The Past 110 Years: Historical Data on the Underrepresentation of Women in Philosophy Journals*

Nicole Hassoun, Sherri Conklin, Michael Nekrasov, and Jevin West

This article provides the first large-scale, longitudinal study examining publication rates by gender in philosophy journals. We find that from 1900 to 1990 the proportion of women authorships in philosophy increased, but it has plateaued since the 1990s (unlike in other disciplines). Top Philosophy journals publish the lowest proportion of women, and anonymous review does not increase the proportion publishing in these journals (though it does in other journals). Value Theory journals do not publish articles by women in proportion to their presence in the subdiscipline. Although the proportion of women authorships in philosophy has increased over time, measurable disparities persist.

I. INTRODUCTION

By all accounts, women compose a small proportion of authors in academic philosophy journals. The most recent research suggests that while women compose 26 percent of authorships across all disciplines, they account for between 12 and 16 percent of authorships in philosophy journals. Yet, publishing in academic philosophy is, perhaps, the most significant measure of professional achievement, and successfully publishing academic articles is essential to hiring and tenuring in academia. Women

Ethics, volume 132, number 3, April 2022.

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^{*} The authors would like to thank Eric Schwitzgebel, Julie Van Camp, Irina Artamonova, and the remaining members of the Demographics in Philosophy advisory board and team. The authors would also like to thank Noa Mizrachi, Milan Patel, and Caroline Tuczinski for background research and assistance.

Jevin D. West et al., "The Role of Gender in Scholarly Authorship," PLoS ONE 8 (2013): 1–6.

compose a relatively low proportion of faculty in US academic philosophy, and the low publication rates noted above may help to explain this.² Still, further data are necessary, as the existing studies are limited in scope in terms of both the number and kinds of journals examined. To date, there are no comprehensive longitudinal studies on the proportion of women authors in philosophy. Most studies examine the proportions of women authors across a few time points, making it impossible to understand long-term trends, and none can tell us what to conclude about the proportions of women authorships in philosophy overall or how philosophy journals compare to journals with interdisciplinary content.³

In this article, we examine five hypotheses, motivated by the existing literature's limitations. First, we hypothesize that a longitudinal analysis will reveal an overall increase in the proportions of women authorships in philosophy journals between 1900 and 2009. By "overall increase" we mean an increase in the proportion of authorships by women, between the first and last decades in our data set, and a decade-over-decade mean increase for the majority of decades. We base this hypothesis on the findings of two previous studies. One examined five "top" philosophy journals over three time periods (1994/95, 1974/75, 1954/55), finding some increase in the proportion of women authorships in recent decades.⁴ Another examined twenty-five highly ranked journals at two time periods (1995 and 2004/5), finding no statistically significant changes in the proportions of women authorships.⁵ We go beyond these studies by providing the first large-scale longitudinal analysis of women authorships in philosophy. Our findings are consistent with our first hypothesis, on aggregate, and with the patterns we see for women academics overall. However, we observe stagnant growth in the proportions of women authorships for recent decades, especially in Nontop Philosophy journals.⁶

- 2. This is, of course, in addition to well-documented issues involving gender representation in the academic pipeline.
- 3. Consider, e.g., Sally Haslanger, "Changing the Ideology and Culture of Philosophy: Not by Reason (Alone)," *Hypatia* 23 (2009): 210–23; Jennifer Saul, "Why So Few Women in Value Journals? How Could We Find Out?," *Public Affairs Quarterly* 31 (2017): 125–41; Eric Schwitzgebel and Carolyn D. Jennings, "Women in Philosophy: Quantitative Analyses of Specialization, Prevalence, Visibility, and Generational Change," *Public Affairs Quarterly* 31 (2017): 83–105; and Isaac Wilhelm, Sherri L. Conklin, and Nicole Hassoun, "New Data on the Representation of Women in Philosophy Journals," *Philosophical Studies* 175 (2017): 1441–64. See also the special edition of the *APA Newsletter on Feminism and Philosophy* 10 (2010).
- 4. See Eric Schwitzgebel, "Only 13% of Authors in Five Leading Philosophy Journals Are Women," *Splintered Mind*, December 15, 2015, https://schwitzsplinters.blogspot.com/2015/12/only-13-of-authors-in-five-leading.html. See also Schwitzgebel and Jennings, "Women in Philosophy."
 - 5. Wilhelm, Conklin, and Hassoun, "New Data."
- 6. See West et al., "Role of Gender"; and Patsy Parker, "The Historical Role of Women in Higher Education," *Administrative Issues Journal: Connecting Education, Practice, and Research* 5 (2016): 3–14.

Second, we hypothesize that Top Philosophy journals have lower proportions of women authorships compared to other philosophy journal categories given the findings in Isaac Wilhelm, Sherri L. Conklin, and Nicole Hassoun's "New Data on the Representation of Women in Philosophy Journals." Ours is the first article to go beyond existing studies in comparing Top Philosophy journals, as ranked in a survey conducted by Brian Leiter, to other philosophy journals and to interdisciplinary journals.⁷ These existing studies only examined the proportions of women authorships in "top" philosophy journals. However, in other areas of philosophy and in academia more generally, researchers regularly observe a pattern where "top"-ranked programs and positions have lower proportions of women faculty than "lower"-ranked programs and positions. 8 So, we expect to see greater proportions of women authorships in lower-ranked philosophy journals. We find that the proportion of women authorships has been lowest in Top Philosophy journals over time but that these journals show the greatest increase in the proportion of women authorships between the 1990s and the 2000s.

Third, we hypothesize that all philosophy journal categories will have lower proportions of women authorships compared to the proportions of women philosophy faculty in the United States. Few studies have directly compared the proportions of women authorships in philosophy for any journal category to the proportions of women philosophy faculty in the United States (or elsewhere; see Sec. IV). ¹⁰ However, existing studies show

- 7. See Haslanger, "Changing the Ideology"; Meena Krishnamurthy et al., "The Underrepresentation of Women in Prestigious Ethics Journals," *Hypatia* 32 (2017): 928–39; Schwitzgebel and Jennings, "Women in Philosophy"; Wilhelm, Conklin, and Hassoun, "New Data"; Brian Leiter, "The Top 20 'General' Philosophy Journals, 2015," *Leiter Reports: A Philosophy Blog*, September 28, 2015, https://leiterreports.typepad.com/blog/2015/09/the-top-20-general-philosophy-journals-2015.html.
- 8. See Haslanger, "Changing the Ideology"; Jennifer Saul, "Ranking Exercises in Philosophy and Implicit Bias," *Journal of Social Philosophy* 43 (2012): 256–73; Krishnamurthy et al., "Underrepresentation of Women"; Giovanni Filardo et al., "Trends and Comparison of Female First Authorship in High Impact Medical Journals: Observational Study (1994–2014)," *BMJ* 352 (2016): 1–8; Helen De Cruz, "Prestige Bias: An Obstacle to a Just Academic Philosophy," *Ergo* 5 (2018): 259–87; Yiqin Shen, Yuichi Shoda, and Ione Fine, "Too Few Women Authors on Research Papers in Leading Journals," *Nature* 555 (2018): 165; and Sherri L. Conklin, Irina Artamonova, and Nicole Hassoun, "The State of the Discipline: New Data on Women in Philosophy," *Ergo* 6 (2019): 841–68.
- 9. Given that philosophy is on par with many STEM fields in terms of the proportion of women faculty overall (and much worse than many programs in the humanities), we might even expect to see women authorships in the highest proportions in Interdisciplinary journals—at least outside of STEM areas. See Elizabeth S. Spelke and Ariel D. Grace, "Sex, Math, and Science," in *Why Aren't More Women in Science? Top Researchers Debate the Evidence*, ed. Stephen J. Ceci and Wendy M. Williams (Washington, DC: American Psychological Association, 2007), 57–67; West et al., "Role of Gender."
- Molly Paxton, Carrie Figdor, and Valerie Tiberius, "Quantifying the Gender Gap: An Empirical Study of the Under-representation of Women in Philosophy," Hypatia 27 (2012):

that women philosophy faculty compose between 22 and 24 percent of faculty in the United States, compared to the previously reported 12 percent of women authorships. ¹¹ We go beyond these studies in comparing journals grouped by different categories to the proportions of women philosophy faculty overall. We corroborate Wilhelm, Conklin, and Hassoun's finding that women authors are underrepresented in Top Philosophy journals even compared to the low proportion of women philosophy faculty in the United States overall (at 12 percent vs. 22 percent). ¹² However, contrary to our prediction, the proportions of women authorships in lower-ranked philosophy journals and women philosophy faculty in the United States do not differ.

Fourth, we hypothesize that the proportions of women authorships in Value Theory journals will be lower than the proportions of women philosophy faculty with a Value Theory area of specialization (AOS) in the United States. ¹³ Few studies have compared the proportions of women authorships in philosophy across journal ranks and specializations to the proportions of women philosophy faculty with different academic specializations. Wilhelm, Conklin, and Hassoun previously reported a statistically significant difference between the comparatively low proportion of women authorships in Value Theory journals and the comparatively high proportion of women philosophy faculty in the United States with the same AOS. ¹⁴ We go beyond this study in examining how publication rates vary with AOS using a larger sample of journals from various (Top Philosophy, Nontop Philosophy, Interdisciplinary) journal categories. However, we corroborate Wilhelm, Conklin, and Hassoun's findings, and we are the

- 11. See Schwitzgebel and Jennings, "Women in Philosophy"; Wilhelm, Conklin, and Hassoun, "New Data"; Conklin, Artamonova, and Hassoun, "State of the Discipline."
 - 12. See Wilhelm, Conklin, and Hassoun, "New Data."
- 13. Jennings et al., Academic Placement Data and Analysis; Carolyn D. Jennings, "An Empirical Look at Gender and Research Specialization," Invited Colloquium Presentation for the Metaphilosophy & Diversity Colloquium at Boston University, March 2015; Schwitzgebel and Jennings, "Women in Philosophy"; Wilhelm, Conklin, and Hassoun, "New Data."
- 14. See Wilhelm, Conklin, and Hassoun, "New Data." See also Jennings et al., Academic Placement Data and Analysis.

^{949–57;} Kathryn Norlock, "Women in the Profession: A Report to the CSW," APA Committee on the Status of Women, Data on Women in Philosophy (website), https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxhcGFjb21taXR0ZWVvbnRoZXN 0YXR1c29md29tZW58Z3g6MTBkMjEyYmExMDg2NDZjYQ; Kathryn Norlock, "Update," APA Committee on the Status of Women, Data on Women in Philosophy (website), http://www.apa onlinecsw.org; Sherri Irvin, "Diversity in Aesthetics Publishing," Aesthetics for Birds (website), https://aestheticsforbirds.com/2014/12/10/diversity-in-aesthetics-publishing-by-sherri-irvin/; Carolyn D. Jennings et al., Academic Placement Data and Analysis (website), http://placement data.com/about; Catherine Pugh, "Landmark Moments for Women in Philosophy [Timeline]," OUPblog, March 18, 2018, https://blog.oup.com/2018/03/women-in-philosophy-timeline/; Catherine Pugh, "What Is It Like to Be a Woman in Philosophy, and in Academia as a Whole?," OUPblog, March 24, 2018, https://blog.oup.com/2018/03/women-in-philosophy-quotes/; Conklin, Artamonova, and Hassoun, "State of the Discipline."

first to observe that the previously reported disparities in Value Theory are sustained across all philosophy journal categories, including lower-ranked journals where women authors publish in greater proportions.¹⁵

Fifth, we hypothesize that journals practicing Triple Anonymous review publish a lower proportion of women authors than those using other review types, and we expect, in addition, a higher proportion of women authorships in journals not relying on anonymous submission processes. 16 Although counter to some prevailing opinions about Triple Anonymous review, we base these hypotheses on recently published work.¹⁷ Even so, we acknowledge that there have been few authorship studies examining peer review publishing practices in philosophy or any discipline because of the difficulty in accessing this sort of data. We go beyond these studies in examining women authorships in different journal categories (Top Philosophy, Nontop Philosophy, Interdisciplinary) by academic review type using a larger sample of journals.¹⁸ We find that Top Philosophy journals practicing Nonanonymous review publish higher proportions of women authors (22 percent) than Top Philosophy journals practicing Double or Triple Anonymous review (at 13 and 12 percent, respectively) (confirming the results of Wilhelm, Conklin, and Hassoun). 19 However, we find that Nontop philosophy journals publish the greatest proportion of women authorships when practicing Double Anonymous review, the most stringent anonymization level within this journal tier (at 28 percent), while Interdisciplinary journals publish the greatest proportion of women authorships when practicing Triple Anonymous review (at 39 percent).

Because academic publishing is essential to hiring, tenuring, and promoting university faculty, we believe it is important that we understand what is happening in academic philosophy journals. ²⁰ We contribute to this effort by providing the first longitudinal study that combines an examination of peer review, AOS, and journal category. We also consider how to interpret our results in light of limited information about journal submissions by author gender. We end by exploring the implications of these

- 15. Wilhelm, Conklin, and Hassoun, "New Data."
- 16. Ibid.
- 17. Ibid.
- 18. See Christine Wenneras and Agnes Wold, "Nepotism and Sexism in Peer-Review," *Nature* 387 (1997): 341–43; Schwitzgebel and Jennings, "Women in Philosophy"; Wilhelm, Conklin, and Hassoun, "New Data."
 - 19. See Wilhelm, Conklin, and Hassoun, "New Data."
- 20. See Patrick G. O'Neill and Paul N. Sachis, "The Importance of Refereed Publications in Tenure and Promotion Decisions: A Canadian Study," *Higher Education* 28 (1994): 509–15; and Sean Allen-Hermanson, "Leaky Pipeline Myths: In Search of Gender Effects on the Job Market and Early Career Publishing in Philosophy," *Frontiers in Psychology* 8 (2017): 953; Jihui Chen, Myongjin Kim, and Qihong Liu, "Do Female Professors Survive the 19th-Century Tenure System? Evidence from the Economics Ph.D. Class of 2008," *SSRN Electronic Journal* 2885951 (2016): 2–11.

findings for the prospects of women philosophers and explain how the results inform our effort to create a list of good practices for philosophy journals to consider. The article proceeds as follows. Section II explains our methodology. Section III presents the results of our analysis. Section IV provides a discussion and summary of the results.

II. METHODS

This article presents a new analysis of bibliographic data in the JSTOR network data set, with a special focus on philosophy journals. Our analysis is limited to annotated data, previously analyzed and generously shared with us by Jevin West et al. in "The Role of Gender in Scholarly Authorship," and we describe the methods they used in narrowing the data set prior to sharing it with us, for our philosophy-specific analysis of 47,597 article entries.²¹ We also provide the details of the statistical methods we used in this article.

The JSTOR database contains more than 8.3 million documents, with dates ranging between the 1500s and 2011, at the time of data collection by West et al. ²² We conduct our analysis on a part of the corpus labeled the "network data set." This subset includes 1.8 million documents that either cited other JSTOR articles or were cited by other JSTOR articles. Except where specified in the results below, the comparisons conducted in this study were planned beforehand.²³

We examine the numbers and proportions of women authorships in philosophy journals for historical data collected from the JSTOR network data set dating between 1900 and 2009. We define "authorships" as author-article pairs, where multiple authors may coauthor the same article. We use authorships throughout the analysis instead of unique authors because our data set, like most large-scale bibliographic data sets, does not contain a fully disambiguated set of unique authors.²⁴

- 21. See West et al., "Role of Gender."
- 22. Ibid.
- 23. Although we did not preregister our comparisons for this study, we did not change our analysis decisions based on results. We specify below any follow-up analyses conducted in light of our results.
- 24. When referring to "authors," we normally mean "authorship" since that is the unit of analysis throughout this article. It is only in this paragraph where we talk about "unique authors." We add quotes to emphasize this. There are likely different authors with the same first and last name. Therefore, we cannot guarantee genuinely (no quotes) unique authors throughout our data set. This is why we use "authorships" rather than "unique authors." However, if we assume for just this paragraph that a unique first-and-last-name pair defines a "unique author" in our data, we find 19,660 "unique authors" (3,789 women and 15,871 men). For this set of "unique authors," there exist 3,899 (8 percent) articles that have more than one "unique author," out of which 173 have multiple all-women "unique authors," 2,683 have all-men "unique authors," and 1,043 have mixed-gender "unique authors." Aggregated across all years in

West et al. further narrowed the network data set to 1.5 million documents where author gender was identifiable, using a binary gender classification. We recognize that this may not reflect the self-identified gender of the individual. This decision was made to use the annotated gender tags created by West et al. owing to the historical nature of this work, where getting self-identified gender is not possible, and to allow comparison to other works published on historical data. We are sensitive to the fact that this binary prescriptive division does not fully encompass the diversity in the discipline, and we are looking at ways of incorporating self-identified gender in future work. To determine the gender of authors, West et al. used the top 1,000 gendered baby names, produced by the US Social Security Administration for each year between 1880 and 2010, to categorize authors by first name. If a name was associated with a specific gender more than 95 percent of the time, the name was used to assign gender.

West et al. discarded authorship data when the author was listed by initials only, when the first name was common to both genders, and where the name was not on the lists.²⁷ This may introduce a small bias in terms of undercounting women authors given that they may be more likely to rely on initials, but this accounted for only about 4 percent of authorships, and therefore we estimate that we undercount women authors by roughly 0.64 percent.²⁸

our data set, women "unique authors" publish an average of 1.9 articles (with a standard deviation of 2.4), while men "unique authors" publish an average of 2.8 articles (with a standard deviation of 4.7). Because some examined articles are coauthored by more than one woman, the number of women authorships is somewhat greater than the number of women "unique authors." When compared with other disciplines, philosophy tends to have far more solo-authored articles and is less affected by using authorships. For our data set over the full time period, nearly 92 percent of the articles are solo-authored articles.

^{25.} See West et al., "Role of Gender."

^{26.} Using this method, they identified 6,879 unique first names. Because they used names from the full Social Security Administration historical record, the names were heavily Americanized. For more information on how the JSTOR network data set was created, please see West et al.. "Role of Gender."

^{27.} Ibid.

^{28.} A recent study on authorship initials found that the names of men and women are likely to begin with different letters. See Emma Pierson, "Are Female Scientists Hiding?," FiveThirtyEight (website), August 5, 2014, https://fivethirtyeight.com/features/are-female -scientists-hiding/. Using this information, researchers modeled the likelihood that a pair of initials belonged to a man vs. a woman. After examining a large sample of articles, the researchers found that there is a 58 percent chance that an initial corresponds to a woman rather than a man. We used these findings to estimate the bias from throwing out authorships using initials. If 4 percent of the discarded authorships used initials, then we estimate that 2.32 percent (4 percent \times 0.58) of them are women authorships, while 1.68 percent (4 percent \times 0.42) are men, and thus we undercount the proportion of women authorships by roughly 0.64 percent.

For the current study, we selected journals from the JSTOR network data set. The initial list of journals was selected by taking the intersection of lists of philosophy journals from the following sources: Thom Brooks's blog, the Leiter Journal Ranking Survey, the APA/BPA Journal Surveys, Andrew Cullison's Journal Surveys, and Brian Weatherson's Journals Survey. We identified fifty-six journals using this method. The data comprise 47,597 article entries for which we have author gender, with a corresponding 52,865 authorships. Out of these, 7,304 are women authorships, and the remaining 45,561 authorships are men.

We grouped journals into three mutually exclusive categories. "Top Philosophy" journals constitute eighteen of the twenty-one highly ranked philosophy journals listed in a recent survey of faculty perceptions of journal quality.³⁰ We consider eighteen of the twenty-one journals ranked in the Leiter survey because only data for these journals were available from JSTOR. The subset comprises 23,204 article entries, with 2,265 total women authorships. Then, we visited individual journal websites and emailed journal editors as needed to establish two additional journal categories. "Nontop Philosophy" journals constitute twenty-two philosophy journals, which self-identify as philosophy-specific journals. The subset comprises 8,341 article entries, with 1,953 total women authorships. "Interdisciplinary" journals constitute sixteen journals self-identifying as interdisciplinary journals with philosophical content. The subset comprises 15,409 article entries, with 2,519 total women authorships. We classified all journals in our data set by subdisciplines included and review type (see apps. A and B for details).

In our analysis, year is used as a categorical variable throughout. Unless otherwise stated, we use journal-year pair as the grouping for the data. On each journal-year pair we calculate the total proportion of women authorships as defined by the number of women authorships over the total authorships. We present the cumulative distribution function (CDF) examining the number of articles in the groupings in appendix I. We provide descriptive statistics for our data and, when possible, model the data using a generalized linear model (GLM) to examine the distribution of

- 29. See Thom Brooks, "Journal Rankings for Philosophy," *Brooks Blog*, September 29, 2011, http://the-brooks-blog.blogspot.com/2011/09/journal-rankings-for-philosophy_29. html; Leiter, "Top 20"; "APA/BPA Journal Surveys," APA/BPA (website), https://www.apaonline.org/general/custom.asp?page=journalsurveys; Andrew Cullison, "Journal Surveys," Andrew Cullison (website), https://www.andrewcullison.com/journal-surveys/; Brian Weatherson, "Journals Survey," Brian Weatherson (website), https://brian.weatherson.org/blog/2004/04/08/journals-survey/.
- 30. The Leiter Report produces rankings for philosophy journals. While we do not endorse Leiter's methodology or rankings, we acknowledge that Leiter's ranks provide one of the only existing attempts to capture attitudes held by (at least some) professionals in the field of philosophy about the performance and prestige of various academic philosophy journals.

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women authorship across time, journal category, and journal AOS. GLMs are a broad class of models, which can be used on data, such as ours, that do not have a normal distribution. As the data best conform to a negative binomial distribution, in all cases we used this distribution family for generating the model.31

In our analysis, we compare the distributions of the proportions of women authorships in philosophy journals, grouped by category, to the mean proportions of women philosophy faculty in two ways. First, we compare the proportions of women authorships, grouped by journal category, to the proportions of women philosophy faculty employed at ninety-eight institutions in the United States in 2010.³² To perform this comparison, we look at women authorships for the years 2000-2009. We believe this comparison is appropriate because both publication rates and faculty proportions have not changed much in recent years.³³ Second, we compare the proportions of women authorships and faculty by AOS. We grouped journals by AOS using the same methods as Eric Schwitzgebel and Caroline Jennings and identified five AOS categories: Value Theory (V); Language, Epistemology, Metaphysics, and Mind (LEMM); History (H); Science (S); and General (G). 34 See table 1 (in Sec. III.D) for a description of AOS categories and appendix A for a full description of journals included in each category. We used Schwitzgebel and Jennings' data on women philosophy faculty AOS as of 2014.35 To minimize the impact of a single year's variation in authorships, we compare the 2014 faculty AOS data to our last decade of data (2000–2009). We think it is unlikely that the proportion of US faculty in various AOSs has changed very much in that time period. See our explanation in appendix A. Our faculty and authorship data do not fully overlap. There are faculty not included in our authorship data, and there are authors not included in our faculty data. Because of this, we cannot directly compare the distributions of the two populations of

^{31.} Detailed statistical explanations are outside the scope of this article, but we do want to note that negative binomial distributions are usually used for count data. When calculating proportions, we calculate the log of the number of authors as our offset. We include this offset so that we can compute the proportions and not just the count of authorships. We use offset variables to compare, for a simplified example, the total number of women authorships over the total number of authorships (X/Y), which gives the same information as proportions but only utilizes integers in the analysis. This method is appropriate for analyzing the count data we have on hand.

^{32.} For a more in-depth look at the proportions of women philosophy faculty at these ninety-eight philosophy programs in the United States, see Conklin, Artamonova, and Hassoun, "State of the Discipline."

^{33.} See Wilhelm, Conklin, and Hassoun, "New Data"; Schwitzgebel and Jennings, "Women in Philosophy"; Conklin, Artamonova, and Hassoun, "State of the Discipline."

^{34.} See Schwitzgebel and Jennings, "Women in Philosophy."

^{35.} Ibid.

TABLE 1

LIST AND DESCRIPTION OF EACH OF THE FIVE AREAS OF SPECIALIZATION

Key	Areas of Specialization	
V	Value Theory	
LEMM	Language, Epistemology, Metaphysics, and Mind	
Н	Historical Philosophy and Specific Philosophical Traditions	
S	Logic and Philosophy of Science	
G	General Specialization	

faculty and authors to make claims about statistical significance. Instead, we compare the distributions of journal data, grouped by category, to the mean proportions of faculty data. This allows us to make statistically informed inferences about how journals behave relative to the average proportion of women philosophy faculty. Although this is a coarser comparison, we can still derive meaningful and useful observations using this method.

Lastly, we compared the proportions of women authorships within each journal category by the type of review process. This allows us to make observations about which review type is likely to promote the highest proportion of women for journals in each category. As review categories for many journals have been updated relatively recently, we limit our analysis to articles published from 2000 to 2009.

III. RESULTS

An interactive online visualization of our data and many of our results is available at https://women-in-philosophy.org.³⁶

A. Overview of Journal Categories and Outliers

First, as an initial, descriptive inspection of the data, we analyze the extremes of our data (defined in greater detail below) both across the full data set (1900–2009) and in the last decade of available data (2000–2009). For each journal, we compute the total proportion of women authors across all articles and years and sort them by highest proportion of women authorships. We label each journal by one of three categories as described in our methodology.

We begin by examining the extreme ends of our data set by focusing on the ten journals with the highest and lowest proportions of women

^{36.} Researchers can access our data and code at https://gist.github.com/mikrasov/cf61948f12949fc9c415e4927fff860b and https://doi.org/10.25349/D9ZG7Q.

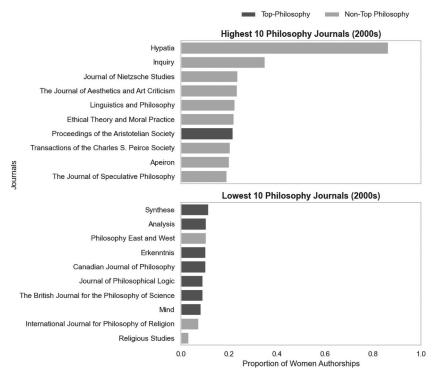


Fig. 1.—Top and Nontop Philosophy journals ranked by proportion of women authorships from 2000 to 2009. Color version available as an online enhancement.

authorships. In figure 1, we present the results for Top and Nontop Philosophy journals only, as this is the comparison that is most likely to be of interest to philosophers.

Here we see that, in the 2000s, seven Top Philosophy journals appear among the journals with the lowest proportions of women authorships, while only one, *Proceedings of the Aristotelian Society*, has among the highest proportions of women.

In figure 2, we present the results for all journals examined in our study, including Interdisciplinary journals. Both across our entire data set and in the last decade of data, feminist philosophy journals *Hypatia* and *Feminist Studies* publish the greatest proportion of women authors, at 87 and 93 percent, respectively, while three Top Philosophy journals, *Journal of Philosophical Logic, British Journal for the Philosophy of Science*, and *Analysis*, have among the lowest proportions of women authorships overall. In the 2000s, our most recent decade of data, five Top Philosophy journals appear among the journals with the lowest proportions of women authorships,

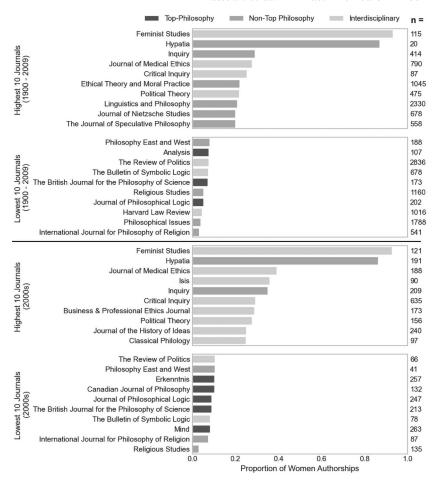
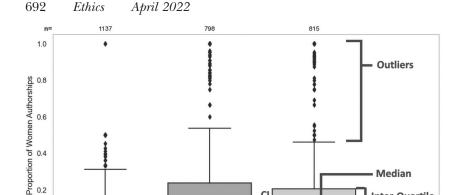


FIG. 2.—Journals with the ten lowest and those with the ten highest proportion of women authorships for all three journal categories ranked by proportion of women authorships. The top two graphs represent the total proportion of women authorships across all years (1900–2009), and the bottom two graphs represent the proportion of authorships from 2000 to 2009. The total number of authorships per journal "n=" is shown on the right of the graph. Color version available as an online enhancement.

while Interdisciplinary journals dominate the journals with the greatest proportions of women authorships.

Next, we group our data by journal-year pairs and compute the proportion of women authorships for each pair. Across all journals and years (regardless of journal category), the median proportion of women authorships in philosophy journals is 9 percent, and the bulk of women authorships (the interquartile range) lie between 0 and 17 percent.



Median Inter-Quartile Range

Fig. 3.—Proportion of women authorships in Top Philosophy journals, Nontop Philosophy journals, and Interdisciplinary journals between 1900 and 2009 shown as a distribution of journal-year pairs for each journal category. The number of observations (journalyear pairs consisting of multiple authorships) is displayed at the top of the graph with the "n =" label. Color version available as an online enhancement.

Interdisciplinary

Non-Top Philosophy

0.0

Top-Philosophy

We show the distribution of women authorship proportions by journal category in figure 3.37 We see that the median proportion of women authorships is lower for Top Philosophy journals (at 7.6 percent) as compared to Nontop Philosophy journals (at 11.1 percent) and Interdisciplinary journals (also at 11.1 percent). Further, we observe that the interguartile range for Nontop Philosophy is larger than the other two journal categories, showing a high variability in women authorships (between 0 and 23.8 percent).

37. For readers not regularly using boxplots in their work, here is a quick refresher. The whiskers represent the min and max values of the data (excluding outliers). The shaded area in the middle is the interquartile range, where 50 percent of the data reside. The dots above (or below) the whiskers represent outliers, defined as values that are more than 1.5 times the interquartile range. The median (middle value of the sorted data) is represented by the horizontal lines in the middle of the shaded regions. The notches in the shaded regions represent the 95 percent CI for each median. When the notches do not overlap, the results are statistically significant within a p-value at or below 0.05. In fig. 3, the notches for Nontop and Interdisciplinary journals overlap with each other, but neither overlaps with the notches for Top Philosophy journals. From this, we can infer that any observed difference between Top Philosophy journals and the other journal categories is likely to be significant. The effects qualified by interactions (e.g., between journal category and decade as in fig. 4) should be interpreted with caution: an observed difference across groups may not hold or may be reversed within subsamples produced by splitting the data by interacting variables. Definitive claims about statistical significance would require additional data and analysis in these cases (we provide these data and analysis where possible below).

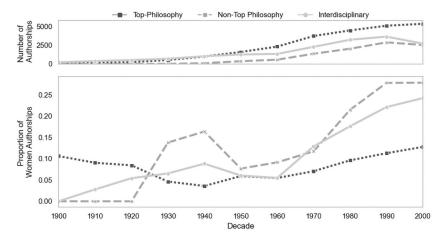


Fig. 4.—Total proportion of women authorships by decade and journal category (1900s–2000s). The top graph shows the total number of authorships by decade and journal category; the bottom graph shows the proportion of women authorships by decade and journal category. Color version available as an online enhancement.

B. Longitudinal Analysis

Second, we compare the proportion of women authorships in each decade for Top Philosophy journals, Nontop Philosophy journals, and Interdisciplinary journals in our data set to test whether Top Philosophy journals have a lower proportion of women authorships compared to other philosophy journal categories.

For figure 4, we compute the total proportion of women authorships within each of the three journal categories for every decade between the 1900s and the 2000s to investigate long-term trends.

Our data show that over the long term Top Philosophy journals consistently publish a lower proportion of women authors than Nontop Philosophy journals and Interdisciplinary journals. We can see that the proportion of women authorships increases substantially across all journal categories after the 1950s. The largest growth occurred between the 1970s and the 1990s. From the 1990s forward, there has been slower growth for Nontop Philosophy journals.

Due to lower publication rates and the widespread use of abbreviated first names to which we cannot assign gender, the number of journals for which we have data from the early 1900s is small.³⁸ As a result, we only have access to a small sample of articles from each journal, and this may explain

^{38.} We have limited our hypotheses, and corresponding analyses, because we do not have complete data for author-article pairs in each journal and each year.

the apparent increase in journal publication rates during that time period. The majority of the subsequent analysis therefore focuses on the time range between 1950 and 2009. This deviates slightly from our initial planned analysis, which aimed at analyzing the change in the proportion of women authorships between the 1900s and 2000s. In this period, we examine the proportion of women authorships for each journal-year pair. In figure 5, we show the distribution of the proportion of women authorships for each journal-year pair, as a function of decade and journal category.

In this detailed look, we continue to see the upward increase in median women authorships and a lag in the median proportion of women authors publishing in Top Philosophy journals. We note that while Interdisciplinary journals exhibit an increase in the interquartile range of women authorships (i.e., the proportions of women authorships have increased in over 50 percent of the journals), Nontop Philosophy journals show a median increase but show a wide variation between individual journal and year of publication records. We note that for Nontop Philosophy and Interdisciplinary journals, the median proportion of women authorships falls lower than the total proportion of women authorships from figure 4 owing to outliers such as *Hypatia* and *Feminist Studies*, which publish an unusually

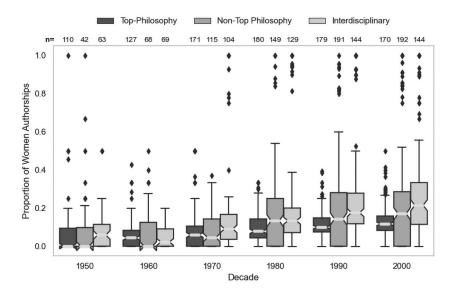


FIG. 5.—Proportion of women authorships in philosophy journals by journal category and decade (1950s–2000s). Whereas figure 4 shows the total proportion of women authorships, this graph plots the distribution of authorships after computing a proportion for each journal-year pair and grouping by journal category and decade. The number of observations (journal-year pairs for each journal category and decade) is displayed at the top of the graph with the "n = " label. Color version available as an online enhancement.

high proportion of women authors compared to other journals in the same category.

To study the trends further, we built a GLM as previously noted. We used the number of women authorships as the response variable, the log of the total number of authorships as an offset, and the decade of publication and journal category as predictors. We found that the interaction between journal category and decade is significant. We reran our model stratified by journal category and interpreted the results for each category of journal independently. We show the resulting model estimates for each journal category and decade in figure 6.

The GLM shows that, for all three journal categories, there is a statistically significant (p < .003) increase in the proportion of women authorships from the 1950s to the 2000s. However, we see stagnated growth in Nontop Philosophy journals between the 1990s and 2000s. We provide a full statistical comparison of our results, including the interactions between journal category and decade, in appendix D, especially table D2. The nonoverlapping confidence intervals (CIs), represented by the white space (or gap) in figure 6, after the 1970s suggest that the difference in the proportions of women authorships in Top Philosophy journals and other journal categories is statistically significant.

In general, between 1950 and 2000, the gains in the proportion of women authorships over time are smallest for the Top Philosophy journals (a $2.3\times$ increase) and greatest for Interdisciplinary journals (a $4.1\times$ increase). While the most promising explanation for the increased proportions of

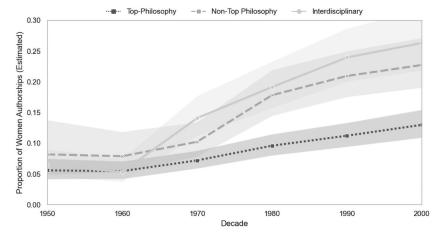


Fig. 6.—GLM estimates for proportions of women authorships (1950s–2000s). The shaded region represents the CIs calculated by the GLM for each journal category. Color version available as an online enhancement.

women authorships in philosophy journals over time is that philosophy journals are publishing more women authors in the 2000s than in the 1950s, these results are also consistent with a decline in the number of authorships by men between 1950 and 2009. However, we rule out the second explanation by examining the change in the number of authorships by men and women for each journal category in appendix E.

C. Comparing Proportion of Women Authorships to Proportion of Women Faculty

Third, we compare the proportions of women authorships between 2000 and 2009 in each journal category to the proportion of women philosophy faculty in 2010 (utilizing data from ninety-eight programs in the United States) to determine whether the proportions are similar (see fig. 7).

Across all journal categories in the 2000s, women authors accounted for 19 percent of authorships, compared to the 22 percent of women philosophy faculty in 2010. Interdisciplinary journals on median publish in proportion to their presence in the discipline, whereas the median of Top and Nontop Philosophy journals falls below the proportion of women

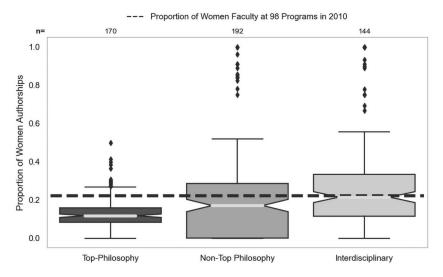


Fig. 7.—Total proportion of women authorships (2000s) compared to the proportion of women philosophy faculty (2010). The number of observations (journal-year pairs for the decade) is displayed at the top of the graph with the "n =" label. Note that this graph is similar to figure 3 but uses only the last decade of data in order to compare to faculty. The dashed line represents the proportion of women faculty (22 percent) at ninety-eight philosophy programs in 2010 as reported by Conklin et al., "State of the Discipline." Color version available as an online enhancement.

philosophy faculty in the discipline.³⁹ Furthermore, due to the tight distribution, we can see that most Top Philosophy journals published lower than 22 percent women authors, whereas journals in the other categories are less consistent.

D. Comparing Authorship AOS and Faculty AOS

Fourth, to examine whether the proportions of women authorships in Value Theory journals will be lower than the proportions of US women philosophy faculty with a Value Theory AOS, we compare the proportions of women authorships grouped by journal category and specialization to the proportion of women philosophy faculty specializing in the same AOS (see table 1). We exclude Interdisciplinary journals, as philosophy AOSs do not apply to them.

In figure 8, we show the total proportion of women authorships between 2000 and 2009 for each journal category (Top Philosophy journals and Nontop Philosophy journals) grouped by AOS (V, LEMM, H, S, G) compared to the proportion of women philosophy faculty grouped by AOS (purple dashed lines) from Schwitzgebel and Jennings.⁴⁰

Figure 8 provides the distribution of data for journal-year pairs, which is how the data are grouped in previous sections. However, when grouped by journal-year pair and limited to the years 2000–2009, the data are sparse (with 362 entries). So, we instead examine the number of articles in each journal category, consisting of 9,127 articles with 10,632 authorships. Based on this grouping, we built a GLM using articles from 2000 to 2009 as input data, the number of women authorships as the response variable, the log of the total number of authorships as an offset, and the journal AOS and category for each article as predictors. As there was significant interaction between journal AOS and category, we stratified by journal category and interpreted the results for each category of journal independently. We show the result of our model in figure 9, and our full results, including the interactions between journal AOS and category, are included in appendix F, especially table F2.

- 39. The data under consideration are not directly statistically comparable, as they come from somewhat different populations. While the data in this article are from 2000 to 2009, the comparison is with 2010 faculty data. Further, while the faculty data come from ninety-eight institutions in the United States, the authorship data are more likely to include foreign authors. Because of this, we do not present CIs in the figure. By reviewer request, the 95 percent CI, assuming a normal distribution, is [0.20, 0.24].
- 40. The data under consideration are not directly statistically comparable (see also note 16). We note that the data under consideration are from different years, and while the faculty data come from institutions in the United States, the authorship data are more likely to include foreign authors. Because of this, we do not present CIs in the figure. By reviewer request, assuming a normal distribution, we present the 95 percent CIs here. G: [0.22, 0.27]; H: [0.25, 0.34]; LEMM: [0.16, 0.23]; S: [0.12, 0.19]; V: [0.29, 0.39]. See Schwitzgebel and Jennings, "Women in Philosophy."

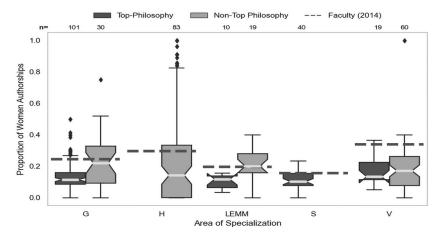


Fig. 8.—Proportion of women authorships (2000s) by journal AOS compared to faculty AOS (2014). The number of observations (journal-year pairs for each journal category and AOS) is displayed at the top of the graph with the "n =" label. There are no Top Philosophy journals specializing in the "History" category as defined here, and we also have no data for Nontop Philosophy journals specializing in "Science" during this time period. (For G in Nontop Philosophy journals, the faculty mean falls into the CI of the journal median in this figure and figure 9. For H in Nontop Philosophy journals, the faculty mean falls above the CI of the journal median in this figure, but in figure 9 this is likely due to the particular journals with high representation of women publishing a larger number of articles.) Color version available as an online enhancement.

We compare journal AOS within journal category (in fig. 9) to examine the questions of whether journal AOS helps to make sense of the observed proportions of women authorships in each journal category and whether journal category helps to explain the observed proportions of women authorships in each journal AOS. We saw no statistically significant difference between AOSs for Top Philosophy journals (see app. F for p-values), suggesting that journal AOS does not help to explain the observed proportions of women authorships in Top Philosophy journals, which consistently publish the lowest median proportion of women authors in each AOS. The CIs suggest, with 95 percent certainty, that Top Philosophy journals do not publish women authors in proportion to their presence as philosophy faculty in every AOS. This is true with the possible exception of S, where the mean proportion of faculty is within the interquartile range, as observed in figure 8. So, this suggests that even though the model does not show a statistically significant overlap in the proportions of women authors and women faculty in S, there may nonetheless be a meaningful correspondence between the two. The difference is largest for G and V, with 12.8 percent (CIs: 11.5 and 14.2 percent) women authorships versus 24.5 percent women faculty in G and 17.0 percent (CIs: 12.7 and 22.7 percent) women authorships versus 33.8 percent women faculty in V.



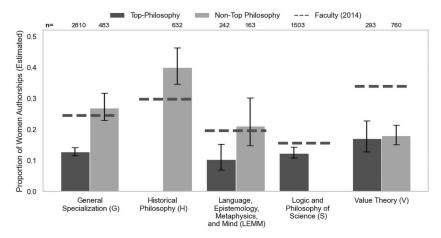


FIG. 9.—GLM estimates of the proportion of women authorships (2000–2009) by journal AOS compared to faculty AOS (2014). The mean estimated proportion of women authorships across all journals separated by journal category and AOS for the years 2000–2009. Error bars represent the CI based on the output of the GLM. The number of observations (articles for each journal AOS and category in the 2000s) is displayed at the top of the graph with the "n =" label. Note that this figure displays the mean proportion estimated by the model on all articles in a journal category, as opposed to the median and distribution of data grouped by journal and year, a different comparison that was shown in figure 8. Color version available as an online enhancement.

Nontop Philosophy journals consistently publish the highest median proportion of women authors in each AOS. However, the women authorship data for Nontop Philosophy journals are more widely distributed, resulting in less consistency across AOS (compared to Top Philosophy journals). In G and LEMM, the proportion of women philosophy faculty is within the CI for Nontop Philosophy journals, meaning that women authors appear to publish in these areas roughly in proportion to their presence in the discipline, with 27.0 percent (CIs: 23.0 and 31.7 percent) women authorships versus 24.5 percent women faculty in G and 21.1 percent (CIs: 14.8 and 30 percent) women authorships versus 19.6 percent women faculty in LEMM. Area H, where women authors appear to publish in a higher proportion than their presence in the discipline, stands out with a statistically significant difference to areas G, LEMM, and V (p = .002, p = .004, and p < .001, respectively). The overlapping CIs in V suggest that Nontop Philosophy journals perform similarly to Top Philosophy journals, which do not publish women authors in proportion to their presence as philosophy faculty, and we observed a statistically significant difference in the proportion of women authorships in V compared to G (p = .004). Because both Top and Nontop Philosophy journals publish similarly low proportions of women authorships, compared to the proportion of women philosophy faculty, in V, we can conclude that journal category does not help to explain the observed proportions of women authorships in V.

E. Comparing by Peer Review Type and Journal Category

Fifth, to test whether journals practicing Triple Anonymous review publish a lower proportion of women authors than those using other review types, we compared the proportions of women authorships within each journal category by the type of review process. We summarize the results in figure 10.

As in the AOS analysis, we examined the number of articles in each journal category because journal-year data are sparse. We built a GLM, using articles from 2000 to 2009 as input data, the number of women authorships as the response variable, the log of the number of authors as an offset, and the article's journal's review type and category as predictors. As there was significant interaction between review type and journal category, we stratified by journal category and interpreted the results for each category of journal independently. We show the result of our model in figure 11, and our full results, including the interaction between review type and journal category, are included in appendix G.

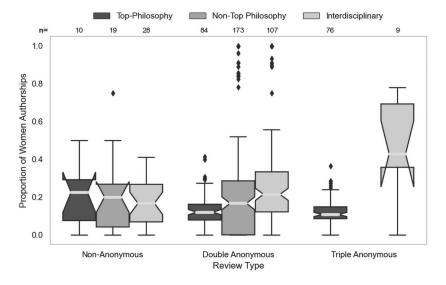


Fig. 10.—Proportion of women authors grouped by journal category and review type (Nonanonymous, Double Anonymous, Triple Anonymous) from 2000 to 2009. The number of observations (journal-year pairs for each journal category and review type) is displayed at the top of the graph with the "n=" label. No Nontop Philosophy journals in our data set utilize Triple Anonymous review. Color version available as an online enhancement.

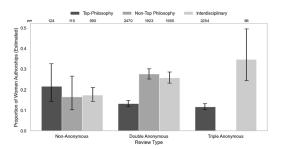


FIG. 11.—GLM estimates of the total proportion of women authorships across all journals separated by journal category and review process for the years 2000-2009. Error bars represent the CI based on the output of the GLM (the CIs are very wide owing to the limited data for Nonanonymous review). The number of observations (articles for each journal category and review type in the 2000s) is displayed at the top of the graph with the "n=" label. Again, note that this is the mean proportion estimated by the model on all articles in a journal category, as opposed to the median and distribution of data grouped by journal and year that was shown in figure 10. Color version available as an online enhancement.

Consider our results for Interdisciplinary journals: the proportion of authorships by women was lower (by half) in journals using Nonanonymous review than journals using Double and Triple Anonymous review (p=.001 for both), and the latter two did not differ (p=.114), likely due to data sparsity.

Consider our results for Nontop Philosophy journals: those using Double Anonymous review published a 40 percent higher proportion of women authors than those using Nonanonymous review, and the difference was statistically significant (p=.038). No Nontop Philosophy journals in our data set utilize Triple Anonymous review.

Consider our results for Top Philosophy journals: those using Nonanonymous review published the highest proportion of women authors, while those using Triple Anonymous review published the lowest (46 percent lower than Nonanonymous). When comparing the proportion of women authorships using Nonanonymous review to the proportions published in those using Double and Triple Anonymous review, we see a statistically significant difference (p=.047 and p=.015, respectively). We observe no statistically significant difference between journals using Double Anonymous review and those using Triple Anonymous review, also likely due to data sparsity (p=.136).

IV. DISCUSSION AND SUMMARY

This article represents the first major longitudinal study of authorship by gender in academic philosophy journals, as well as the only study comparing Top Philosophy journals to other philosophy journals and interdisciplinary

journals.⁴¹ In addition, this article represents the only study comparing the proportions of women authorships in differently ranked categories of philosophy journals to the proportions of women philosophy faculty in the United States. We also examine journals by AOS and review type. We provide corroborating evidence for many previous studies' findings, while nonetheless presenting several new and surprising results. We should emphasize that these results are descriptive, not causal. We do not claim causal connections between the response variables and the predictor variables. Nonetheless, we do find the results suggestive and important for further discussions around this topic.

First, while we expected to find that the proportion of women authorships across all categories of philosophy journals has increased since 1900, it is surprising that growth has stagnated in Nontop Philosophy journals and in the discipline overall since 1990. One partial explanation for this may be that women academics have moved away from philosophy to more practical fields like the sciences, where they may be able to do work sometimes perceived to have greater societal importance for better remuneration. ⁴²

- 41. Some might worry that there is too much noise in such a longitudinal analysis because many more women have entered the workplace over the past century. The number of academic institutions, journals, and positions in philosophy has expanded, and journal review procedures have almost certainly changed significantly over time. We control for potential drivers of our results where possible by examining whether publication rates track changes in the composition of the discipline (faculty proportions) and comparing changes in publication rates in philosophy journals to those in interdisciplinary journals when data exist. We also look at review processes and differences between the proportions of women in the field and publishing only in recent decades. Moreover, there is no reason to think that the varying impacts of different factors (e.g., changes in the total number of academic institutions, journals, or positions) will point in one direction rather than in many different directions. Further, longitudinal data are necessary to see how other factors influence our results. So, our research opens the door to new questions. What is clear, however, is that journal publication rates are much lower than faculty numbers in some areas and lower than publication rates in the rest of the humanities. So, something specific to philosophy and not general demographic trends is driving the results.
- 42. See Morgan Thompson et al., "Why Do Women Leave Philosophy? Surveying Students at the Introductory Level," Philosopher's Imprint 16 (2016): 1-36; Sally Latham, "It's Not Brains or Personality So It Must Be Looks: Why Women Give up on Philosophy," Think 48 (2018): 131-43. For discussion of the academic pipeline, see Paula England and Su Li, "Desegregation Stalled: The Changing Gender Composition of College Majors, 1971–2002," Gender and Society 20 (2006): 657-77; Spelke and Grace, "Sex, Math, and Science"; Corinne A. Moss-Racusin et al., "Science Faculty's Subtle Gender Biases Favor Male Students," Proceedings of the National Academy of Sciences USA 109 (2012): 16474-79; Cheshire Calhoun, "The Undergraduate Pipeline Problem," Hypatia 24 (2009): 216-23; Adam Piovarchy, "Philosophy's Undergraduate Gender Gaps and Early Interventions," Ergo 6 (2020): 707-41. Similar patterns are reported in the broader international context; see Eliza Goddard, "Improving the Participation of Women in the Philosophy Profession; Executive Summary," Australasian Association of Philosophy (website), https://aap.org.au/Resources/Documents/publications/IPWPP /IPWPP_ExecutiveSummary.pdf/; Eliza Goddard, "Improving the Participation of Women in the Philosophy Profession; Report A: Staffing by Gender in Philosophy Programs in Australian Universities," Australasian Association of Philosophy (website), https://aap.org.au/Re

However, this cannot explain the discrepancy in trends between philosophy and other humanities disciplines (see app. C). If women have moved away from philosophy to more practical fields, then we would similarly expect women to move away from other humanities fields unless women believe that philosophy is particularly impractical and risky. Perhaps Louise Antony's hypothesis, that philosophy is uniquely resistant to improving gender disparities because problems like stereotypes and male privilege combine and reinforce one another in uniquely powerful ways, creating a "perfect storm" of bias, merits inquiry. If Antony is right that philosophers tend to think they are both smarter than others and better at critical thinking, then they may be less willing to examine their own biases and address them.

Second, in light of previous literature, we expected to find (and ultimately did find) lower proportions of women authorships in Top Philosophy

sources/Documents/publications/IPWPP/IPWPP_ReportA_Staff.pdf; Eliza Goddard, "Improving the Participation of Women in the Philosophy Profession; Report B: Appointments by Gender in Philosophy Programs in Australian Universities," Australasian Association of Philosophy (website), https://aap.org.au/Resources/Documents/publications/IPWPP/IPWPP _ReportB_Appointments.pdf; Eliza Goddard, "Improving the Participation of Women in the Philosophy Profession; Report C: Students by Gender in Philosophy Programs in Australian Universities," Australasian Association of Philosophy (website), https://aap.org.au/Resources /Documents/publications/IPWPP/IPWPP_ReportC_Students.pdf; Helen Beebee and Jennifer Saul, "Women in Philosophy in the UK, a Report by the British Philosophical Association and the Society for Women in Philosophy UK," Joint BPA/SWIP Committee for Women in Philosophy (website), https://bpa.ac.uk/wp-content/uploads/2018/11/BPA Report Women In Philosophy.pdf; Susan Dodds and Eliza Goddard, "Not Just a Pipeline Problem: Improving Women's Participation in Philosophy in Australia," in Women in Philosophy: What Needs to Change?, ed. Katrina Hutchison and Fiona Jenkins (New York: Oxford University Press, 2013), 143-63; Adriane Rini, "Models and Values: Why Did New Zealand Stop Hiring Women Philosophers?," in Women in Philosophy: What Needs to Change?, ed. Katrina Hutchison and Fiona Jenkins (New York: Oxford University Press, 2013), 127-42; Samuel Baron, Tom Dougherty, and Kristie Miller, "Why Is There Female Underrepresentation among Philosophy Majors?," Ergo 2 (2015): 329-65; Tracy Bowell, "The Problem(s) of Women in Philosophy: Reflections on the Practice of Feminism in Philosophy from Contemporary Aotearoa/New Zealand," Women's Studies Journal 29 (2015): 4-21; and Tom Dougherty, Samuel Baron, and Kristie Miller, "Female Under-representation among Philosophy Majors: A Map of the Hypotheses and a Survey of the Evidence," Feminist Philosophical Quarterly 1 (2015): 1-30. However, we limit our discussion to the United States. See also Eric Schwitzgebel, "How Prominently Is Women's Philosophical Work Discussed? One Empirical Measure," Splintered Mind Blog, December 31, 2015, http:// schwitzsplinters.blogspot.com/2015/12/how-prominently-is-womens-philosophical.html; Schwitzgebel, "Five Leading Philosophy Journals"; and Wilhelm, Conklin, and Hassoun, "New Data."

43. Christina H. Sommers, "Is Academic Philosophy a 'Safe Space' for Women?," *Factual Feminist*, https://www.econjobrumors.com/topic/is-academic-philosophy-a-safe-space-for-women, citing Louise Antony, "Different Voices or Perfect Storm: Why Are There So Few Women in Philosophy?," *Journal of Social Philosophy* 43 (2012): 227–55; Jonathan Haidt, "Does Philosophy Have a Woman Problem?," American Enterprise Institute (website), July 26, 2016, https://www.aei.org/articles/does-philosophy-have-a-woman-problem/.

44. See also Dougherty, Baron, and Miller, "Female Under-representation"; Sarah J. Leslie et al., "Expectations of Brilliance Underlie Gender Distributions across Academic Disciplines," *Science* 347 (2015): 262–65; and Sommers, "Is Academic Philosophy."

journals compared to journals in other categories and lower proportions of women authorships in Top and Nontop Philosophy journals compared to the proportions of women philosophy faculty in the United States. 45 These results may reflect the fact that women are submitting fewer articles to Top Philosophy journals or that articles submitted by women authors are simply not accepted by these journals (see our discussion of submission rates below). As indicated in Section II, women are also less likely to coauthor than men, and perhaps coauthored articles are more likely to be accepted than single-authored articles. If they have fewer opportunities to coauthor articles, and if such articles are more likely to be accepted than others, then that may help explain the fact that there are fewer female authorships than one would expect given faculty proportions. Further research is necessary to evaluate these hypotheses. Note here just that our results are in line with existing evidence that high-profile journals in other fields also publish a lower proportion of women authors than lowerranked journals in those fields.46

Third, some might be surprised to find a large difference between the proportion of women authorships in Value Theory journals and the proportion of US women philosophy faculty with a Value Theory AOS. However, we expected to find these disparities owing to Wilhelm, Conklin, and Hassoun's most recent research on women authorships, which demonstrated a significant difference between the proportion of women philosophy faculty in the United States with an AOS in Value Theory and women authorships in Value Theory for Top Philosophy journals.⁴⁷

On the other hand, we have reason to believe that we would not find any significant differences between the proportions of women philosophy faculty and the proportions of women authorships in History, given that no Top Philosophy journals specialize in History and that the History AOS includes journals, such as *Hypatia*, publishing philosophical traditions like feminist philosophy. One hypothesis for why so many women authors publish in feminist journals is that women are more likely to submit to feminist journals because they believe they will be published. Another is that men do not submit to these journals because they believe that they do not write on relevant "women's issues." However, feminist

^{45.} See Haslanger, "Changing the Ideology"; Filardo et al., "Trends and Comparison"; Shen, Shoda, and Fine, "Too Few Women Authors."

^{46.} See West et al., "Role of Gender"; Shen, Shoda, and Fine, "Too Few Women Authors."

^{47.} See Wilhelm, Conklin, and Hassoun, "New Data."

^{48.} Janet A. Kourany, "How Do Women Fare in Philosophy Journals?," *APA Newsletter on Feminism and Philosophy* 10 (2010): 4–5; Sally Haslanger, "Preliminary Report of the Survey on Publishing in Philosophy," *APA Newsletter on Feminism and Philosophy* 10 (2010): 10–17; Alison Wylie, "Hypatia: A Journal of Her Own," *APA Newsletter on Feminism and Philosophy* 10 (2010): 20–24.

philosophy deals, of course, with a much broader range of topics than "women's issues."

Fourth, we anticipated corroborating the previous finding that Top Philosophy journals practicing Triple Anonymous review publish a lower proportion of women authors than those with other forms of anonymity or those that do not rely on anonymous submission processes. ⁴⁹ Some might find these results surprising, since one might expect the highest level of anonymity to promote the publication of women authors. ⁵⁰

In light of these results, some might argue that we should give up Triple Anonymous review to increase representation (a contentious suggestion, to say the least!), but our new analysis revealed the surprising result that Interdisciplinary journals utilizing Triple Anonymous review and Nontop Philosophy journals utilizing Double Anonymous review publish the greatest proportion of women authors overall. The low proportion of women authorships in journals using Triple Anonymous review in philosophy may have something to do with their being Top Philosophy journals rather than their review process.⁵¹

One hypothesis that might explain our finding that, even with anonymous review, Top Philosophy journals publish a lower proportion of women authors than other categories of journals is that women are particularly hesitant to submit to those journals. There is some evidence that women are less likely to submit philosophical work for publication than men. The editors of the *Philosophical Review*, *Dialectica*, *Ergo*, and *Mind* have reported low submission rates by women—between 10 and 35 percent. ⁵² We need more data on submission rates by journal category to understand

- 49. Kourany, "How Do Women Fare."
- 50. Amber E. Budden et al., "Double-Blind Review Favours Increased Representation of Female Authors," *Trends in Ecology and Evolution* 23 (2008): 4–6.
- 51. There is evidence that in some Top Philosophy journals authors are much more likely to get published if they have a PhD from a particular institution, and Top Philosophy journals have been criticized for having a very narrow understanding of what qualifies as good or important work in the discipline. See Helen De Cruz, "Prestige Bias: An Obstacle to a Just Academic Philosophy," *Ergo* 5 (2018): 259–87.
- 52. Franz Huber and Jonathan Weisberg, "Introducing Ergo," Ergo 1 (2014): 1–11; Justin Weinberg, "Making Philosophy Journal Statistics Publicly Available," Daily Nous Blog, July 8, 2014, https://dailynous.com/2014/07/08/making-philosophy-journal-statistics-publicly-available/; "Philosophical Review Editorial Policies for Authors," Duke University Press (website), https://www.dukepress.edu/Assets/Downloads/PR_editorial_policies_for_authors.pdf; Adrian W. Moore and Lucy O'Brien, "Triple Anonymous Review and MIND: Where Are the Women?," MIND, 2018, https://academic.oup.com/mind/pages/women_in_philosophy; Adrian W. Moore and Lucy O'Brien, "Diversity and Philosophy Journals: Diverse Aims at MIND," APA Blog, October 1, 2018, https://blog.apaonline.org/2018/10/01/diversity-and-philosophy-journals-diverse-aims-at-mind/. However, the editors at Ethics have previously reported that the proportion of submissions by women authors is on par with the proportion of women philosophy faculty. See Henry S. Richardson, "The Triply Anonymous Review Process at Ethics." APA Newsletter on Feminism and Philosophy 10 (2010): 1–38.

what is actually going on, and we are working with philosophy journal editors to start collecting these data.⁵³ However, these data are quite difficult to obtain, as collecting them requires coordination with journal staff and editors, their publishers, and the authors who submit their work for publication. We have received anecdotal reports from editors that many authors do not include gender information in their author profile because, it seems, they are concerned about such information being used to remove their work from consideration.

Another hypothesis that might explain our finding that, even with anonymous review, Top Philosophy journals publish a lower proportion of women authors than other categories of journals is this: even with full anonymity, markers of gender, including the chosen topic of research, might still be available to referees and editors.⁵⁴ The most selective journals may utilize these markers, in addition to other information, in choosing the very small number of articles they publish. In the social sciences, for instance, there is evidence that more women work on topics related to family, while men are more likely to work on crime.⁵⁵ In the same vein, we know that while 34 percent of women philosophers work in Value Theory, in General journals such as *Mind*, the *Journal of Philosophy*, and the *Philosophical Review* (2013–15), only 1 percent of Value Theory articles were authored by women.⁵⁶ So, authorships by women may have been filtered out by specific topic area. On a related note, some suggest that men and women may have different views about what counts as valuable contributions

- 53. See discussion below—one of the authors has conducted an informal survey of editors asking for this information and hopes to do so again in the future. However, few journals had collected, or were willing to collect, this information. Moreover, it is worth noting that even if submission rates are low, that may be precisely because women correctly perceive their chances of being published (especially in Top Philosophy journals and in subdisciplines where most women work) as poorer than those of their male counterparts.
- 54. See Irene V. Blair, "The Malleability of Automatic Stereotypes and Prejudice," Personality and Social Psychology Review 6 (2002): 242–61; Berit Brogaard, "The Journal Reviewing Process Isn't Anonymous. Did You Really Think It Was? Think Again!," New APPS Blog, December 18, 2012, https://www.newappsblog.com/2012/12/the-journal-reviewing-process-isnt-anonymous-did-you-really-think-it-was-think-again.html; Helen De Cruz, "Anonymous Reviewing Is Not Enough to Counter Implicit Bias, So What Can We Do to Mitigate It?," New APPS Blog, October 2, 2014, https://www.newappsblog.com/2014/10/anonymous-reviewing-is-not-enough-to-counter-implicit-bias-so-what-can-we-do-to-mitigate-it.html; Helen De Cruz, "A Bechdel Test for Philosophy Papers," New APPS Blog, April 3, 2014, https://www.newappsblog.com/2014/04/a-bechdel-test-for-philosophy-papers.html; Carole J. Lee and Christian D. Schunn, "Philosophy Journal Practices and Opportunities for Bias," APA Newsletter on Feminism and Philosophy 10 (2010): 5–10.
- $55. \ See West et al., "Role of Gender"; Jeffery Dastin, "Amazon Scraps Secret AI Recruiting Tool That Showed Bias against Women," \textit{Reuters}, October 9, 2018, https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G.$
 - 56. See Schwitzgebel and Jennings, "Women in Philosophy."

to philosophy.⁵⁷ So, if the editors and editorial boards for most philosophy journals are primarily men (at around 73 percent in 2010 according to historical data collected from the websites of journals included in this study), they may be more likely to reject work by women philosophers based on the topic, style of the writing, or citation practices.⁵⁸ Finally, there exists some evidence that academic writing produced by women academics is held to higher standards than that produced by men during the peer review process, even, it seems, when reviewed anonymously.⁵⁹

57. Kristie Dotson, "How Is This Paper Philosophy?," *Comparative Philosophy* 3 (2012): 3–29. See also David Bourget and David J. Chalmers, "What Do Philosophers Believe?," *Philosophical Studies* 170 (2014): 465–500; Ruth E. Hagengruber, "Cutting Through the Veil of Ignorance: Rewriting the History of Philosophy," *Monist* 98 (2015): 34–42; Mary E. Waithe, "Sex, Lies, and Bigotry: The Canon of Philosophy," in *Methodological Reflections on Women's Contribution and Influence in the History of Philosophy*, ed. Sigridur Thorgeirsdottir and Ruth E. Hagengruber, *Women in the History of Philosophy and Sciences* (Switzerland: Springer, 2020), 3–17, 193.

58. See also Aaron Rosenblatt and Stuart A. Kirk, "Recognition of Authors in Blind Review of Manuscripts," Journal of Social Service Research 3 (1981): 383-94; Olyana N. Grod et al., "Systematic Variation in Reviewer Practice according to Country and Gender in the Field of Ecology and Evolution," PLoS ONE 3 (2008): 1-5; Sara Ahmed, "Making Feminist Points," Feministkilljoys, September 11, 2013, https://feministkilljoys.com/2013/09/11/making-feminist -points/; Kieran Healy, "Lewis and the Women," Kieran Healy Blog, June 19, 2013, https:// kieranhealy.org/blog/archives/2013/06/19/lewis-and-the-women/; Patrick Dunleavy, "Poor Citation Practices Are a Form of Academic Self-Harm in the Humanities and Social Sciences," Writing for Research, October 27, 2014, https://blogs.lse.ac.uk/impactofsocialsciences/2014/12/09 /poor-citation-practices-humanities-and-social-sciences/; De Cruz, "Bechdel Test"; Marcus Arvan, "Philosophers Don't Read and Cite Enough (Guest Post by Marcus Arvan)," Daily Nous Blog, March 2, 2015, https://dailynous.com/2015/03/02/philosophers-dont-read-and-cite-enough/; Kieran Healy, "Gender and Citation in Four General-Interest Philosophy Journals, 1993–2013," Kieran Healy Blog, February 25, 2015, https://kieranhealy.org/blog/archives/2015/02/25/gen der-and-citation-in-four-general-interest-philosophy-journals-1993-2013/; Eric Schwitzgebel, "Citation of Women and Minorities in the Stanford Encyclopedia of Philosophy," Splintered Mind Blog, August 7, 2014, http://schwitzsplinters.blogspot.com/2014/08/citation-of-women-and -ethnic-minorities.html; Eric Schwitzgebel, "The 267 Most-Cited Authors in the Stanford Encyclopedia of Philosophy," Splintered Mind Blog, August 7, 2014, http://schwitzsplinters.blogspot .com/2014/08/the-266-most-cited-contemporary-authors.html; Schwitzgebel, "Women's Philosophical Work"; "Citation Practices," Critical Ethnic Studies Journal (website), http:// www.criticalethnicstudiesjournal.org/citation-practices. For more on editorial practices in academic philosophy journals, see "Instructions for Contributors," Journal of the American Philosophical Association (website), https://www.cambridge.org/core/journals/journal-of-the -american-philosophical-association/information/instructions-contributors; "Review Policies," Midsummer Philosophy Workshop (website), http://midsummerphilosophy.squarespace.com; Françoise Baylis, Alana Cattapan, and Dave Snow, "Editorial Misconduct," Pacific Affairs Quarterly 31 (2017): 143-55; Purushottama Bilmoria, "Diversity and Philosophy Journals: Sophia's History of Encouraging Diversity," APA Blog, September 6, 2018, https://blog.apaonline.org/2018 /09/06/diversity-and-philosophy-journals-sophias-history-of-encouraging-diversity/.

59. Erin Hengel, "Publishing While Female: Are Women Held to Higher Standards? Evidence from Peer Review" (PhD diss., University of Cambridge, 2015). We thank an anonymous reviewer at *Ethics* for bringing this interesting research to our attention.

Yet another hypothesis that may partly explain the observed proportions of articles published in Value Theory (and may help explain why, even with anonymous review, Top Philosophy journals in general publish fewer women than other types of journals) is that Value Theory is marginalized in philosophy. Historians document the influence of the Vienna Circle and the linguistic movement, which established logic and language as "core philosophy" during the 1920s and 1930s. ⁶⁰ We note, however, that causation may run both ways: today, women may be able to find work disproportionately in Value Theory because it is marginalized, and it may be marginalized in part because women work in Value Theory. ⁶¹

One limitation of our study is that we cannot fully match the US faculty count statistics and the journal publication statistics. This limitation is due to the fact that some women authorships are by philosophers from outside of the United States, while the only existing faculty AOS data are from the United States. ⁶² So, the proportions of women authorships in philosophy journals compared to the proportions of women faculty who are employed as philosophy faculty anywhere in the world could be different from that reported here. However, because our analysis only uses author names that also appear in the US Social Security database, which are heavily anglicized and, in particular, Americanized, we believe the vast majority of our authors come from English-speaking countries. ⁶³ Moreover, the percentage of women faculty in other English-speaking countries is similar to the percentage of women faculty in US countries—between 23 and 25 percent in Australia, New Zealand, and the United Kingdom,

- Heiner Rutte, "Ethics and the Problem of Value in the Vienna Circle," in Rediscovering the Forgotten Vienna Circle, ed. Thomas E. Uebel (Springer: Dordrecht, 1991), 143–57.
- 61. There is empirical evidence that women's work is perceived as less valuable than their male counterparts' in many fields. This is called "devaluation theory" and may help to explain how Value Theory came to be marginalized in philosophy. See Virgina Valian, Why So Slow? The Advancement of Women (Cambridge, MA: MIT Press, 1998), 421; Phillip N. Cohen and Matt L. Huffman, "Individuals, Jobs, and Labor Markets: The Devaluation of Women's Work," American Sociological Review 68 (2003): 443–63; Phillip. N. Cohen and Matt L. Huffman, "Occupational Segregation and the Devaluation of Women's Work across US Labor Markets," Social Forces 81 (2003): 881–908; Martha S. West and John W. Curtis, "AAUP Faculty Gender Equity Indicators 2006. Technical Report," American Association of University Professors (website), https://www.aaup.org/reports-publications/publications/see-all/aaup-faculty-gender-equity-indicators-2006; Paula England, Allison Paul, and Yuxiao Wu, "Does Bad Pay Cause Occupations to Feminize, Does Feminization Reduce Pay, and How Can We Tell with Longitudinal Data?," Social Science Research 36 (2007): 1237–56; Asaf Levanon, Paula England, and Paul D. Allison, "Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950–2000 U.S. Census Data," Social Forces 88 (2009): 865–91.
 - 62. See Schwitzgebel and Jennings, "Women in Philosophy."
- 63. While one might worry that our argument assumes that there are very few "foreign" baby names used by individuals registered with the US Social Security Administration, we would like to note that the list of top baby names included all documented names on record as of 2011. The names in the historical record of the US Social Security Administration bias the list of top baby names in favor of heavily Americanized names.

compared to 25 percent in the United States.⁶⁴ We expect the effect of foreign authors to be negligible. That said, further data and analysis are necessary to investigate the significance of these additional considerations.

Our research is important for many reasons. First, it allows us to isolate possible bottlenecks in the publication pipeline, such as the relatively low proportions of women authorships in Top Philosophy journals versus other philosophy journals and the low proportions of women authorships in Value Theory journals versus the proportion of women philosophy faculty in the United States with a Value Theory AOS in our data (for both Top and Nontop Philosophy journals). Because Value Theory attracts the greatest proportion of women over any other AOS in our data set, our results are crucial for understanding the difficulties women face in publishing their original research articles. Second, it can help us identify what practices are ineffective/effective for increasing gender representation in differently ranked journals. For example, anonymity appears to increase inclusivity for Nontop Philosophy and Interdisciplinary journals but not Top Philosophy journals. Third, our research helps us identify what practices may help journals increase gender representation, such as increasing the proportion of articles in Value Theory published in General journals—the only other venue for women philosophers working in Value Theory who are having difficulty publishing in Value Theory journals. Finally, our research suggests avenues for further inquiry into why certain practices work or do not work. It suggests, for example, that it might be fruitful to consider why anonymity helps in some cases and not others, if we hope to increase the proportion of women authorships. Still, we lack sufficient data to draw firm conclusions about the causes of the disparities we see. We need representative data on the proportion of women authors who submit to philosophy journals, and we have already noted that few philosophy journals collect aggregate information about the gender breakdown of submissions.

We are encouraging editors to start collecting the information we need to test different hypotheses about why women authors are underrepresented in philosophy journals and what we can do to improve representation. One of the authors has informally surveyed the editors of fifty-two philosophy journals to request data on submission rates, as well as a wide variety of editorial practices (see app. H). When the data were unavailable, we offered to collaborate with the journals on collecting those data. Utilizing an informal survey on editorial practices and publicly available information (e.g., on the gender makeup of journal editorial review boards and journal governance), we are hoping to analyze, in greater detail, the underlying explanation for the trends we report in this article.

 $^{64.\} See$ Goddard, "Executive Summary"; Rini, "Models and Values"; Bowell, "Problem (s) of Women."

This and previous studies' results inform our current efforts to advance gender (and other) representation in philosophy through the Demographics in Philosophy project. ⁶⁵ There are many things we can do to increase gender (and other) representation in philosophical publishing and the field at large. In addition to partnering with editors to collect and analyze data on submissions and publication, it is also possible to work with editors to monitor publishing practices and implement promising initiatives to increase gender (and other) representation in philosophy.

We have used the results of our present project to make concrete suggestions for increasing gender (and other) representation in the discipline. We initiated a broadly consultative project to identify inclusive practices for philosophy journals at the 2018 Pacific Division Meeting of the American Philosophical Association (APA) by organizing a session with approximately twenty editors of prestigious philosophy journals to encourage reflection on these (and similar) results, as well as suggestions derived from them for increasing the representation of women philosophers and other groups underrepresented in philosophy journals. We then invited editors from several leading journals to reflect on how they could use this information to improve their processes in a series of blog posts hosted on the blog of the APA.66 Finally, based on our data and these discussions, the Demographics in Philosophy project put together a list of potential best practices, which we precirculated to those with expertise on diversity issues and to the editors of approximately one hundred journals and posted for comment on the blog of the APA.⁶⁷ With permission, we include it in appendix J. Together with editors, researchers can test the efficacy of these and other possible "best" practices to see what works in a philosophy-specific context. We hope future research on these and similar aspects of diversity can more firmly establish what we can do to advance gender (and other) representation in the discipline.

65. See www.women-in-philosophy.org.

66. See Nicole Hassoun, Eric Schwitzgebel, and Subrena Smith, "Diversity and Philosophy Journals: Introduction," *APA Blog*, August 23, 2018, https://www.blog.apaonline.org/2018/08/23/diversity-and-philosophy-journals-introduction/; Rebecca Kukla, "Diversity and Philosophy Journals: How to Avoid Conservative Gatekeeping," *APA Blog*, August 30, 2018, https://www.blog.apaonline.org/2018/08/30/diversity-and-philosophy-journals-how-to-avoid-conservative-gatekeeping/; Bilmoria, "Diversity and Philosophy Journals"; Stephen Hetherington, "Diversity and Philosophy Journals: Some Comments on Diversity," *APA Blog*, September 13, 2018, https://www.blog.apaonline.org/2018/09/13/diversity-and-philosophy-journals: Reforming Philosophy," *APA Blog*, September 20, 2018, https://www.blog.apaonline.org/2018/09/20/diversity-and-philosophy-journals-reforming-philosophy/; Moore and O'Brien, "Triple Anonymous Review"; Sherri L. Conklin, Nicole Hassoun, and Eric Schwitzgebel, "Diversity and Philosophy Journals: Practices for Improving Diversity in Philosophy Journal Publishing," *APA Blog*, October 4, 2018, https://blog.apaonline.org/2018/10/04/diversity-and-philosophy-journals-practices-for-improving-diversity-in-philosophy-journal-publishing/.

67. Conklin, Hassoun, and Schwitzgebel, "Diversity in Philosophy Journals."

In conclusion, our study frames a picture of the discipline that was inaccessible through previous studies. We show how data on the underrepresentation of women authors in philosophy journals, for recent years, fit into larger historical trends in the discipline. ⁶⁸ Our data provide a historical baseline against which future researchers can compare emerging trends in the discipline. These results highlight a tension in current research on gender equity in philosophy. While we see considerable gains over the past century, we nonetheless identify continuous gender gaps in the proportion of women authorships in philosophy. Further research is necessary to test hypotheses that might explain these gaps.

Data are essential for figuring out what we can do to advance equity in philosophical publishing and bend the long arc of history toward justice. Knowing where we are succeeding and failing opens the door to figuring out how to do better. We are currently partnering with journals to discuss these issues and collect further data that will allow us to evaluate policies' impacts. We are creating a toolbox of potentially useful strategies and recommending particularly effective changes. In the meantime, journal editors can use our data to compare their performance to their peers, set targets for improvement, and track their progress. Authors considering publishing in journals can use it to evaluate performance, and potential reviewers and editors/editorial board members considering contributing to journals can use it to encourage positive change. Ultimately, we believe, data can help us develop effective strategies for creating more inclusive publishing practices and cultivate the political will to do so.

Appendix A

Each journal was assigned an area of philosophy (see table A1).⁷⁰ Journals that predominantly publish articles on Value Theory, including ethics, aesthetics, philosophy

- 68. See "APA Divisional Presidents and Addresses," American Philosophical Association (website), https://apaonline.org/page/presidents; "Joyce Mitchell Cook Award," American Philosophical Association (website), https://apaonline.org/page/cook; "Margaret Floy Washburn, PhD," American Psychological Association (website), https://www.apa.org/about/governance/president/bio-margaret-washburn; Pugh, "Landmark Moments"; Pugh, "What Is It Like."
- 69. Yann Benétreau-Dupin and Guillaume Beaulac, "Fair Numbers: What Data Can and Cannot Tell Us about the Underrepresentation of Women in Philosophy," *Ergo* 2 (2015): 59–81.
- 70. Not all well-known philosophy journals were included in this study, as we did not have access to authorship data for many journals. We do not include the *Journal of the History of Philosophy* as a Top Philosophy journal, for example, because we do not have access to these data. Similarly, there are many Value Theory journals that remain unanalyzed by this study because the authors did not have access to authorship data. These include the *Journal of Political Philosophy*, *Social Theory and Practice*, *Politics*, *Philosophy and Economics*, *Journal of Applied Philosophy*, *Journal of Moral Philosophy*, *Journal of Social Philosophy*, *Critical Review of International Social and Political Studies*, and several others. As pointed out by an editor at *Ethics*,

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of law, and so on, were assigned to "V." Those that predominantly publish articles on Language, Epistemology, Metaphysics, and Mind were assigned to "LEMM." Those that predominantly publish in Historical Philosophy or specific philosophical traditions (Feminist Philosophy, African Philosophy, etc.) were assigned to "H." Those that predominantly publish articles on Philosophy of Science, Mathematics, and Logic were assigned to "S." Finally, those that do not clearly fall into one of the four other areas were assigned to "G." We note, however, that many of the journals assigned to "G" do not publish equal numbers of articles in areas V, LEMM, H, and S. *Analysis*, for example, published very few articles in areas V and H in 2015.

TABLE A1

LISTS OF THE FIFTY-SIX JOURNALS AND THEIR ASSIGNED

AREAS OF SPECIALIZATION

Area	Category	Journals
v	Тор	Ethics
Value Theory	•	Philosophy and Public Affairs
,	Nontop	Ethical Theory and Moral Practice
	•	Law and Philosophy
		Public Affairs Quarterly
		The Journal of Aesthetics and Art Criticism
		The Journal of Ethics
		The Journal of Religious Ethics
	Inter.	Business and Professional Ethics Journal
		Business Ethics Quarterly
		Harvard Law Review
		Journal of Medical Ethics
		Political Theory
		Polity
		The Review of Politics
LEMM	Top	Erkenntnis
Language, Epistemology,	1	
Metaphysics, Mind	Nontop	Linguistics and Philosophy
1 /	1	The Review of Metaphysics

an analysis of these journals could significantly impact our results because these are target journals for political philosophers and applied ethicists—a large proportion of whom are women. Another choice that could potentially affect our results is the categorization of journals like Hypatia and Feminist Studies in the "H" AOS. We did so because feminist philosophy, as a specific philosophical tradition, has been categorized as such in previous empirical studies, and we aim to make our work comparable to the existing literature. Note that women authors appear to publish in a higher proportion than their presence in the discipline in area "H." If feminist philosophy journals were recategorized to "V," we might find a smaller gap between the proportion of women authorships in "V" and the proportion of women philosophy faculty specializing in "V." This leaves the authors of future empirical studies and the discipline at large with a practical question of how best to categorize work in specific philosophical traditions. For related discussion, see Thom Brooks, "The View from the Journal of Moral Philosophy," APA Newsletter on Feminism and Philosophy 10 (2010): 16-17; Kathryn Norlock, "Gender Ratios of Papers Published in Ethics and the Journal of Moral Philosophy," New APPS Blog, August 19, 2014, https://www.newappsblog.com /2014/08/gender-ratios-of-papers-published-in-ethics-and-the-journal-of-moral-philosophy .html.

TABLE A1 (Continued)

Hassoun et al.

Area	Category	Journals
Н	Nontop	Apeiron
Historical Philosophy and Specific		
Philosophical Traditions		Hypatia
		International Journal for Philosophy of Religion
		Journal of Nietzsche Studies
		Philosophy East and West
		Phronesis
		Religious Studies
		The Journal of Speculative Philosophy
	_	Transactions of the Charles S. Peirce Society
	Inter.	Classical Philology
		Feminist Studies
		Isis
		Journal of the History of Ideas
0	TF.	The Pluralist
S	Тор	Journal of Philosophical Logic
Logic and Philosophy of Science		Philosophy of Science
		Synthese The Printink January of four the Philosophy of
		The British Journal for the Philosophy of Science
	Inter.	Studia Logica: An International Journal for Symbolic Logic
		The Bulletin of Symbolic Logic
		The Journal of Symbolic Logic
G	Тор	American Philosophical Quarterly
General Specialization	•	Analysis
_		Canadian Journal of Philosophy
		Mind
		Noûs
		Philosophical Studies
		Philosophy and Phenomenological Research
		Proceedings of the Aristotelian Society
		The Journal of Philosophy
		The Philosophical Quarterly
		The Philosophical Review
	Nontop	Inquiry
		Philosophical Issues
		Philosophical Perspectives
		Philosophy
	Total	The Monist
	Inter.	Critical Inquiry

We compare the proportions of women authorships in philosophy journals grouped by journal category and AOS to the proportions of women philosophy faculty in each AOS. To derive the proportion of faculty with General specializations, labeled G, we combined averages of all (2017) faculty proportions, as reported in the other four "Faculty 2014" AOS categories.⁷¹ The other four AOS categories are

^{71.} We use faculty AOS data collected by Schwitzgebel and Jennings, "Women in Philosophy."

exhaustive of all AOSs in philosophy. We compared this to the proportion of women authorships in General Interest journals, which were assigned to G.

We think it is unlikely that the proportion of US faculty in various AOSs has changed very much between the 2000s and 2014 for three reasons. First, although we do not have much historical data on US faculty AOS, the most recent hiring trends show that men and women are hired roughly in proportion to documented faculty AOS distributions.72 If these trends continue, we would not expect to see significant changes in US faculty AOSs in the near-term. Changes are likely to be slow, especially given the second concern—that we are only examining trends within a relatively small (i.e., fifteen-year) time span. We would expect the AOS among faculty hires during that time period to be relatively stable, since many departments change areas of focus relatively slowly and new hires are often replacements for faculty leaving previously existing tenure lines. Third, the increase in the proportion of tenured/tenure-track women philosophy faculty is around 0.44 percent per year (from 19.4 to 26 percent) between 2004 and 2015 across all ninety-eight philosophy programs.⁷³ In many cases, the observed increase is due to the addition of one or two women faculty or, in rarer cases, due to a loss of a single man in a fifteen-year time span. Even if there is some variation in AOS over time, we would nonetheless expect our results to be reasonably accurate given the small changes in numbers and proportions of faculty we are observing.⁷⁴

Appendix B

Table B1 includes a list of philosophy journals categorized by Review Type at the time of data collection.

TABLE B1
LISTS OF EACH JOURNAL BY REVIEW PROCESS

Review Process	Journals	
Triple Anonymous	Analysis	
1 /	Ethics	
	Journal of Medical Ethics	
	Mind	
	Noûs	
	Philosophy and Phenomenological Research	
	The British Journal for the Philosophy of Science	
	The Philosophical Quarterly	
	The Philosophical Review	

^{72.} Jennings et al., Academic Placement Data and Analysis; Carolyn D. Jennings, "Tracking the Job Market: A Start," *New APPS Blog*, October 19, 2015, https://www.newappsblog.com/2015/10/tracking-the-job-market-a-start.html.

^{73.} Conklin, Artamonova, and Hassoun, "State of the Discipline."

^{74.} We thank an anonymous reviewer at *Ethics* for requesting clarification on this point.

Review Process	Journals	
Nonanonymous	Critical Inquiry	
•	Proceedings of the Aristotelian Society	
	Studia Logica: An International Journal for Symbolic Logic	
	The Journal of Symbolic Logic	
	The Monist	
	The Review of Metaphysics	
Double Anonymous	American Philosophical Quarterly	
,	Apeiron	
	Business and Professional Ethics Journal	
	Business Ethics Quarterly	
	Canadian Journal of Philosophy	
	Classical Philology	
	Erkenntnis	
	Ethical Theory and Moral Practice	
	Feminist Studies	
	Harvard Law Review	
	Hypatia	
	Inquiry	
	International Journal for Philosophy of Religion	
	Isis	
	Journal of Nietzsche Studies	
	Journal of Philosophical Logic	
	Journal of the History of Ideas	
	Law and Philosophy	
	Linguistics and Philosophy	
	Philosophical Issues	
	Philosophical Perspectives	
	Philosophical Studies	
	Philosophy	
	Philosophy and Public Affairs	
	Philosophy East and West	
	Philosophy of Science	
	Phronesis	
	Political Theory	
	Polity	
	Public Affairs Quarterly	
	Religious Studies	
	Synthese	
	The Bulletin of Symbolic Logic	
	The Journal of Aesthetics and Art Criticism	
	The Journal of Ethics	
	The Journal of Philosophy	
	The Journal of Religious Ethics The Journal of Speculative Philosophy	
	The Journal of Speculative Philosophy The Pluralist	
	The Review of Politics	
	Transactions of the Charles S. Peirce Society	

Appendix C

When we aggregate data from across all academic fields, we observe that the proportion of women authorships has shown a continual increase between the 1900s and the 2000s. We observe the same trends for humanities disciplines. When we compare the proportions of women authorships in philosophy to the humanities and to academia overall, we observe a similar increase in the proportions of women authors. However, the proportion of women authorships in philosophy is consistently lower than in other disciplines. Also unlike philosophy, which stays relatively flat between 1990 and 2009, we observe an increase in the proportion of women authorships in other disciplines during that time period. If women are leaving philosophy for more practical fields, then we would expect women to leave other humanities disciplines as well. However, the humanities follow the same trend as academia overall, whereas philosophy does not. See figure C1.

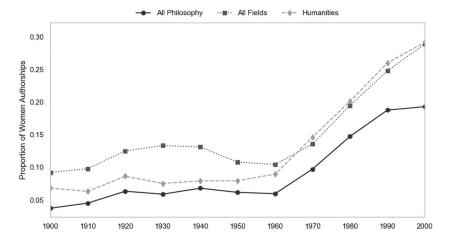


Fig. C1.—For comparison we overlay the proportion of women authorships for all the humanities fields in the JSTOR corpus (dashed line) as reported in West et al., "Role of Gender," 1–6. Color version available as an online enhancement.

All Fields data are all fields included in the JSTOR data set. These aggregate data were originally analyzed by West et al. 76 In that article, the authors examined all journals and fields included in the JSTOR corpus. That includes all the life science, social science, and humanities journals included in the JSTOR corpus. The Humanities data are a subset of the All Fields data that were extracted specifically for this article. This includes history, classics, and literary analysis journals (among others) represented in the JSTOR corpus.

^{75.} John W. Curtis, "Persistent Inequity: Gender and Academic Employment," American Association of University Professors (website), https://www.aaup.org/NR/rdonlyres/08E023AB-E6D8-4DBD-99A0-24E5EB73A760/0/persistent_inequity.pdf.

^{76.} West et al., "Role of Gender."

Appendix D

Tables D1 and D2 show statistical results of GLM pairwise comparisons for the estimated proportions of authorships by women for each decade.

TABLE D1 GLM Comparisons of Estimated Proportion OF WOMAN AUTHORSHIPS BY DECADE

D 1	Percent Change	7.0	I OI	II OI	D37.1
Decade	(%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
		Top Philoso	phy		
1960-1950	-2	-0.121	0.66	1.44	.904
1970-1950	29	1.408	0.91	1.84	.500
1980-1950	72	3.086	1.22	2.42	.016
1990-1950	101	4.016	1.43	2.82	.001
2000-1950	132	4.848	1.65	3.27	< .001
1970-1960	32	1.679	0.95	1.83	.387
1980-1960	76	3.532	1.29	2.41	.004
1990-1960	106	4.562	1.51	2.80	< .001
2000-1960	138	5.473	1.75	3.25	< .001
1980-1970	33	2.101	1.02	1.74	.196
1990-1970	56	3.301	1.20	2.02	.009
2000-1970	80	4.376	1.38	2.35	< .001
1990-1980	17	1.235	0.91	1.50	.520
2000-1980	35	2.381	1.05	1.74	.115
2000-1990	16	1.172	0.91	1.48	.520
	1	Nontop Philo	sophy		
1960–1950	-4	-0.112	0.50	1.86	.911
1970-1950	25	0.744	0.70	2.24	.840
1980-1950	118	2.729	1.24	3.80	.044
1990-1950	156	3.358	1.48	4.42	.007
2000-1950	178	3.651	1.60	4.80	.003
1970-1960	30	1.042	0.80	2.12	.757
1980-1960	126	3.504	1.43	3.56	.005
1990-1960	165	4.319	1.70	4.13	< .001
2000-1960	188	4.681	1.85	4.49	< .001
1980-1970	74	3.184	1.24	2.45	.012
1990-1970	105	4.330	1.48	2.83	< .001
2000-1970	122	4.824	1.61	3.07	< .001
1990-1980	18	1.165	0.90	1.54	.753
2000-1980	28	1.757	0.97	1.67	.390
2000-1990	9	0.646	0.85	1.39	.840
		Interdisciplin	nary		
1960–1950	-18	-0.805	0.51	1.33	.665
1970–1950	117	3.729	1.45	3.27	.001
1980–1950	195	5.423	2.00	4.37	< .001
1990–1950	270	6.674	2.52	5.43	< .001
2000-1950	306	7.093	2.76	5.98	< .001
1970–1960	165	4.639	1.76	4.01	< .001
1980–1960	260	6.352	2.43	5.35	< .001
	200	3.004	4.10	0.00	.001

TABLE D1 (Continued)

Decade	Percent Change (%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
1990–1960	351	7.607	3.06	6.65	< .001
2000-1960	395	8.015	3.35	7.32	< .001
1980-1970	36	2.004	1.01	1.83	.168
1990-1970	70	3.591	1.27	2.27	.002
2000-1970	87	4.165	1.39	2.51	< .001
1990-1980	25	1.657	0.96	1.63	.265
2000-1980	37	2.310	1.05	1.80	.100
2000-1990	10	0.710	0.85	1.42	.665

Note.—We applied multiple comparison adjustments on the presented p-values using the Holm-Sidak step-down method. Rows in bold indicate statistics referred to in the main text.

TABLE D2

SUMMARY OF GOODNESS-OF-FIT PARAMETERS FOR STRATIFIED AND UNSTRATIFIED MODELS COMPARING DECADE AND TYPE

	DF	Pearson Chi-Square	Log-Likelihood
Type	2	1650	-4601.2
Decade	5	1920	-4557.2
Decade * type	7	1570	-4502.0
Decade stratified by type:			
Тор	5	438	-1727.9
Nontop	5	489	-1270.6
Interdisciplinary	5	558	-1495.0

Note.—This table show the degrees of freedom, chi-square, and log-likelihoods. The top two rows show the model run on the independent variables. The third is a joint model of decade and type, and the remaining rows indicate the model stratified by type. We remind the reader that when interpreting the fit this GLM model uses a negative binomial distribution with a log link.

Appendix E

Our results show that the proportions of women authorships in philosophy journals have increased between the 1950s and 2000s. While we hypothesize that our results are best explained by increases in the number of women authorships over time, we would see the same results if, instead, the numbers of men were decreasing. For example, suppose a journal publishes 20 percent women authors, where four authors are women and sixteen are men. If the number of men authors falls to twelve and the number of women authors stays the same (now four out of sixteen), the proportion of women authors would increase to 25 percent.⁷⁷ To rule out this possibility and to show that philosophy journals are publishing more women

77. We thank an anonymous reviewer from *Ethics* for requesting clarification on this point. It is possible that the apparent increase in the proportion of women authorships could be explained by a decrease in the number of men authors without any increase in

authors in the 2000s than in the 1950s, we have to show that increases in the proportions of women authorships over time are not primarily due to decreases in the numbers of authorships by men.

To examine the change in the number of authorships by men and women for each journal category, we built two GLMs with negative binomial distributions, one with the number of men (per journal per year) as the outcome variable, and the other with the number of women (per journal per year), with journal category and decade as predictors for each. We found that the interaction between journal category and decade is significant. We reran our model stratified by journal category and interpreted the results for each category of journal independently.

We conclude that increases in the average number of women authorships between the 1950s and 2000s (per journal per year) are not being driven by decreases in the average number of authorships by men in that time period. For all three journal categories, the average number of authorships by women (per journal per year) has more than tripled between the 1950s and the 2000s (and these results are statistically significant, p < .001), while the average number of authorships by men (per journal per year) has changed to a much lesser extent. For Top Philosophy journals, the average number of authorships by men has doubled (p < .001). For Nontop Philosophy journals, we observe no statistically significant change in the average number of authorships by men (p = .966). For Interdisciplinary journals, we observe a 24 percent decrease in the average number of authorships by men, but this decrease is not statistically significant (p = .584). We can therefore conclude that the numbers of authorships by men are not decreasing at a greater rate than the numbers of women authorships are increasing over time. We present our results in figure E1 and tables E1 and E2.

the number of women authors. We aim to rule out this explanation for the patterns we observe. If journals published the exact same number of articles each year, this would not be a problem. We would simply look at the differences in the proportions of authorships by men and women. Because this is not the case, we need to also look at the absolute number of men and women authors. That said, it is worth noting that even if women authorships are constant and authorships by men are decreasing, that could still mean greater equity for women authors as they are published at proportionately greater rates.

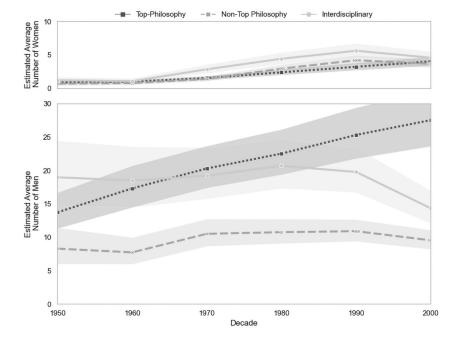


FIG. E1.—GLM estimates of the average number of authorships by men and women in a journal in a year (1950s–2000s). The top graph shows model estimates for the average number of women authorships, while the bottom graph shows the model estimates for authorships by men. The scale of the *y*-axis is the same for both of the graphs, but, as the number of women authorships is smaller than the number of men, the maximum ranges of the two graphs are different. The shaded region represents the CIs calculated by the GLM for each journal category. Color version available as an online enhancement.

TABLE E1

GLM Comparisons of Estimated Number of Woman Authorships by Decade

Decade	Percent of Change (%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
	Т	op Philosop	hy		_
1960–1950	16	0.780	0.80	1.67	.436
1970-1950	79	3.396	1.28	2.50	.004
1980-1950	177	6.150	2.00	3.84	< .001
1990-1950	273	8.025	2.71	5.15	< .001
2000-1950	367	9.381	3.38	6.44	< .001
1970-1960	54	2.726	1.13	2.11	.025
1980-1960	139	5.681	1.77	3.24	< .001
1990-1960	222	7.706	2.39	4.34	< .001
2000-1960	303	9.171	2.99	5.43	< .001

TABLE E1 (Continued)

Decade	Percent of Change (%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
1980–1970	55	3.316	1.20	2.01	.005
1980–1970	109	5.654	1.62	2.69	< .005
2000–1970	161	7.363	2.02	3.37	< .001
1990–1970	35	2.412	1.06	3.37 1.71	.047
2000–1980	68	4.219	1.32	2.14	< .001
2000-1980	25	1.843	0.99	1.58	.126
<u> </u>	No	ontop Philoso	ophy		
1960–1950	13	0.400	0.62	2.04	.689
1970–1950	103	2.613	1.19	3.45	.038
1980–1950	327	5.594	2.57	7.09	< .001
1990–1950	509	7.098	3.70	10.03	< .001
2000-1950	434	6.576	3.24	8.80	< .001
1970–1960	80	2.660	1.17	2.77	.038
1980–1960	278	6.446	2.52	5.66	< .001
1990–1960	439	8.421	3.64	7.98	< .001
2000-1960	373	7.752	3.19	7.01	< .001
1980–1970	110	4.813	1.55	2.85	< .001
1990–1970	200	7.519	2.25	4.00	< .001
2000-1970	163	6.601	1.98	3.51	< .001
1990–1980	43	2.858	1.12	1.82	.025
2000-1980	25	1.796	0.98	1.60	.202
2000-1990	-12	-1.146	0.70	1.10	.440
	I	nterdisciplin	ary		
1960-1950	-12	-0.548	0.55	1.40	.827
1970-1950	133	4.132	1.56	3.48	< .001
1980-1950	262	6.570	2.47	5.32	< .001
1990-1950	360	7.925	3.15	6.70	< .001
2000-1950	275	6.842	2.57	5.48	< .001
1970–1960	165	4.820	1.78	3.95	< .001
1980-1960	313	7.320	2.82	6.03	< .001
1990-1960	424	8.705	3.61	7.61	< .001
2000-1960	327	7.606	2.94	6.21	< .001
1980-1970	56	2.944	1.16	2.09	.016
1990–1970	97	4.673	1.48	2.63	< .001
2000-1970	61	3.253	1.21	2.15	.007
1990-1980	27	1.793	0.98	1.65	.262
2000-1980	4	0.260	0.80	1.35	.827
2000-1990	-18	-1.578	0.63	1.05	.306

Note.—We applied multiple comparison adjustments on the presented *p*-values using the Holm-Sidak step-down method. Rows in **bold** indicate statistics referred to in the main text.

TABLE E2
GLM Comparisons of Estimated Number of Men Authorships by Decade

	Percent Change				
Decade	(%)	Z Score	Lower CI	Upper CI	P-Value
		Top Philoso	phy		
1960-1950	26	1.715	0.97	1.64	.363
1970-1950	48	3.090	1.15	1.89	.020
1980-1950	64	3.956	1.28	2.09	.001
1990-1950	84	4.893	1.44	2.35	< .001
2000-1950	100	5.514	1.56	2.56	< .001
1970-1960	17	1.320	0.93	1.48	.563
1980-1960	30	2.210	1.03	1.64	.197
1990-1960	46	3.194	1.16	1.85	.015
2000-1960	59	3.859	1.26	2.01	.001
1980-1970	11	0.951	0.90	1.37	.623
1990-1970	25	2.022	1.01	1.55	.266
2000-1970	36	2.755	1.09	1.68	.052
1990-1980	12	1.086	0.91	1.39	.623
2000-1980	22	1.840	0.99	1.51	.335
2000-1990	9	0.767	0.88	1.35	.623
	1	Nontop Philos	sophy		
1960-1950	-7	-0.335	0.62	1.40	.995
1970-1950	27	1.245	0.87	1.84	.881
1980-1950	30	1.407	0.90	1.86	.852
1990-1950	31	1.519	0.92	1.87	.809
2000-1950	15	0.774	0.81	1.64	.966
1970-1960	36	1.897	0.99	1.87	.539
1980-1960	39	2.128	1.03	1.88	.378
1990-1960	41	2.296	1.05	1.89	.280
2000-1960	23	1.398	0.92	1.65	.852
1980-1970	2	0.175	0.79	1.32	.995
1990-1970	4	0.295	0.81	1.32	.995
2000-1970	-9	-0.789	0.71	1.16	.966
1990-1980	1	0.121	0.81	1.27	.995
2000-1980	-11	-1.050	0.71	1.11	.912
2000-1990	-13	-1.251	0.71	1.08	.881
		Interdiscipli	nary		
1960–1950	-3	-0.147	0.69	1.38	1.000
1970-1950	1	0.079	0.73	1.40	1.000
1980-1950	9	0.548	0.80	1.48	1.000
1990-1950	4	0.264	0.77	1.41	1.000
2000-1950	-24	-1.809	0.56	1.02	.584
1970-1960	4	0.246	0.76	1.42	1.000
1980-1960	12	0.736	0.83	1.51	.998
1990-1960	7	0.447	0.80	1.44	1.000
2000-1960	-22	-1.691	0.58	1.04	.649
1980-1970	8	0.544	0.83	1.40	1.000
1990-1970	3	0.213	0.79	1.33	1.000

TABLE E2 (Continued)

Hassoun et al.

Decade	Percent Change (%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
2000-1970	-25	-2.219	0.57	0.97	.295
1990-1980	-4	-0.366	0.75	1.22	1.000
2000-1980	-31	-2.946	0.54	0.88	.047
2000-1990	-28	-2.653	0.57	0.92	.106

NOTE.—We applied multiple comparison adjustments on the presented p-values using the Holm-Sidak step-down method. Rows in bold indicate statistics referred to in the main text.

Appendix F

Tables F1 and F2 show statistical results of GLM pairwise comparisons for the proportions of articles, authored by women, in each AOS for each journal category (Top, Nontop, and Interdisciplinary).

TABLE F1 GLM Pairwise Comparison of AOS by Article FOR EACH JOURNAL CATEGORY IN 2000-2009

AOS	Percent Change (%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
		Top Philoso	phy		
LEMM-G	-20	-1.051	0.53	1.21	.647
S-G	-3	-0.353	0.81	1.16	.724
V-G	33	1.812	0.98	1.81	.252
S-LEMM	21	0.873	0.79	1.85	.647
V-LEMM	66	2.012	1.01	2.72	.237
V-S	37	1.921	0.99	1.90	.245
	1	Nontop Philo	sophy		
H-G	48	3.580	1.20	1.84	.002
LEMM-G	-22	-1.228	0.53	1.16	.391
V-G	-33	-3.314	0.52	0.85	.004
LEMM-H	-47	-3.266	0.36	0.77	.004
V-H	-55	-6.860	0.36	0.56	< .001
V-LEMM	-15	-0.796	0.57	1.27	.426

Note.—We applied multiple comparison adjustments on the presented p-values using the Holm-Sidak step-down method. Rows in bold indicate statistics referred to in the main text.

TABLE F2
SUMMARY OF GOODNESS-OF-FIT PARAMETERS FOR STRATIFIED AND UNSTRATIFIED MODELS COMPARING AOS AND TYPE

	DF	Pearson Chi-Square	Log-Likelihood
Type	2	6280	-5040.8
AOS	4	6080	-5018.8
AOS * type	6	6250	-4992.1
AOS stratified by type:			
Top	3	3770	-2057.9
Nontop	3	1140	-1449.6

Note.—This table shows the degrees of freedom, chi-square, and log-likelihoods. The top two rows show the model run on the independent variables. The third is a joint model of AOS and type, and the remaining rows indicate the model stratified by type. We remind the reader that when interpreting the fit this GLM model uses a negative binomial distribution with a log link.

Appendix G

Tables G1 and G2 show statistical results of GLM comparisons for Review Type and AOS.

TABLE G1 GLM Comparisons of Estimated Proportion of Women Authorships by Review Type for Each Journal Category in 2000-2009

AOS	Percent Change (%)	Z Score	Lower CI	Upper CI	<i>P</i> -Value
	To	p Philosoph	у		
Non- vs. double	63	2.237	1.07	2.49	.047
Triple vs. double	-12	-1.492	0.75	1.04	.136
Triple vs. none	-46	-2.814	0.35	0.83	.015
	Nont	top Philosop	ohy		
Non- vs. double	-40	-2.073	0.37	0.97	.038
	Inte	erdisciplinaı	У		
Non- vs. double	-33	-3.573	0.54	0.84	.001
Triple vs. double	35	1.579	0.93	1.95	.114
Triple vs. none	100	3.371	1.34	2.99	.001

NOTE.—We applied multiple comparison adjustments on the presented *p*-values using the Holm-Sidak step-down method. Rows in **bold** indicate statistically significant results.

TABLE G2

SUMMARY OF GOODNESS-OF-FIT PARAMETERS FOR STRATIFIED AND UNSTRATIFIED MODELS COMPARING REVIEW TYPE AND JOURNAL TYPE

	DF	Pearson Chi-Square	Log-Likelihood
Type	2	6280	-5040.8
Review	2	6150	-5103.1
Review * type	4	6290	-5034.8
Review stratified by type:			
Тор	2	3770	-2056.3
Nontop	1	1130	-1472.8
Interdisciplinary	2	1370	-1496.4

NOTE.—This table show the degrees of freedom, chi-square, and log-likelihoods. The top two rows show the model run on the independent variables, the third row is a joint model of review type and journal type, and the remaining rows indicate the model stratified by type. We remind the reader that when interpreting the fit this GLM model uses a negative binomial distribution with a log link.

Appendix H

Here we present the preliminary results of an informal survey on inclusivity practices in fifty-two philosophy journals.

- Journals typically utilize review practices aimed at increasing fairness in the review process (forty-six out of fifty-two in our data set), including the following:⁷⁸
 - a. Some form of anonymous review (double or triple anonymous review).
 - b. Utilizing a diverse reviewer pool.
 - c. Streamlining and shortening the review process to encourage members of underrepresented groups to submit, since long waits make it harder for members of underrepresented groups to get published on the hiring and tenuring timeline.
 - d. Utilizing a developmental review process, helping promising authors, especially from underrepresented or vulnerable groups, improve their work up to publishable quality.
 - e. Erring on the side of caution in not rejecting work from underrepresented groups in borderline cases at the desk rejection stage.
- Some journals publish volumes with special guest editors, special guest authors, or special themes that might be of more interest to underrepresented groups, such as anti-oppression or race theory (eleven out of fifty-two surveyed journals).

^{78.} At the time we conducted our survey, only ten out of fifty-two journals surveyed utilize any of 1b–1e.

- 3. Some journals have, and actively seek, diverse editors in chief, editorial boards, and other decision-making bodies or have committees that are designated for maintaining a diverse pool of contributors (twelve out of fifty-two surveyed journals).
- 4. Some journals give out prizes to young talent in the profession and seek to distribute these prizes with inclusivity in mind (two out of fifty-two surveyed journals).

Appendix I

To examine the density of our groupings, we generated a cumulative density distribution for our two grouping strategies (journal, year) and (journal, decade) (see fig. II). If a large portion of the groupings contained few data points, our results would be more susceptible to noise. The CDF shows that this is not the case. When grouping by journal and year, we observe that at least 50 percent of the grouped data points represent twenty or more unique articles, which is representative of a typical journal publishing load. When grouped by journal and decade, we observe that at least 50 percent of the grouped data points represent more than 150 unique articles.

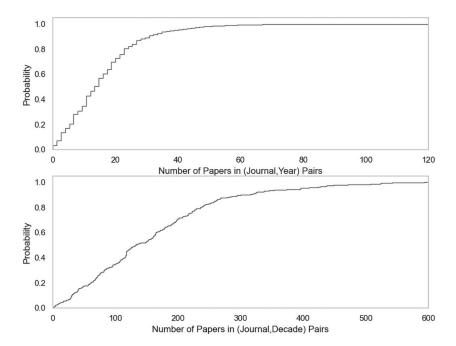


Fig. 11.—Graph of a CDF for the two groupings we utilize. A CDF showing (journal, year) grouping is shown on top. A CDF showing (journal, decade) grouping is shown on bottom. Color version available as an online enhancement.

Appendix J

Below are concrete suggestions for increasing the proportion of women authorships in philosophy journals, as well as to improve other areas of representation. These suggestions are based on a broadly consultative project, previously undertaken to identify inclusive practices for philosophy journals. Many of the suggestions are based on existing best practice schemes, including some adopted by other disciplines. The Demographics in Philosophy project has included philosophy-specific suggestions based on our review of the data, our survey results, and discussions with editors and authors at the 2018 Pacific Division Meeting of the APA. We have also consulted with members of relevant APA committees, as well as other individuals and groups who are impacted by existing publication practices. These best practices were initially published in the APA Blog and are reproduced here with permission. We include this appendix to ensure publication of the results of this process outside of the gray literature.

The following are editorial practices to consider to improve diversity in philosophy journals: 80

- Diversify representatives—editors, editorial board members, referees, trustees, staff, and so on—to include more people from underrepresented groups and more people working on important but neglected topics of interest to a diverse range of philosophers, utilizing a diverse range of methods.
 - Commit to inclusion with influence. However, also be cautious about creating disproportionate burdens on members of underrepresented groups, especially if those burdens do not come with public recognition.
- 2. Set specific, achievable targets to make progress in increasing diversity in your journal.
 - For underrepresented groups, long-term targets might include publishing and promoting their work at least in proportion to their presence in the part of the discipline that your journal covers.
- 3. Implement promising practices to meet these targets and increase diversity in your journal, such as the following:
 - Solicit submissions of promising work by members of underrepresented groups. (PhilPeople might be a useful resource.)

^{79.} Eric Schwitzgebel and Nicole Hassoun, "Tell Us How to Fix the Lack of Diversity in Philosophy Journals," *APA Blog*, March 26, 2018, https://www.blog.apaonline.org/2018/03/26/tell-us-how-to-fix-the-lack-of-diversity-in-philosophy-journals/.

^{80.} Here we define increased diversity in philosophy journals as the increased representation of women, members of other marginalized groups, and marginalized philosophies in philosophical publications.

- Reserve more space for articles by members of underrepresented groups to help meet specific targets.⁸¹
- Publish more articles of interest to underrepresented groups in philosophy and on important but neglected topics of interest to a diverse range of philosophers.
- When inviting authors, always bear in mind the importance of increasing diversity in the field (potentially via special issues).
- Ensure fair practice in weighing the value of anonymity and nonanonymous editorial discretion, bearing in mind that evidence is mixed regarding the effectiveness of anonymous review in increasing diversity. Take special care to ensure that any nonanonymous parts of the review process do not omit or unfairly disadvantage authors from underrepresented groups.
- Attend to your regional context, as well as the overall global context (e.g., the importance of including adequate geographical and indigenous representation in your journal).
- 4. Implement diversity-supporting referee practices, such as the following:
 - Encourage referees and authors to avoid using language that is insensitive to cultural differences or that inappropriately excludes or offends any group of people based on their ability/disability, age, ethnicity and race, gender identity, sexual orientation, class, nationality, and so on.
 - Encourage referees and authors to check that articles cite and discuss a fair representation of relevant work by members of underrepresented groups.
 - Encourage referees to consider accepting articles on topics of interest to underrepresented groups in philosophy and on important but neglected topics of interest to a diverse range of philosophers.
 - Encourage referees to not reject promising articles on grounds of writing quality, if the concerns are merely stylistic, they can be repaired to an adequate level, and the philosophical content is good. This helps ensure fair consideration of work by philosophers who are not native speakers of English.
 - Encourage timely and developmental reviews, since members of vulnerable groups are especially disadvantaged by long delays before publication.
- 81. Krishnamurthy et al., "Underrepresentation of Women."
- 82. Given the extra service requirements and other burdens members of underrepresented groups face, timely reviews may be particularly important for this group of scholars prior to tenure. There is also evidence that submissions by members of some underrepresented groups are held to a higher standard for publication with resulting delays. Hengel, "Publishing While Female"; Robert Warren, "How Much Do You Have to Publish to Get a Job in a Top Sociology Department? Or to Get Tenure? Trends over a Generation," *Sociological Science* 6, (2019): 172–96.

- 5. Implement promising practices to increase accessibility in journals, such as the following:
 - · Create structurally tagged content.
 - Utilize text-to-speech capability for print-impaired users in the absence of an audio book.
 - Include a navigable table of contents within your publications, and
 provide a defined reading order (including, e.g., appropriate links between the main flow of the text and any sidebar or boxout text) to help
 those relying on text-to-speech functions to navigate the article.
 - Include Alt-text descriptions to explain illustrations for readers with reduced access to graphic information.
 - Give readers control over the font (size, style, and color), background
 color, and line spacing for online publications, and/or make them
 available in html.
 - Consider trying to make your journal more accessible for those in developing countries by making your journal open access in those regions.
 - Employ W3C web accessibility standards where feasible, and check for web accessibility.
- 6. Collect data on diversity-relevant publishing practices, for example, submission and publication rates for members of underrepresented groups, referee and editorial board composition, and so on, and track progress in increasing diversity in your journal.
- 7. Evaluate progress at regular intervals and revise practices accordingly.
 - Work with researchers to isolate and implement evidence-based practices that increase diversity in academic philosophy journals.
- 8. Officially adopt these diversity-promoting practices and widely publicize your journal's targets and commitment to promoting diversity.
 - Inform all representatives and bind future representatives to uphold these standards.
 - Publicly and explicitly adopt diversity-promoting practices, helping to create a culture of concern that enhances the journal's reputation for welcoming diversity, attracting more diverse submissions.