Gender gap in the processes of social production of knowledge. A case of Polish Wikipedia

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Wikipedia

Gender gap of Wikipedia and its consequences



- an online free-content encyclopedia project that aims to help create a world in which every single human can freely share in the sum of all knowledge
- the free encyclopedia that anyone can edit
- One of the "five pillars" of Wikipedia editing proclaims that "Wikipedia is written from a neutral point of view"

Gender gap

- [Gender Gap Index] a framework for capturing the magnitude of gender-based disparities and tracking their progress over time. The index benchmarks national gender gaps on economic, education, health and political criteria, and provides country rankings that allow for effective comparisons across regions and income groups¹
- Based on data from the LinkedIn platform, women are under-represented in six of the eight micro-clusters with the highest employment growth rate (people and culture, content production, marketing, sales, specialized project managers, data and AI, engineering and cloud computing)

¹Global Gender Gap Report 2020

State of the Art

State of the Art

In many respects, the Internet reproduces the larger societal gender status quo. Top-level control of Internet resources, infrastructure, and content is exercised mostly by men. The largest single activity on the Internet - the distribution of pornography - is not only largely controlled by men, but casts women as sexual objects for men's use. The sexualization of women carries over into ostensibly neutral domains, such as recreational chat and personal homepages. In serious contexts, such as academic discussion groups, women participate and are responded to less than men. (Herring 2003: 218)

State of the Art: Psychological Approach

Male students were more likely to discount the risks involved when using Wikipedia information compared to their female counterparts. Furthermore, male students had higher ratings than female students regarding most aspects of Wikipedia, including outcome expectations, perceptions about its information quality, belief in the Wikipedia project itself, emotional states while using Wikipedia, confidence in evaluating information quality, and further exploration. (Lim 2010: 212)

State of the Art: Psychological Approach

- 1. "in confidence in one's expertise, with women expressing greater lack of confidence than men"
- 2. "in comfort with editing such that women will express greater discomfort than men with editing other people's work in Wikipedia"
- 3. "Women will respond more negatively than men to criticism in Wikipedia"
- 4. "Women will report less discretionary time than men" (Bear et alii 2016: 256-257)

State of the Art: Women' Biographies

"We conclude that Wikipedia provides better coverage and longer articles, and that it typically has more articles on women than Britannica in absolute terms, but we also find that Wikipedia articles on women are more likely to be missing than are articles on men relative to Britannica. (...) While Wikipedia has more biographies of women than does Britannica in absolute terms (...), Wikipedia tends to be less balanced in whom it misses than is Britannica as seen in the percentages of missing articles" (Reagle 2011: 1155)

Different forms of gender gap

- 1. participation gap
- content bias
 - (a) quantity gap: biographical coverage, but also proportion of presence of females and males on the front page of Wikipedia etc.
 - (b) quality bias: way of representation

Different forms of gender gap

- "Matilda effect" (Rossiter 1993).
- "Male as a norm". "It's a man's world"
- Bechdel-Wallace test (van Raalte 2015: 16)
- Smurfette Principle (Pollitt 1991)

Method and Approach

Methodological doubts

- Can a male write about gender bias?
- Inevitable bias of the researcher
- Approach: micro-analysis of the content

Research sample

Research Sample

Females	Males	-
Feminizm	Maskulinizm	Aborcja
Kobiecość	Męskość	BDSM
Kobieta	Mężczyzna	Cisseksualizm
Matriarchat	Patriarchalizm	Determinacja płci
	Patriarchat	Gender
	Hipoteza o wyższości mężczyzn	Gender mainstreaming
		LGBT
		Płeć
		Role płciowe
		Różnice psychologiczne między płciami
		Seks
		Seksizm

Research Sample: 22 articles chosen from Polish language version of Wikipedia, 15 June 2020

Results: propositions for classifying Wikipedia gender biases

Biases by carrier

The sizes of the article

1.	Language	Pl	Ru	It	Fr	Es	De	En
2.		Kobieta	Женщина	Donna	Femme	Mujer	Frau	Woman
3.	Length (bytes)	5276	123705	15507	102600	32816	50349	72201
4.		Mężczyzna	Мужчина	Uomo	Homme	Varón	Mann	Man
5.	Length (bytes)	14057	54165	17847	26239	28802	16454	18864
6.		K/M	Ж/М	D/U	F/H	M/V	F/M	W/M
7.	Proportion	38%	228%	87%	391%	114%	306%	383%
8.		Kobieta	Женщина	Donna	Femme	Mujer	Frau	Woman
9.	Length (%)	100%	4%	34%	5%	16%	10%	7%
10.		Mężczyzna	Мужчина	Uomo	Homme	Varón	Mann	Man
11.	Length (%)	100,00%	26%	79%	54%	49%	85%	75%

A Comparison of the sizes of the articles on woman and man in different language versions of Wikipedia

Term Frequency Test

1.	Różnice psychologiczne między płciami	Sex differences in psychology
2. Length (bytes)	40929	102049
3. "IQ" occurrences	22	2
4. Proportion	0,54‰	0,02‰

A Comparison of the number of the term "IQ" occurrences

Female (Kobieta) — pl.wiki, 1st photo



Od lewej do prawej począwszy od góry: Makeda • Wenus • Joanna d'Arc • Eva Perón • Maria Skłodowska-Curie • Indira Gandhi • Wenus z Willendorfu • Wangari Maathai • Matka Teresa z Kalkuty • Grace Hopper • Mamechiho (gejsza) • tybetanka • Marilyn Monroe • Oprah Winfrey • Aung San Suu Kyi • Mata Hari • Izyda • Laverne Cox • Elżbieta I Tudor • Florence Owens

Female (Kobieta) — pl.wiki, 2nd & the last photo



Kobieta w ciąży

Female (Kobieta) — en.wiki, 1st photo



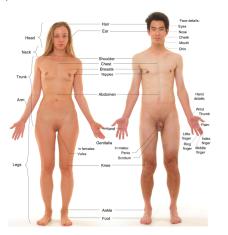
A woman mechanic

Female (Kobieta) — en.wiki, 2nd photo



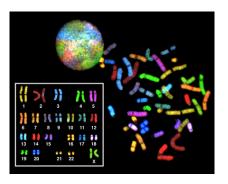
The human female reproductive system

Female (Kobieta) — en.wiki, 3rd photo



Photograph of an adult female human, with an adult male for comparison. Note that the body hair of both models is removed.

Female (Kobieta) — en.wiki, 4th photo



Spectral karyotype of a human female

Female (Kobieta) — en.wiki, 5th photo



The Life & Age of Woman – Stages of Woman's Life from the Cradle to the Grave,1849

Female (Kobieta) — en.wiki, 6th photo



Female (Kobieta) — pl.wiki vs. en.wiki





🔹 pl.wiki: 📱









en.wiki:

Biases by strategy

Concealment, or Lost In Translation

Concealment, or Lost In Translation

No	pl	No	en
1 st	Aims of the feminism	1 st	Aims of the feminism
2^{nd}	Assumptions of the feminist worldview	2^{nd}	Assumptions of the feminist worldview
3^{rd}	Activities of feminist organisations	3^{rd}	Postulates for practical action
4^{th}	More on these activities	4 th	Activities of feminist organisations
5 th	-	5 th	More on these activities

A Comparison of the Introductory Part of the entry of "Feminizm"

Efforts to change that include fighting gender stereotypes and seeking to establish educational and professional opportunities for women that are equal to those for men" (Feminism n.d.)

Obsolete sources

Obsolete sources

- "Seks" based in great part on the Kinsey report from 1948 and 1943 and research by Masters and Johnson from 1966 and 1970.
- "Matriarchat" cites as a source works of Feliks Koneczny

 ${\sf Camouflage}$

Camouflage

Cisgender

"a term for people whose gender identity matches their sex assigned at birth" (Cisgender, n.d.)

Polish version brings such a formulation:

"expression regarding descriptions of gender identity, where personal experience related to it is consistent with the sex that was assigned to the person at birth"



Gender: "A man and a woman in ceremonial European costumes" (pl.wikipedia.org)



Gender: "An example of genderqueer, that is, one who does not identify as either a woman or a man." (pl.wikipedia.org)



Gender: "Gender symbols intertwined. The red (left) is the female Venus symbol. The blue (right) represents the male Mars symbol." (en.wikipedia.org)



Gender: "Gender depicted as an ambiguous phenomenon, by a young Swedish actor" (en.wikipedia.org)

Gender bias

Gender — pl.wiki vs. en.wiki





• pl.wiki:





en wiki:

Open text

Open text

Seks:

"entirety of behaviors resulting from sex drive and aimed at satisfying individual sexual needs of a person" (Seks n.d.)

Human sexual activity:

"the manner in which humans experience and express their sexuality" (Human sexual activity n.d.).

Open text

• Hypothesis on the superiority of men:

"an assumption about psychological, especially intellectual advantage of men in the species H. sapiens, which would have a biological basis." (Hipoteza o wyższości mężczyzn n.d.).

 does not exist anymore, now included into "Różnice psychologiczne między płciami" Drastic content

Drastic content



Aborcja (pl.wikpedia.org): "This photo of an opened oviduct with an ectopic pregnancy features a spectacularly well preserved 10-millimeter embryo. It is uncommon to see any embryo at all in an ectopic, and for one to be this well preserved (and undisturbed by the prosector's knife) is quite unusual."

Conclusions and further questions

Conclusions and further questions

- There are several biases in Wikipedia, so it cannot be perceived as a reliable, authoritative source of knowledge.
- The cognitive bias may come in many different forms
- Biases can be detected by comparing the different language versions of Wikipedia
- Is the method applied a good tool for bias localisations?
- How to uncover more biases?

The End

Thank you for your attention!