

# Reducing Bias in Wikipedia's Coverage of Political Scientists

Samuel Baltz, *University of Michigan, USA*

One in five political scientists with biographies on Wikipedia are women and almost half are American. Biases on Wikipedia can cause real harm, so I created or expanded a political science-related Wikipedia article every day for a year, focusing on writing new pages about political scientists from underrepresented groups. This article shows that Wikipedia's coverage of political scientists remains skewed by gender and nationality, and I suggest ways for political scientists to improve Wikipedia's representation of the discipline.

Anyone can write an article on Wikipedia, including a biography of another person, but an overwhelming proportion of these biographies are about men from wealthy countries. This has prompted a type of digital activism: for almost as long as Wikipedia has existed, there have been collective efforts to make its coverage of people fairer (Redden 2016).<sup>1</sup> Almost a decade of work has focused specifically on increasing the proportion of biographies about women in science (Wade and Zaringhalam 2018). However, whereas thousands of new pages have been written about underrepresented natural scientists, medical researchers, and engineers, Wikipedia's treatment of social scientists has not received the same level of attention.

Yet, Wikipedia's coverage of social sciences suffers from the same problems as its coverage of natural and medical sciences. Adams, Brückner, and Naslund (2019) found that sociologists who are men or who are white are disproportionately likely to be the subject of a biography on Wikipedia, and Schellekens, Holstege, and Yasseri (2019) identified similar gender gaps among pages about economists, physicists, and philosophers. As Alter et al. (2020) argued, and as Ackerly and Michelitch (2022) discuss in this symposium, there is reason to expect that these biases also would apply to political scientists. To match the estimated proportion of women among full-time political scientists in the United States, Wikipedia's biographies of women in political science would need to appear at almost double the overall proportion of Wikipedia biographies about women (APSA 2011).<sup>2</sup>

These types of biases echo the enduring problems in political science. Gender gaps have been consistently identified in political science citations, syllabi, and books, whereas the academic study of politics historically has focused on a small number of wealthy countries (Dion and Mitchell 2019; Wilson and Knutsen 2020). The prominent initiatives Women Also Know Stuff and People of Color Also Know Stuff were motivated partly by a closely related bias: publications and

events about politics are less likely to include experts who are white women or people of color (Beaulieu et al. 2017; Lemi, Osorio, and Rush 2019).

Like other types of bias in the discipline, biased coverage on Wikipedia can have serious effects. In a typical month, Wikipedia articles about politics are viewed hundreds of millions of times.<sup>3</sup> Experiments demonstrate that text on highly viewed Wikipedia pages can affect outcomes from the way that scientific topics are described in academic papers to the revenue of tourist destinations (Hinnosaar et al. 2017; Thompson and Hanley 2018). Researchers specifically argue that biased coverage of a profession on Wikipedia can discourage people from joining that profession due to an absence of visible role models (Hinnosaar 2019; Wade and Zaringhalam 2018).

To address these issues, I undertook a year-long project to reduce bias among political science-related Wikipedia articles, in which I focused on gender and regional disparities in biographies about political scientists. Every day in 2020, I created or expanded a Wikipedia article about a political scientist from an underrepresented group. How productive were these efforts, and how much work remains before Wikipedia biographies of political scientists are a fair representation of the field?

First, I describe the distributions of gender and nationality among Wikipedia pages about political scientists. I then discuss the limitations of an individual effort like mine that aims to address a systemic problem. Finally, I provide concrete suggestions for how others can contribute.

## BIASED COVERAGE

To measure the extent of bias in pages about political scientists, it is necessary to classify Wikipedia's biographies of political scientists according to salient characteristics. Following past literature on Wikipedia's bias, I focus on two characteristics: gender and nationality. These are certainly not the only interesting attributes, but they have the advantage of being straightforwardly tracked across Wikipedia pages. Other characteristics, such as ethnicity, can be even more contingent on time and place. By "bias," I specifically mean that the distribution of Wikipedia articles about political scientists by gender and nationality does not resemble the actual distributions. Brown (2011) found that Wikipedia's coverage of politics "suffers less from inaccuracies than omissions"; in this vein, I study the omissions in its coverage of political scientists rather than focus on issues in the

contents of its pages. I make no other inferential or associational claims about these biases.

There are only a few thousand pages about political scientists on Wikipedia; therefore, exact manual counts are possible. To identify the distribution of political scientists by gender, I manually checked every biography that was classified

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as being about a political scientist and identified whether the article subject is a woman (Baltz 2021). (Classifying article subjects by gender is not trivial. As discussed in the online appendix, the precise feature I classified is whether a page subject is referred to by “she” and “her” pronouns.) In late 2020, there were 3,335 biographies of political scientists on the English Wikipedia but only 670 (about 20%) were biographies of women. This percentage is substantially lower than estimates of the proportion of women in the discipline, which (for example) in the United States is close to 30% (APSA 2011; Nelson 2017).

What about nationality? Figure 1a maps the distribution of political scientists with English Wikipedia biographies by country. Naturally, we might expect political scientists from English-speaking regions to be better represented on an English-language encyclopedia. Therefore, I counted the nationality of every political scientist across all 49 languages

in which Wikipedia listed at least one biography of a political scientist. I identified 11,077 biographies of political scientists in any language; their nationalities are mapped in figure 1b.

In the distribution of English-language pages, the United States is an overwhelming outlier: about 43% of all biographies of political scientists on Wikipedia are about Americans.

Canada, the United Kingdom, Germany, and France are also highly represented, but there is sparse coverage of political scientists outside of North America and Central and Western Europe. The major difference when including non-English pages is that Japan, Russia, and some Eastern European countries become dramatically better represented.

There are two reasons to believe that this does not resemble the actual distribution of political scientists around the world. First, it does not agree with other estimates. Ideally, we would compare the distribution of Wikipedia articles to some “gold-standard” estimate of the distribution of political scientists by nationality, but this eludes confident identification. However, the number of political scientists within a specific country or region at various times has been estimated. Klingemann (2008) estimated that there were about 10,000 political scientists in Europe; around the same time, the American Political Science Association (2011) faculty database identified more

Figure 1a

### Number of Political Scientists by Country on English Wikipedia

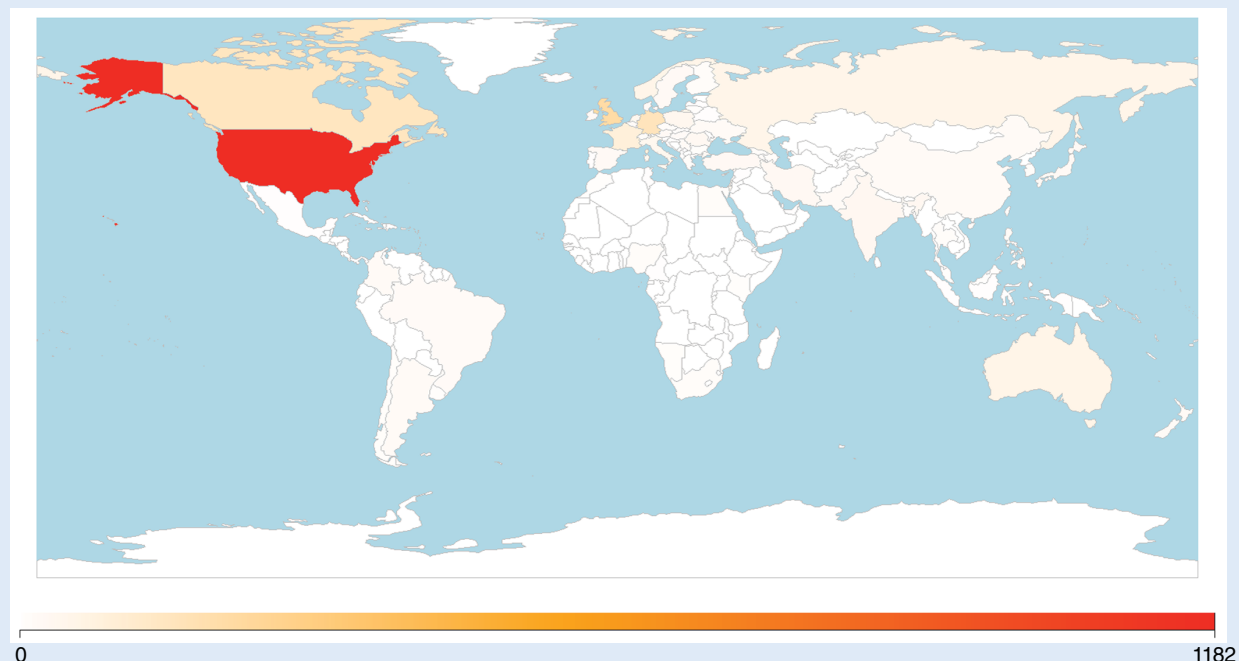
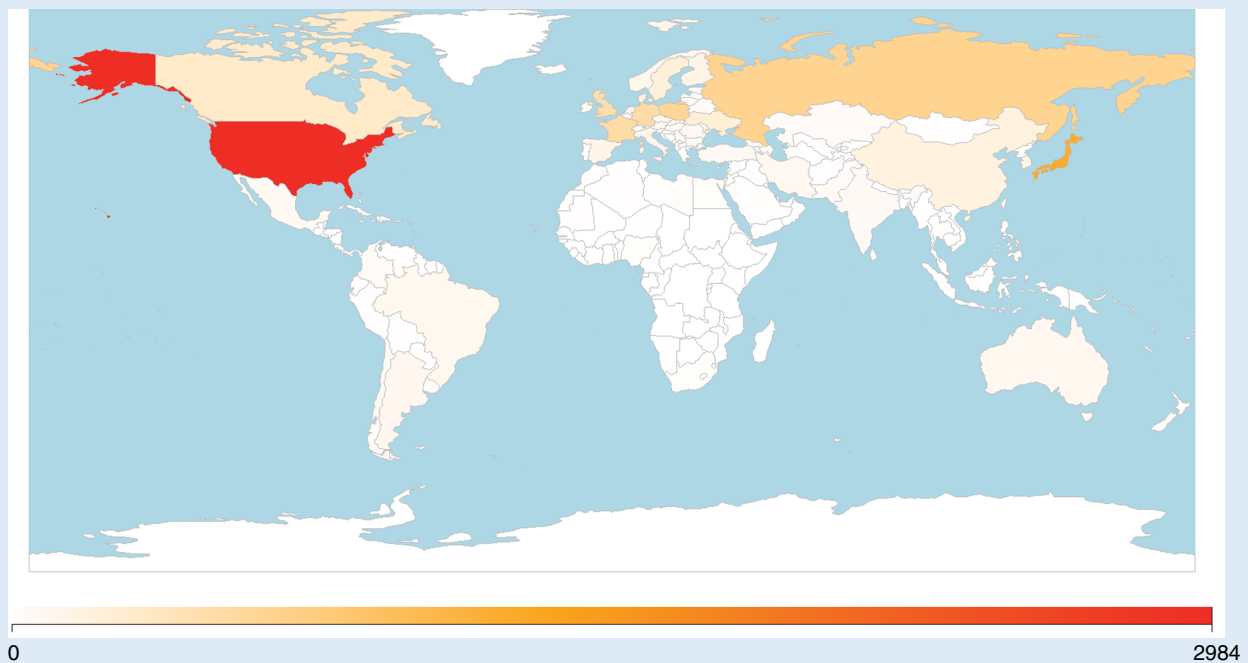


Figure 1b

## Number of Political Scientists by Country Across All Languages



Note: The distribution by nationality of political scientists who have a biography on Wikipedia (a) in English, and (b) in any language.

than 9,000 political scientists in the United States. The Wikipedia data do not quite reflect these numbers because there are hundreds more American than European political scientists on English Wikipedia. Moreover, if these figures are correct, then the English Wikipedia's proportion of American political scientists is representative only if the entire remainder of the

A final hint of missing political scientists is that many countries have numerous Wikipedia pages about political scientists in other languages but few in English. The most extreme case is Japan: there are more than 1,000 Japanese political scientists with Japanese Wikipedia biographies but only a few dozen have English Wikipedia biographies.

### *Wikipedia is disproportionately likely to include political scientists who are men and those who are American.*

world has about 2,500 political scientists. Analyses of political science activity in other places—from political science instruction in “several thousand colleges” in India (Shah 2001), to the volume of articles written by Brazilian political scientists (Nicolau and Oliveira 2017)—suggest that this is not a reasonable estimate. Evidently, Wikipedia's coverage of political scientists is biased toward the United States.

A second problem is that several countries with active political science communities have almost no representation. Figure 2 classifies countries by whether at least one political scientist of that nationality has a biography on Wikipedia. Of the 85 United Nations member states with no political scientists on the English Wikipedia, at least nine have a national political science association or journal. Moreover, several other countries with large political science communities, including Brazil, India, Japan, and Nigeria, have only a few dozen political scientists on Wikipedia.

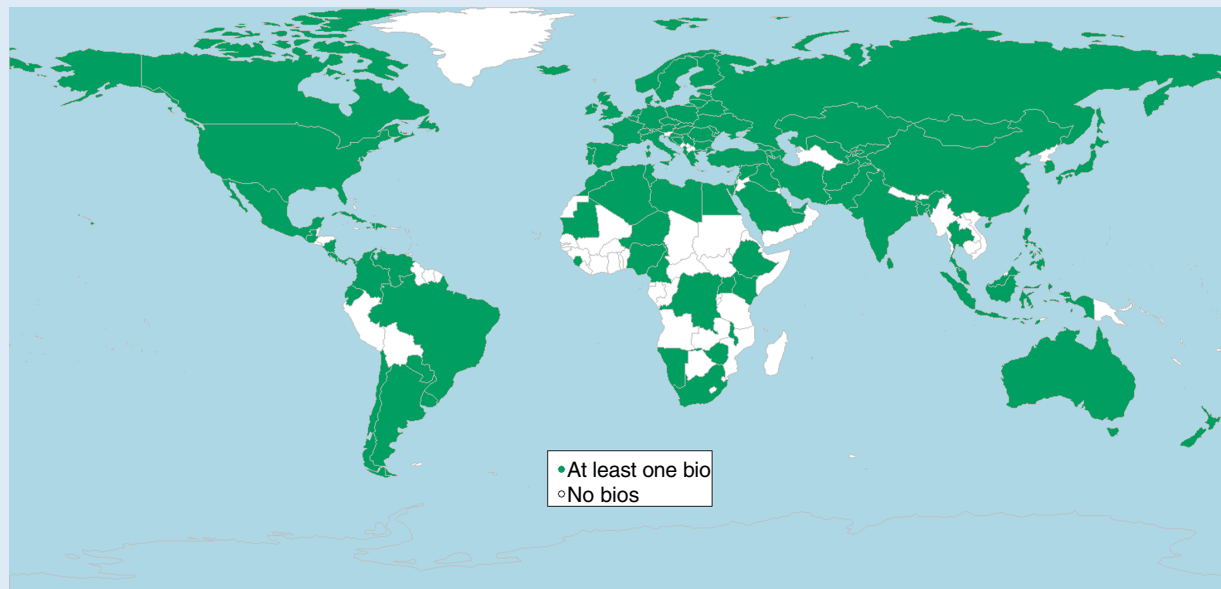
An exact count demonstrates that Wikipedia is disproportionately likely to include political scientists who are men and those who are American. This disparity is a form of bias and is consistent with the biases identified by similar analyses.

#### PROPOSED SOLUTIONS

The fact that only about one in every five biographies of political scientists on the English Wikipedia is about women and almost half are about Americans remained true after I made daily efforts for a year to reduce these biases. These efforts involved writing 297 new pages, which were viewed approximately 300,000 times during 2020.<sup>4</sup> This included approximately 260 pages about women and added about a dozen countries to the list of nationalities with at least one political scientist on Wikipedia. I also expanded about 70 existing pages. However, the population of Wikipedia articles is so substantial that even sustained individual efforts make little

Figure 2

Regions Where at Least One Political Scientist Has a Page



Note: Countries that have at least one political scientist with a biography on the English Wikipedia; 85 countries have none.

difference. Narrowly construed, about 250 of the articles I wrote were new pages about political scientists (other articles were about closely related topics; e.g., the subfield of gender and politics). Therefore, approximately only 7% of Wikipedia’s articles about political scientists were created during this project. My contributions hardly addressed—and, in some ways, may have even exacerbated—the bias by nationality. Evidently, collective action is needed.

However, several obstacles prevent people who have never written a Wikipedia article from helping to rapidly fix biases. Although there are many guides to the mechanics of writing Wikipedia articles, the complexities of writing a Wikipedia

I therefore suggest three approaches for new editors that are likely to produce pages that are safe, useful, counter to the website’s bias, and motivated by past research (Luo, Adams, and Brückner 2018; Schellekens, Holstege, and Yasseri 2019).

First, many of these considerations are nullified if the page subject is deceased. Information about many important political scientists of previous generations can be found only by searching through pay-walled journals and reading pay-walled obituaries. By writing pages about historical political scientists on Wikipedia, we make information about their work freely available. Many underrepresented political scientists from previous generations still are missing from

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biography—particularly of a living academic—are more arcane. On the one hand, Wikipedia has complicated rules about what can be included in biographies of living people, motivated primarily by concerns about copyright and libel. It also has rules about which academics are considered “notable” enough to warrant an article; academics who are judged to not satisfy these rules might have their page deleted.<sup>5</sup> (These deletions may exacerbate existing biases; see Tripodi 2021.) On the other hand, the interests of page subjects must be considered; their page must be accurate, useful, and protected from vandalism. (However, if needed, pages that were written mostly by one author can be deleted quickly at the request of that author.)

Wikipedia, so this can be accomplished in large-scale initiatives. One model could follow the example of Rachael Reavis’s lab, in which students write Wikipedia pages about underrepresented psychologists (Weingartner 2020).<sup>6</sup> This model could incorporate ideas from other contributions to this symposium about using Wikipedia editing as a project for students (Wilfahrt and Michelitch 2022; Norell 2022; Sengupta and Ackerly 2022).

A second strategy is to translate Wikipedia pages from other languages into English. This can be easier than creating a new page and partially addresses concerns about writing biographies of living people. It is more likely that the page

subject will be judged notable, and translators can select pages that appear to be of particularly high quality.

Third, although this article focuses on the bias among biographies of political scientists, a related problem is bias in citations. Introducing citations is comparatively fast and simple, and egregious disparities in citations are easy to find. We need look no further than Wikipedia's page on "political science"—which is the top Google result for "political science"—which receives about 700,000 views a year.<sup>7</sup> In late 2020, the first authors in its reference and suggested-reading sections included 26 men and one woman.<sup>8</sup>

## CONCLUSION

At a rate of one contribution per day, one person might need two more years to increase the proportion of Wikipedia biographies about women in political science up to its current proportion in the field. Even more work would be needed to improve coverage of political scientists from underrepresented countries and to address biases in citations. Worse, if we do not change the imbalances among new pages created, then the proportions of pages will tend back to their original skew; we can make a long-term difference only if we permanently reduce the bias among new pages. However, any efforts to address these problems must be directed toward effective and useful additions. New pages must not be deleted from Wikipedia and must provide a positive service to the encyclopedia, to its readers, and especially to the page's subject. Three promising next steps are for any interested person to write pages about political scientists from the history of the discipline; translate pages that already exist in other languages; and introduce citations to political scientists who are, at present, severely underrepresented in the world's most important reference work.

## ACKNOWLEDGMENTS

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## DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the *PS: Political Science & Politics* Dataverse at <https://doi.org/10.7910/DVN/XAXMVK>.

## SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit APSA Educate at <https://educate.apsanet.org/resource/12-13-2021/reduc-ing-bias-in-wikipedias-coverage-of-political-scientists>. ■

## NOTES

1. See [https://en.wikipedia.org/w/index.php?title=Wikipedia:WikiProject\\_Countering\\_systemic\\_bias&oldid=6332105](https://en.wikipedia.org/w/index.php?title=Wikipedia:WikiProject_Countering_systemic_bias&oldid=6332105).
2. See [https://en.wikipedia.org/w/index.php?title=Wikipedia:WikiProject\\_Women\\_in\\_Red&oldid=995690733](https://en.wikipedia.org/w/index.php?title=Wikipedia:WikiProject_Women_in_Red&oldid=995690733).
3. See [https://en.wikipedia.org/wiki/Wikipedia:WikiProject\\_Politics/Popular\\_pages](https://en.wikipedia.org/wiki/Wikipedia:WikiProject_Politics/Popular_pages).
4. See <https://pageviews.toolforge.org/userviews/?project=en.wikipedia.org&platform=all-access&agent=user&namespace=0&redirects=0&range=last-year&sort=views&direction=1&view=list&user=Astrophobe>.

5. See [https://en.wikipedia.org/w/index.php?title=Wikipedia:Notability\\_\(academics\)&oldid=990432229](https://en.wikipedia.org/w/index.php?title=Wikipedia:Notability_(academics)&oldid=990432229).
6. See [www.thepeerlab.org/wikipedia](http://www.thepeerlab.org/wikipedia).
7. See [https://pageviews.toolforge.org/?project=en.wikipedia.org&platform=all-access&agent=user&redirects=0&range=all-time&pages=Political\\_science](https://pageviews.toolforge.org/?project=en.wikipedia.org&platform=all-access&agent=user&redirects=0&range=all-time&pages=Political_science).
8. See [https://en.wikipedia.org/w/index.php?title=Political\\_science&oldid=977224980](https://en.wikipedia.org/w/index.php?title=Political_science&oldid=977224980).

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