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HOW AN EPISTEMOLOGY OF IGNORANCE MAINTAINS WIKIPEDIA'S GENDER GAP

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This paper argues that an epistemology of ignorance helps to maintain Wikipedia's gender gap, despite continued efforts to promote gender balance. Wikipedia's 'gender gap' refers to the consistently low numbers of women editing Wikipedia, relative to the general population. It is estimated that between 9% and 16% of Wikipedians are women (Hill and Shaw 2013; Wikimedia Foundation 2011). As I have argued elsewhere, Wikipedia's gender gap has several negative epistemic consequences, including undermining Wikipedia's reliability, limiting the scope of topics covered, and spreading misleading truths (Frost-Arnold forthcoming). Several projects are underway to address the problem (cf. Cohen 2011; "Wikipedia:WikiProject Countering Systemic Bias"; "Wikipedia:WikiProject Women in Red"). Despite these efforts over the course of several years, the gender gap remains a persistent problem. This paper draws on the epistemologies of ignorance literature and research in HCI to uncover some of the Wikipedian social norms, design features, and background socio-linguistic structures that stymie attempts to close the gender gap.

The epistemologies of ignorance literature is based on the premise that ignorance is not a simple absence of knowledge, but an active production that can be systematically maintained through norms, practices, habits, ideologies, institutional structures, etc. (cf. Sullivan and Tuana 2007). This paper identifies three aspects of Wikipedia's epistemology of ignorance through which knowledge of Wikipedians' gender (and their gendered experiences as editors) is precluded and sometimes actively silenced.

First, Wikipedians espouse informal and formal norms of conduct and content inclusion that are generally viewed as gender-neutral, but which in fact facilitate ignorance of gender-based harassment and exclude content related to women. For example, consider the Wikipedian slogan "Don't stick beans up your nose" (or "beans" for shorthand). This refers to an informal behavioral norm against preemptively admonishing Wikipedians for bad behavior. As Menking and Erickson (2015) discovered in interviews with women Wikipedians, the "beans" norm (in conjunction with others, such as "deny recognition [to trolls]") discourages women from discussing details of the gender-based harassment they experience on Wikipedia. Additionally,

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other formally neutral norms for content inclusion, i.e., the notability guideline and verifiability policy, functionally exclude content related to women and people of color (Backer 2015; Stephenson-Goodknight 2015). This illustrates a common feature of an epistemology of ignorance: reliance on formally neutral norms without addressing the ways in which, given the social context in which the norms operate, they produce bias and ignorance (cf. Young 1990).

Second, Wikipedia's commitment to online anonymity means that Wikipedians' gender identities are not readily accessible to those who develop tools to combat the gender gap. This limits their ability to tailor solutions to the specific needs of women Wikipedians who are at risk of leaving the project. One example is the useful *Snuggle* tool that was designed by researchers to improve mentoring of newcomers to Wikipedia (Halfaker, Geiger, & Terveen 2014). Despite the fact that this tool was developed based on feminist principles and was created, in part, to deal with the gender gap, *Snuggle* does not take the gender of the newcomers into account. This is not surprising, since newcomers do not need to provide any information about their gender when they edit Wikipedia, so there is no way for *Snuggle* to provide that information to mentors. But this shows that the design of Wikipedia itself is based on an epistemology of ignorance—it precludes knowledge about the gender of Wikipedians. Thus, this feature of Wikipedia limits what *Snuggle* can accomplish by preventing *Snuggle* from quickly identifying and helping newcomers who may be targets of gender-based harassment.

Third, the socio-linguistic structures of English gendered pronouns limit the knowledge that can be attained by another promising solution to the gender gap. *Passing On* is an experiment that uses reader-sourcing to create Wikipedia content to increase the coverage of women's biographies (Matias, Diehl, & Zuckerman 2015). As readers browse women's obituaries in the *New York Times* and learn about gender disparities in the *Times'* coverage, content and resources are added to Wikipedia that can be used to create more biographies of notable women. This is an innovative solution, but it depends on gendered pronoun appearance in the *Times* for identifying subjects. As the researchers acknowledge, this limits *Passing On's* ability to identify trans and gender non-conforming people who may be referred to with incorrect pronouns in news coverage, or who may use alternative pronouns (Matias n.d.). Of course, *Passing On* has to be designed with some way to identify women in the *Times*, and gendered pronouns are a standard linguistic practice in English for identifying the gender of subjects. But this is where an epistemology of ignorance approach is helpful. It shows how this cultural and linguistic practice functions, in the context of this experiment, to exclude many trans and gender non-conforming people from the knowledge disseminated by Wikipedia.

Thus, this paper outlines some of the sources of ignorance of gender that surround Wikipedia and attempts to remedy its gender gap. By understanding how knowledge of gender and gender-based harassment is erased, silenced, and precluded, we can better understand the scope of Wikipedia's gender problem. With this understanding, we can design more effective tools for solving the problem. This paper concludes with some suggestions for solutions.

Methodology

Methodologically, this is a project in social epistemology of the internet. While the theoretical tools are primarily philosophical in nature, the paper also draws on research in HCI to analyze particular tools and experiments aimed at correcting the gender gap. To make it accessible to an interdisciplinary audience, the paper will begin with an introduction to the literature on epistemologies of ignorance and the issues of diversity within Wikipedia.

References

- Backer, A. (2015) "AfroCROWD—Bridging the Multicultural Gap," WikiConference USA, October 10, 2015, Washington, DC.
<<https://www.youtube.com/watch?v=WkHbg9V5wnl>>. [February 27, 2017].
- Cohen, N. (2011) "Define Gender Gap? Look up Wikipedia's Contributor List," *The New York Times* January 30, 2011.
<http://www.nytimes.com/2011/01/31/business/media/31link.html?_r=0>. [December 14, 2015].
- Frost-Arnold, K. (forthcoming) "Wikipedia," In *The Routledge Handbook of Applied Epistemology*, D. Coady & J. Chase (eds.). New York: Routledge.
- Halfaker, A., Geiger, R.S., & Terveen, L.G. (2014) "Snuggle: Designing for Efficient Socialization and Ideological Critique," In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 311-320). ACM.
- Hill, B.M., and Shaw, A. (2013) "The Wikipedia Gender Gap Revisited: Characterizing Survey Response Bias with Propensity Score Estimation," *PLoS ONE* 8(6): e65782.
- Matias, J.N. (n.d.) *Passing On*. <<http://passingon.natematias.com/>>. [February 25, 2017].
- Matias, J.N., Diehl, S., & Zuckerman, E. (2015) "Passing on: Reader-Sourcing Gender Diversity in Wikipedia," In *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 1073-1078). ACM.
- Menking, A., & Erickson, I. (2015) "The Heart Work of Wikipedia: Gendered, Emotional Labor in the World's Largest Online Encyclopedia," In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 207-210). ACM.
- Stephenson-Goodknight, R. (2015) "Women...It Takes a Village" WikiConference USA, October 10, 2015, Washington, DC.
<<https://www.youtube.com/watch?v=WkHbg9V5wnl>>. [February 27, 2017].
- Sullivan, S. and Tuana, N. (eds.) (2007) *Race and Epistemologies of Ignorance*, Albany, NY: SUNY Press.

- Wikimedia Foundation (2011) *Wikipedia Editors Study*.
<https://wikimediafoundation.org/w/index.php?title=File%3AEditor_Survey_Report_-_April_2011.pdf&page=1>. [February 27, 2017].
- “Wikipedia:WikiProject Countering Systemic Bias” (n.d.) Wikipedia.
<https://en.m.wikipedia.org/wiki/Wikipedia:WikiProject_Countering_systemic_bias>. [February 27, 2017].
- “Wikipedia:WikiProject Women in Red” (n.d.) Wikipedia.
<https://en.m.wikipedia.org/wiki/Wikipedia:WikiProject_Women/Women_in_Red>. [October 16, 2015].
- Young, I. (1990). *Justice and the Politics of Difference*. Princeton, NJ: Princeton University Press.