## WHY SO LOW?

## ON INDIRECT EFFECTS OF GENDER BIAS IN PHILOSOPHY

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Abstract: Empirical evidence indicates that women philosophers tend to submit their work to journals substantially less often than their male colleagues. This paper points out that this difference in submission behavior comes with other specific aspects of women philosophers' behavior, such as a tendency to be reluctant to participate in discussions, to be willing to do work low in prestige, and to specialize in certain research topics, and it argues that these differences can be understood as indirect effects of social biases: namely, effects on the working behavior of members of targeted social groups. Recent findings from philosophy journals' book review sections and from other academic disciplines known to suffer from gender problems, especially from STEM disciplines, lend additional weight to this hypothesis.

#### 1. Introduction

Certain social groups are underrepresented in academic philosophy, the underrepresentation increasing significantly when moving up the academic hierarchy from lower to higher positions. Women make up roughly 31 percent of graduates receiving a Ph.D. in philosophy (Leslie et al. 2015), and Wilhelm, Conklin, and Hassoun (2018) and Schwitzgebel and Jennings (2017) have shown that women compose, at most, 25 percent of U.S. philosophy faculty, occupying 37 percent of assistant, 29 percent of associate, and only 20 percent of full professorships.

In recent years, especially since Sally Haslanger's (2008) publication of her prominent *Hypatia* article on the situation of women philosophers, there has been a lively debate on the issue of why women are underrepresented in philosophy. Many contributions have been made to the debate, helping to understand the diverse ways in which philosophy is socially exclusive. In particular, implicit and explicit biases against women and members of other underrepresented groups have been elucidated thoroughly not only by a huge amount of anecdotal evidence but also by current research (e.g., Brownstein and Saul 2016; Crouch and Schwartzman 2012; Hutchison and Jenkins 2013; Kourany 2010; Lee and Schunn 2011; Leslie et al. 2015).

Most notably, Sarah-Jane Leslie and her team addressed the issue of why women are underrepresented in so many different academic disciplines. Like Haslanger (2008, 215), they had recognized that the underrepresentation of women did not consistently correlate with, for example, technical or abstract subjects. Rather, certain disciplines in the natural and social sciences (such as biology and psychology) furnish relatively large numbers of women, while some disciplines in the humanities (such as music composition and philosophy) have very poor gender ratios (worse than in

physics or engineering, for instance). This led Leslie and her team to the hypothesis that in disciplines in which women are underrepresented a belief is widely shared that attributes such as brilliance and genius are required. There is a widespread tendency, however, to deny women, Blacks, and Latinos such "raw, innate talent" (Leslie et al. 2015, 262).

The survey by Leslie and her team was of 1,820 persons, "faculty, postdoctoral fellows, and graduate students . . . from 30 disciplines (12 STEM, 18 SocSci/Hum) . . . at geographically diverse high-profile public and private research universities across the United States" (Leslie et al. 2015, 262). It resulted in confirmation of their hypothesis: in fact, in those disciplines, including philosophy, which are so widely believed to require innate intellectual talent, the percentages of women are lower than in disciplines that are believed to require mainly hard work (Leslie et al. 2015). The evidence accounts "for the distribution of gender gaps across the entire academic spectrum" and "extends to African Americans' underrepresentation as well" (Leslie et al. 2015, 262).

The finding by Leslie and colleagues is especially important here, since it supports the idea that social biases play a role when it comes to the underrepresentation of women (and other social groups) in philosophy (and other disciplines). If there is such a widely shared belief that one needs "raw, innate talent" to be, for instance, a good philosopher, and if this finding correlates significantly with the underrepresentation of specific groups (for example, of women and Blacks) in philosophy, this strongly suggests that the philosophical community holds shared biases against these social groups: the belief of a requirement of innate raw talent is not per se directed against women and Blacks; in order for these groups to be targeted, there must be biases directed against them in such a way that people tend to believe (consciously or not) that it is *women and Blacks* who lack the required innate raw talent. And in fact, it was also revealed by Leslie and colleagues that this belief is widely shared in the philosophical community.<sup>1</sup>

Particularly with respect to the role of *implicit* bias, this point is crucial: while people might go on record as saying they believe in a requirement of raw innate talent, they certainly do not often consciously believe that women and Blacks lack such talent. Therefore, it strikes me that the finding that the belief in raw innate talent plays such an important role when it comes to the underrepresentation of specific social groups in philosophy strongly confirms, once again, that social biases play an important role in the exclusion of specific social groups from the discipline of philosophy. Nevertheless, there are still many aspects that remain largely unclear and suggest that the functioning of biases against women (and other social groups) is a much more intricate problem than is often assumed in debates on this issue thus far.

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<sup>&</sup>lt;sup>1</sup> They revealed this by asking participants "to evaluate the statement, 'Even though it's not politically correct to say it, men are often more suited than women to do high-level work in [discipline].' Participants rated their own agreement and the extent to which they thought that other people in their field would agree" (Leslie et al. 2015, 264).

One of the aspects remaining unclear is the underrepresentation of women writing articles in philosophical journals.<sup>2</sup> As the elucidation of this point is particularly illuminating, I cover it in section 2. In section 3, I present further specific characteristics in women philosophers' professional behavior and introduce findings from science studies on the underrepresentation of women in most natural sciences. I argue that key insights from these studies are transferable to the case of philosophy. Women philosophers, just like women in STEM disciplines (science, technology, engineering, and mathematics), tend to differ from their male colleagues when it comes to submitting papers to journals, their willingness to do work low in prestige, and their choice of research topics.

Finally, in section 4, I argue that this difference is a result of indirect effects of (both explicit and implicit) biases against women, as such social biases stifle targeted people's productivity and have threatening and discouraging effects on them. I argue that the indirect effects of biases are central to the explanation of why women in philosophy tend to differ from men in certain aspects of their professional behavior (for example, why they tend to make fewer submissions than men) and conclude that indirect bias effects complement—and reinforce—direct bias effects by impairing how members of targeted groups behave in academia and conduct their research.

# 2. On Submission and Acceptance Rates

Haslanger (2008) investigated, among other things, the underrepresentation of women's work in top philosophical journals by quantitatively examining the distribution of author gender. She concentrated on articles and discussions, finding contributions from female authors to be underrepresented vis-à-vis the number of women in the philosophical discipline overall.<sup>3</sup> She speculates that this is related to biases against women's submissions: "I cannot argue that evaluation bias *is* playing a role in publication in philosophy . . . [but] the numbers suggest that women are underrepresented in what are considered 'top' journals, and we should investigate why the numbers are so low" (Haslanger 2008, 214, emphasis in original)

There are two potential reasons for this underrepresentation of women's articles in philosophical journals. First, the *submission rate* from female philosophers could be lower than that of male philosophers (that is, female philosophers, on average, submit fewer articles to journals than their male counterparts). Second, the submission rate could be (roughly) equal, but it is the *acceptance rate* that differs (that is, women's submissions are not accepted as often as men's). When Haslanger published her paper, however, there was no access to journal submission data, making it impossible to ascertain whether the problem stems from a difference in the submission rate or the acceptance rate.

<sup>&</sup>lt;sup>2</sup> Women are underrepresented as authors of research articles in relation to the overall proportion of women in the discipline of philosophy.

<sup>&</sup>lt;sup>3</sup> They are underrepresented by about 12.36 percent on average (Haslanger 2008, 220).

Subsequently, new data have come to light, provided by the American and the British Philosophical Associations in 2014. According to these data the journals' acceptance rates are roughly equal (APA/BPA 2014). The numbers, provided by *Mind*, the *Philosophical Quarterly*, the *European Journal of Philosophy*, the *Canadian Journal of Philosophy*, the *British Journal for the Philosophy of Science*, and the *British Journal for the History of Philosophy* for the period 2011 to 2013/2014, do not indicate any bias in acceptance rates disadvantaging women (indeed, in some cases acceptance quotas are even slightly better for women).<sup>4</sup>

We should note that it is unclear how reliable these acceptance rates are with respect to philosophy journals in general. For example, journals willing to share their data could be exactly those journals that have already taken steps to reduce bias in evaluation. For future research, it would be very helpful to have more journals providing gender-related data.<sup>5</sup> However, while it may be unclear whether the available numbers indicate that philosophy journals, in general, are accepting at equal rates or whether there is merely an absence of evidence that philosophy journals, in general, are accepting at unequal rates, there is clear evidence that women are not submitting at equal rates. With the exception of the *Canadian Journal* (to which 20 percent of submissions are by women), the submission rates of women in all the journals are very low (10 percent, 14 percent, 11.84 percent, 12 percent, and 16 percent). In addition, Philipp Blum, coeditor of *dialectica*, reported that merely 12 percent of all articles submitted to *dialectica* were written by women (Blum in Weinberg 2014).

One could speculate that women's low submission rate is related to the fact that the journals do not address topics of particular interest to women. This conjecture gains some substance when considering that the submission numbers are better for specific journals, such as *Ethics*. Furthermore, for the *Journal of Moral Philosophy*, editor and founder Thom Brooks revealed that around 23 percent of all submissions come from women, while 22 percent of all accepted papers have female authors (Brooks 2010, 16). These journal quotas—both for submission and for acceptance—appear to correspond with the current population of women in philosophy. Since, however, the *Journal of Moral Philosophy* is a journal that, like *Ethics*, addresses an area of philosophy in which women are particularly well represented (see section 3), a submission rate of 23 percent appears in a less positive light (Krishnamurthy et al. 2017; Haslanger 2008, 215). Moreover, the idea that "women 'just aren't

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<sup>&</sup>lt;sup>4</sup> This may reflect a tendency of women to (over)polish their papers and maximally shore them up against hostile scrutiny, which would support the oft-discussed hypothesis that women produce "low-quantity-and-high-quality" work (see Bright 2017).

<sup>&</sup>lt;sup>5</sup> As Weisberg (2017) has pointed out, the APA/BPA data should be taken with a grain of salt: "A good number of the usual suspects aren't included, like *Philosophical Studies*, *Analysis*, and *Australasian Journal of Philosophy*. So the usual worries about response rates and selection bias apply. The data are also a bit haphazard and incomplete. Fewer than half of the journals that responded included gender data. And some of those numbers are suspiciously round."

as interested' in philosophy of mind, philosophy of language, and such, . . . does not sit well with the fact that women seem to be doing well in linguistics, cognitive psychology, and cognitive science more generally" (Haslanger 2008, 215; see also Leslie et al. 2015).

Thus, the conundrum persists: the acceptance rates are apparently roughly equal (or sometimes even better for women), while women in fact tend to submit less often. Although Haslanger suspects that acceptance rates are biased, she already provides the alternative possibility that "it may be that women do not submit work to these journals in large numbers. But if that is so, we need to ask why" (Haslanger 2008, 215). Because more evidence has come to light supporting this possibility, the present paper seeks an answer to this question. For this purpose, women's differing submission behavior is embedded here in a context of other specific aspects of women's behavior in philosophy and other academic disciplines. I argue that these differences can be understood as indirect effects of gender biases.

Haslanger mentions stereotype threat as a potential reason for the case that there is an underrepresentation of women's submissions, as stereotype threat would cause individuals to "look for low-risk strategies" (Haslanger 2008, 215). I concur that this effect of stereotype threat is a plausible explanation for women's low submission rates.

While the hypothesis of stereotype threat has been challenged as unreliable given problems of replicability (e.g., Finnigan and Corker 2016), others have defended it convincingly via recourse to comprehensive comparative studies (e.g., Ma et al. 2018; Nguyen and Ryan 2008). However, the effects of stereotype threat may be subtler than previously assumed. I flesh out this idea by arguing that stereotype threat is one of a number of direct effects arising from biases; such direct effects then cause indirect effects, which include various effects on the professional behavior of targeted groups' members.

Direct effects refer to the external conditions that are caused by social bias and that lead to worse working conditions for targeted persons. These include material conditions, such as low-prestige positions, no support staff, little travel money, and huge teaching workloads, as well as nonmaterial conditions, such as a hostile, competitive, and discouraging social environment and negative stereotypes threatening targeted persons. *Indirect effects*, on the other hand, refer to the psychological effects that these direct effects have on the targeted persons, that is, on their performance and their professional decisions and behaviors. This idea is motivated by empirical insights from science studies on women in several academic disciplines, particularly STEM disciplines and also philosophy.

# 3. The Shared Characteristics of Women in Philosophy and Women in Science

As demonstrated above, empirical evidence has recently indicated that women philosophers tend to submit fewer articles to journals than their male colleagues (APA/BPA 2014). Moreover, they tend to differ in other aspects of their professional behavior as well. A recent examination of the book review sections in the journals *Ethics*, *Mind*, and the *Philosophical Review* is salient in this respect

(Leuschner and Lindemann 2018). First, this study reveals that women are better represented in book review sections than in article sections: while only 19.3, 6.38, and 11.11 percent of articles were written by women (Haslanger 2008), 28.06, 20.94, and 15 percent of book reviews were written by women (Leuschner and Lindemann 2018, 21). Book reviews, however, count as "minor publications," although writing them requires a lot of work (Valian 1998, 261; Griffiths, Dawson, and Rascoff 2006, 6–7; Urry 2015). The finding that women philosophers are so much better represented in the book review sections than in the article sections, thus, exemplifies the fact that women tend to do work of lesser prestige more often.

Second, the same study shows that in all three journals, the percentage of women reviewers is higher when the books are written by women; however, this difference is significant only in *Ethics* (Leuschner and Lindemann 2018, 21). As studies on women in philosophy have argued, women have been able to establish a foothold in specific topics, in particular in ethics: just think of care ethics, ecofeminism, feminist bioethics, embodiment, intersectionality, standpoint epistemology, and feminist science studies (see Friedman 2013, 32; Dodds and Goddard 2013, 159). The finding that the percentage of women reviewers is higher when the reviewed books are written by women confirms the suspicion that there are gender-specific areas in philosophy because if this is the case, there are more books on specific issues written by women than by men, and greater numbers of competent women than men are available for reviewing the respective books, meaning that editors simply can find more women experts on these topics.

If we compare these findings to insights from gender studies on other academic disciplines, it is, right off the bat, intriguing that the professional behavior of women in certain disciplines of the natural and social sciences is characterized by the same (and some similar) differences evidenced in women philosophers' behavior.

First, women scientists in the STEM disciplines, just like women philosophers, tend to submit fewer articles to journals than their male colleagues (Lee 2016; Lerback and Hanson 2017; Lane and Linden 2009; Sonnert and Holton 1995, 152–53; Valian 1998, 262–265). The same holds for women in the social sciences (Clemens et al. 1995, 470).

Second, women scientists, just like women philosophers who tend to focus on specialized fields in ethics in particular, tend to build thematic niches (Sonnert and Holton 1995, 152). In the social sciences, women prefer qualitative approaches in contrast to men, who tend to have a quantitative leaning (Clemens et al. 1995, 471; Plowman and Smith 2011).

Lastly, women scientists, just like women philosophers, who, for example, are so much better represented in the book review sections than in the article sections of leading journals, more often do work of lesser prestige (Antony 2012, 235; Sonnert and Holton 1995, 148–52). They tend to invest more time in such tasks as "pastoral care, personal tutoring, representation on equality committees or heavy first year teaching loads . . . [to which less value is assigned with regard to being promoted than to typical 'male' tasks] such as research committee memberships, links with outside organizations/industry or postgraduate teaching roles. It seems, the more prestigious the role, the more

likely it is to be seen as [male] and thus filled by a male" (Guth and Wright 2010, 169). In general, it has been shown that "women tend to work harder and more efficiently than men do for the same amount of money" (Valian 1998, 174).

So, it seems that women share these characteristics in their professional behavior across academic disciplines. The question remains, however, why women in specific academic fields differ in this way compared to their male colleagues. I suggest in the next section that this can very adequately be explained via indirect effects of (implicit and explicit) social biases: these are effects on targeted people's professional behavior caused by direct effects of social biases (such as material and nonmaterial disadvantages).

## 4. Direct and Indirect Effects of Biases

Thus far, I have shed light on two points: first, women in academic disciplines in which they are underrepresented, such as philosophy, are confronted with biases which arise, as Leslie and her team (2015) have shown, on the sheer grounds of their being women. Second, they tend to differ from men in certain aspects of their professional behavior. What is still largely unclear, however, is the matter of how these two points relate to each other, or, in other words, whether (and, if so, how) gender biases are responsible for the differences between the professional behavior of women academics and that of men academics.

When it comes to an explanation of the exact workings of implicit and explicit biases in philosophy and other disciplines in which women are underrepresented, research on this problem has mainly emphasized *direct* effects of biases, that is, disadvantageous material and nonmaterial (particularly social) effects on members of targeted groups.

First, the research has illuminated how implicit biases subtly affect the evaluation of members of the targeted groups. There is a vast amount of experimental evidence on implicit biases in different social contexts (Blair, Dasgupta, and Glaser 2014). For instance, it has been shown that in academic contexts identical CVs are ranked higher if they bear male names rather than female ones (Moss-Racusin et al. 2012; Steinpreis, Anders, and Ritzke 1999). Moreover, implicit biases can function via broadly shared—and, thus, mostly unchallenged—evaluative standards (in terms of content or methodology), transporting and reinforcing bias mechanisms (Lee and Schunn 2011).

Second, women academics often face discrimination and exclusion in their communities as well as professional marginalization and devaluation. They experience exclusionary interactional quirks, such as microaggressions—that is, subtle and casual degradation, including avoidance, suggestive comments, ambiguous compliments, interruptions, corrections, and so on (see Brennan 2013; Kidd 2015); they receive fewer invitations to conferences or institutional colloquia; and they are asked less often to sit on prestigious committees (see Fehr 2011; Haslanger 2008; Saul 2013; Urry 2015). On various blogs and forums, women philosophers report feeling excluded, experiencing personal incivility and harassment. Symposia in philosophical journals are often all-male affairs, and, as we know, for example, from the *Feminist Philosophers* "Gendered Conference Campaign" project,

panels and invited speakers at philosophical conferences also are frequently exclusively male. Moreover, we know that women philosophers are more often employed in part-time rather than full-time positions (26 percent compared to 16.6 percent [see Norlock 2011]), which can only partly be explained by childcare commitments, as women academics and women in general are more often in part-time positions even if they do not have children (Baker 2012, 37).

Third, women academics do not have equal access to facilities and resources (Valian 1998, 263–64). For example, in 2012, the *American Institute of Physics* found that women physicists do not have sufficient access to such key academic resources as funding, office space, lab space, equipment, travel money, clerical support, and employees or student assistants (Ivie and Tesfaye 2012, 48).

Fourth, there is "a strong correlation between elite institutional status and the poor representation of women" (Jenkins 2013, 82).

Fifth, stereotype threat is another direct effect that (implicit and explicit) biases might have.<sup>6</sup>

As Virginia Valian has pointed out, all these direct effects subtly hinder women over the course of time in succeeding in their academic careers by hampering them in the accumulation of advantages (Valian 1998). Consequently, many women leave academia sooner or later.

This was also most recently confirmed by Debbie Ma and colleagues (2018), who find that at the beginning of their philosophy studies students do not experience the field as male dominated; only when they have progressed and learned that philosophy is a man's game do they often become less interested and quit: "Although they may enter the major unaware of these schemas [philosophy as male dominated], women may become acculturated to the masculine nature of philosophy at the upper-division where gender parity diminishes, or perhaps women see that most of their professors are male and course texts are predominantly male-authored. . . . [T]hese perceptions may *discourage* women's identification and engagement in the field" (Ma et al. 2018, 77–78, emphasis added)

Some women stay in their fields, however, and the question remains how the various direct disadvantageous effects of gender biases influence them in their work. This seems to be an important question, since there are apparently significant differences between women's professional behavior and men's, such as lower submission rates to journals, thematic specification, and the exceptional willingness to do a lot of less prestigious work, as shown in sections 2 and 3.

With respect to the low submission rates, it seems obvious—though not trivial—that having less adequate working conditions (less funding, staff, equipment, collegial and institutional support, and so forth) hinders people in their productivity simply for the obvious reason that it eats up time

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<sup>&</sup>lt;sup>6</sup> As already indicated, I wish to differentiate between the *threat* of a negative stereotype, that is, the general, more or less overt tendency to expect women to fail when it comes to certain tasks, which can find its expression, for example, in certain comments or jokes (that is, a *direct* effect of bias) and the *effects* that this threat might have on targeted people's thoughts and behavior (that is, *indirect* effects of this bias).

(Valian 1998, 263). This does not, however, seem to be the only reason for women academics' lower productivity; the other differences in women academics' working behavior cannot be attributed to time-consuming working conditions, and, thus, I wish to suggest that the *direct* effects of biases mentioned above entail *indirect* effects, that is, effects on the thoughts and behavior of targeted people. In other words, the point I wish to explicate here is that the direct effects of biases are likely to interfere with and deflate targeted people's confidence.<sup>7</sup> If the direct effects of social biases feed back into the way women (and members of other targeted groups) in academia work, this explains very adequately why these people differ from white male academics in certain aspects of their professional behavior.

For example, in a survey on the situation of women of color in STEM disciplines, all sixty women interviewed reported having encountered patterns of gender bias. In particular, 77 percent of the interviewed Black women and two-thirds of the other groups (mainly Latinas and Asian Americans) felt that they were confronted with what Williams, Hall, and Philips (2014) call "prove-itagain bias." This refers to the fact that "women often have to provide more evidence of competence than men in order to be seen as equally competent . . . [which] reflects the perceived lack of fit . . . between being a woman and being a scientist" (Williams, Hall, and Philips 2014, 3). That women scientists feel they must provide such an extra proof of competence is an outstanding example of the effects of stereotype threat (that is, an indirect effect of gender bias) or, as Liam Kofi Bright puts it, of an "internalized negative self-evaluation" (2017, 426).8

Similarly, in a huge empirical survey of 460 National Science Foundation postdoctoral fellows (99 women and 361 men) and 239 Nuclear Regulatory Commission postdoctoral associates (92 women and 147 men), Gerhard Sonnert and Gerald Holton found that women scientists in STEM disciplines tend to be less self-confident and more cautious, careful, detailed, and perfectionist in their methodological choices and in conducting their research than their male colleagues (Sonnert and Holton 1995, 152–53): "A woman stated that 'women are often more careful in their research and more hesitant to make statements until they feel they can really "prove" them.' . . . Some said they were perfectionists because they wanted to avoid failure or criticism" (Sonnert and Holton 1995, 152).

This finding was also confirmed by Virginia Valian's *Why So Slow?* (1998), in which Valian pointed out that gender-specific caution and perfectionism leads to women scientists submitting fewer articles and, consequently, amassing fewer publications than their male colleagues (Valian 1998, 262–

<sup>&</sup>lt;sup>7</sup> For discussions on related aspects of this hypothesis see also Antony (2012), Bright (2017), Dotson (2011b), Lee (2016), and Freeman (2017).

<sup>&</sup>lt;sup>8</sup> Stacey Goguen (2016) similarly argues that the effects of stereotype threat comprise not only the controversially discussed effect of underperformance in test situations that people generally link to stereotype threat but also, and maybe more importantly, more general patterns of behavior, such as disengagement and domain avoidance.

65, 275). She states that her discussion of women academics' constrained productivity "holds equally for any professional activity that requires initiative" (Valian 1998, 275). And there is indeed empirical evidence confirming this. For example, women academics tend to be particularly reluctant to participate in discussions at conferences and in the classroom (Valian 1998, 5; Haslett, Geis, and Carter 1992, 108; Hinsley, Sutherland, and Johnston 2017). Moreover, "more men than women described their overall scientific approach as creative (men: 27 percent; women: 12 percent)" (Sonnert and Holton 1995, 154). Given that women in academia seek to avoid any failures by means of exceptional industriousness, this may not seem very surprising, although "it runs counter to the common stereotype of women as more creative and men as more logical and analytical," as noted by Sonnert and Holton (1995, 154). Further, the thematic specializations with which women academics create "a quiet niche for themselves" could also be an indirect effect of biases, as "it may be structurally necessary for women operating in fields dominated by men to carve out niches in order to maintain a sense of autonomy and control" (Sonnert and Holton 1995, 151-52) And women's willingness to do less prestigious work could also be an indirect effect of biases, as it may come about in the face of the direct effects of biases they anticipate, leading them to find difficulty in being assertive and in refusing to take on duties of lesser prestige.

Thus, direct effects of biases, that is, material disadvantages, such as inadequate working conditions, as well as nonmaterial disadvantages, such as professional marginalization and devaluation, a hostile atmosphere, microaggressions, and stereotype threat, are likely to lead to indirect effects of biases, that is, to the identified differences between women and men academics' working behavior.<sup>9</sup>

Clearly, these indirect effects of biases are, again, in a relation of mutual reinforcement both with biases and with the direct effects of biases. For example, "a performance measure based chiefly on publication count may be biased against women" (Sonnert and Holton 1995, 154). The same holds for work of lesser prestige (Antony 2012, 235). Moreover, specific thematic areas in which women are overrepresented have become marginalized. Consider, for instance, the social sciences, in which authors face strong disadvantages when seeking to publish qualitative studies (Clemens et al. 1995; Adcock and Bevir 2010), or feminist science studies, which are discredited as being "anti-science," relativistic, and constructivist, indoctrinated by left-wing idiosyncrasies, or simply irrational (Lloyd 1996), or "soft" topics in philosophy. Philosophy is a thematically broad discipline concerned with a variety of different issues, from medieval aesthetics to the epistemology of quantum mechanics, but

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<sup>&</sup>lt;sup>9</sup> I assume that this trend can be found in all academic disciplines in which women are underrepresented, that is, with varying degree of severity in most academic disciplines. If this assumption holds true, submission rates, for instance, will be higher in disciplines in which women are less frequently confronted with gender bias and, thus, better represented. Unfortunately, I am not aware of any empirical studies relating to this hypothesis.

not every topic in the discipline carries the same prestige. There is a strong thematic hierarchy between an imputed core and a less prestigious periphery (Kitcher 2011), with women being more likely to pursue research on allegedly peripheral issues (Hutchison and Jenkins 2013; Haslanger 2008, 11–12). In fact, Philip Kitcher once told me that he had heard some areas, including ethics and aesthetics, referred to as "girly topics."

If this picture of direct and indirect effects of gender biases holds true, we are faced with a vicious circle: because of biases against women there are direct disadvantageous effects, which, in turn, lead to indirect disadvantageous effects: namely, lower research output and less confident research conduct. Such indirect effects then reinforce both the biases and their direct disadvantageous effects.

Finally, I wish to point out that some women may also react to experiencing gender bias not by behaving in an intimidated and less confident manner but, as a kind of backlash, by overcompensating, that is, by being especially dominant, assertive, and productive; thus, this can, in some cases, also be an indirect effect of biases. As Louise Antony (2012, 238–39) has pointed out, however, a woman academic who behaves in such a way will also experience sanctions in the form of social exclusion because she violates common gendered expectations (such as that women should be "deferential, pleasant, and supportive"). Thus, both kinds of reactions will ultimately be disadvantageous. Hence, Antony argues that this poses a real double bind.<sup>10</sup>

This problem seems to exist for women and other targeted groups in many academic disciplines: STEM disciplines, many parts of the social sciences, and also certain disciplines in the humanities, such as philosophy.

# 5. Conclusion

I have argued for the importance of broadening the focus from direct to indirect effects of (implicit and explicit) gender bias in order to gain a better understanding of why certain disciplines, including philosophy, have such a poor gender situation. I began with the recently widely discussed question of why women are significantly underrepresented as authors of articles in philosophical journals. Even though it is likely that (implicit and explicit) gender bias in philosophy leads to a systematic disqualification of the work from women philosophers, it is unlikely that gender bias plays a *direct* role in explaining the underrepresentation of female authors of articles. This is improbable because a number of journals have provided data that do not indicate any biases in the acceptance rates of

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<sup>&</sup>lt;sup>10</sup> One might suspect that women will face more disadvantages and miss more opportunities if they behave in a reluctant and self-conscious manner, and that the situation is, thus, not a classical dilemma, since one side is preferable to the other. A discussion of this point must, however, await future work.

philosophical journals but do reveal very low submission rates among women. Thus, the question arose: Why do women philosophers submit articles significantly less often than their male colleagues?

I continued to approach this question by pointing out that the working behavior of women academics from various disciplines—from many disciplines in the natural and social sciences as well as certain disciplines in the humanities, such as philosophy—characteristically differs from that of their male colleagues: they not only tend to submit their work to journals less often, they also end up doing work of lesser prestige more often and tend to focus on specific thematic fields. I argued that gender bias plays a crucial role in explaining this finding. As Leslie and colleagues (2015) have shown, the fact that there is a belief in "raw, innate intellectual talent" in those disciplines in which women and Blacks are underrepresented demonstrates that in these disciplines biases against specific social groups are widely shared, exerting specific pressure on members of these groups.

It has been well confirmed that social biases have a number of *direct* effects. In academia, such direct effects include discrimination of targeted people in their communities, marginalization and devaluation of their work, material and professional disadvantages in their careers, and stereotype threat. I have argued that these direct effects interfere with the confidence of members of targeted groups and have, therefore, various effects on their working behavior—the *indirect* effects of biases: that is, women academics in the respective disciplines tend to differ in their working behavior in the described ways; they tend to conduct their research especially cautiously, carefully, and reluctantly, to do low-prestige work more often, and to focus on thematic niches; moreover, they are hindered in their productivity due to "internalized negative self-evaluation" (Bright 2017, 426; see also Dotson 2011b; Freeman 2017; Lee 2016).

Finally, I stressed that the direct disadvantageous effects of biases against women as well as their indirect effects stand in a relation of mutual reinforcement, since, as a consequence of their behavior differing from men's, women then face even more biases and direct disadvantages, which, in turn, reinforce their different behavior yet again.

This vicious circle provides an explanation for the poor gender situation in many disciplines, including philosophy. While bias mechanisms directly cause many young women to leave academia, those remaining in their fields are likely to differ from men in their academic behavior. As a consequence, the disadvantages do not dissipate.

I do not claim that my analysis of the circle of direct and indirect effects of biases is exhaustive. I do, however, consider this circle to be a pivotal component of the mechanism of gender biases in many academic disciplines that warrants further research, as there is more ground to cover. For a start, it would be good—to stress this point one last time—to have more data from more philosophical journals, as the data would improve transparency and, thus, help us get an even clearer picture of how biases in academic philosophy work.

Next, it seems likely that social biases affect different disciplines and different people in different ways (Antony 2012; Dotson 2011a). For example, there are various underrepresented topics and social groups in philosophy, and sociologists provide the insight (stemming from Bourdieu) that a

lack of certain habitual norms leads to the exclusion of people of a nonacademic family background from academia. Intersectional effects resulting from the interaction of different group memberships (class, ethnicity, gender, race, and so on) may create social positions that constitute qualitatively novel forms of exclusion (Bright, Malinsky, and Thompson 2016; Dotson 2011a). More studies on different disciplines and intersectionality would certainly lead to a more fine-grained picture.

Lastly, there are probably important differences between career stages. It seems plausible, for instance, that gender biases affect women more strongly during their early careers. Students who experience being systematically disqualified are unlikely to persevere in the field and may not even reach the career stages in which journal and conference submissions are relevant. Thus, it is important to recognize that the, say, 21 percent of women who have gained tenured employment in academic philosophy are special in this respect. As Sonnert and Holton write of the women scientists in their survey: "Simply by becoming doctoral-level scientists, the women in our group do not fit the typical female pattern. Nonetheless, they differed from their male cohorts" (Sonnert and Holton 1995, 145). Indeed, some crucial differences seem to be that even these "atypical," persevering women tend to be excessively careful and reluctant regarding being both methodologically creative and bold in what they bring to discussion, doing work of lesser prestige more often, focusing on specific thematic areas, and submitting their work to journals substantially less often than their male colleagues.

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