fix the rules.
  - Biased according to what?
    - e.g. there's a bias in the world, but compared to what?
       E.g. there's a bias in the community, but where did it comes from?

- Language bias -- most tools are based in English
  - Other languages have grammatical characteristics that English does not.
  - Way harder to implement a tool from English Wikipedia to another language.
- we know, that bias are happening, but how we can detect them? The best detection machine is the brain"
- How complex removing a bias is depends on the type
  - Example of "ha" in italian and anonymous bias in ORES
- It would be great if we have a machine that could look at external sources and compare it to content on the wikis.
- We could have a machine that creates an article based on Wikidata
  - AI can learn from already existing text and writes articles -would help the community -- something they would want
  - The content translation tool translates articles automatically (e.g. English to German)
  - There're already similar things from Google (and probably other) which creates new data with existing data "deep learning"
  - The data creates by AI has still to be validated (by a human?) to verify, that it's valid? Open question is also: Referencing? How does a machine can correctly reference the data (it used to create the content)
  - Could be a bot that writes to Wikipedia or it could be a "placeholder article" generated from Wikidata
    - (Bot created articles are generally out of date whereas article placeholders will be updated with Wikidata)
    - Is it necessary to have text? For a lot of things, an infobox does the trick.
- An AI could learn from an existing Wikidata item and a corresponding Wikipedia article how the data correlates to the natural language and could use this both ways (creating articles from Wikidata or creating a Wikidata item from a Wikipedia article)
- Problem spaces
  - Reducing patroller workload
    - E.g. vandalism fighting takes time ML can reduce edits that need review
  - Filling in gaps
    - article place holders fill gaps
    - you can recommend missing statements in Wikidata
    - personalized content creation: e.g. could ask a user a

set of questions and then deliver relevant content -- like a conversation

- We also want to categorize things +1
  - "This article looks like it's in X category"
  - "This image has a dog"
- Finding relevant stuff (e.g. search)
  - Areas that likely need updating
  - Surfacing the good stuff (quality)
  - Find me an image that looks like <foo>
  - Find stuff that is like <foo> but has/doesn't have <bar>
- Constraint solver
  - E.g. this president should have been replaced by now (based on wikidata statements), so this article needs an update
  - E.g. this person was born before 1900, they are probably not still alive
- Enabling comfortable human behavior
  - Convert natural language to a Wikidata Query
    - Existing demo
- How do we deal with the fact that Wikipedia/Wikidata is the information source behind an AI
  - Goal is free knowledge.
  - Google is already using snippets from Wikipedia
  - When the answer to a question is directly given, where do we get the readers, editors and contributors at all from?
  - Maybe we need to make our own AI! Our own Siri.
- Creating articles with AI always means "The data is still coming from humans"

## CONCLUSIONS/RECOMMENDATIONS/ACTIONS (IF ANY):

- AI needs and uses a lot of processing capacity and direct access to system resources (e.g. NFS does not work like a directly attached harddisk)
- Removing false-positives is mostly based on the "control" and the "findings" of the humans
- If an AI creates data, an AI needs to make sure, that it is updated, as small communities may not handle the amount of data to keep it updated
- A search engine could profit from AI, e-g. to understand natural language
- In 15 years: Will I simply ask my question and get the answer from Wikipedia?
  - Google is already doing this with the Knowledge graph, e.g.
- The problem "Where does editors come from then" has to be clarified.

