

The Gendered Geography of Contributions to OpenStreetMap: Complexities in Self-Focus Bias

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ABSTRACT

Millions of people worldwide contribute content to peer production repositories that serve human information needs and provide vital world knowledge to prominent artificial intelligence systems. Yet, extreme gender *participation disparities* exist in which men significantly outnumber women. A central concern has been that due to self-focus bias [46], these disparities can lead to corresponding gender *content disparities*, in which content of interest to men is better represented than content of interest to women. This paper investigates the relationship between participation and content disparities in *OpenStreetMap*. We replicate findings that women are dramatically under-represented as OSM contributors, and observe that men and women contribute different types of content and do so about different places. However, the char-

KEYWORDS

Peer production, gender, OpenStreetMap, self-focus bias, urban, rural

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1 INTRODUCTION

Peer production is a powerful example of the potential of social computing in which communities like Wikipedia and

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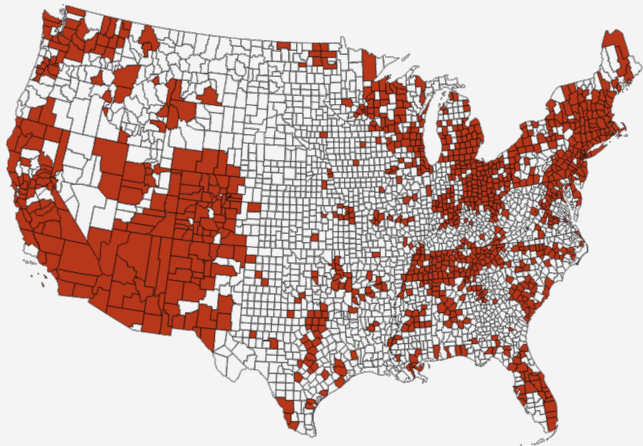
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These are **participation disparities** and **content disparities**

GENDER DISPARITIES IN OSM MAPPING DATA CONTRIBUTIONS



The US counties shown in red are those with at least 1 edit from the women power editors in our sample in the no-bots dataset. A prominent “No Female Edits Belt” (in white) is visible running from the Northern Mountain West down through the Great Plains, Midwest, and Appalachians.

(note: these counties may be edited by non-power-editors or unidentified female editors)

SALIENT TAKEAWAYS

- Every county in the continental US received ≥ 1 edit from male editors; only 1/3 of the counties received ≥ 1 edit from female editors
- there's a rural/urban dimension
- there's a racial/diversity dimension read the paper for more info on both
- male editors created more edits with bots than female editors did
- “women editors were more likely to contribute [more] information about *masculinized spaces* relative to men, and men were more likely to contribute [more] information about *feminized spaces* relative to women”
 - A male editor makes ~1.5 times what a female produces in the *masculinized spaces*, but produces over 2.5-3 times that in the *feminized spaces*

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WHAT'S GOING ON/WHAT TO DO

What's going on?

- self-focus bias isn't happening?
- intersectional or other demographic factors overpowering gender self-focus bias?

What to do?

- “we need to think critically about ways to increase coverage of under-represented facilities on OSM”
- Send in the bots

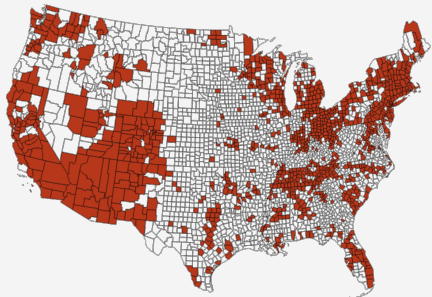
ISSUES?

categorized various places as **feminized** or **masculinized**:

- childcare
- kindergarten
- hospice
- day-care
- assisted living
- nursery
- retirement home
- beauty
- nail salon
- brothel
- nightclub
- strip club
- swinger club
- love hotel
- sex shop
- adult
- sperm bank
- barber shop

DISCUSS?

some major things to take away



- some issues:
 - inferred genders from usernames
 - sorta problematic classifications of locations
- women edit OSM less often than men
- men and women seem to edit locations associated with other gender more often than their own
- self-focus bias doesn't **seem** to play out
- participation & content disparities