

Implicit Bias, Stereotype Threat and Women in Philosophy¹

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Papers in this volume and elsewhere show that the number of women in professional philosophy is much lower than the number of men. However, this does not on its own show that there is a problem to be addressed by philosophers. It could be that women just don't like (or aren't good at) the sorts of reasoning philosophers engage in or the sorts of problems philosophers discuss, either as a result of their innate nature or as a result of their socialisation. If either of these is the case, then it's far from clear that *philosophers* should feel the need to do anything about women in philosophy. These hypotheses are very difficult to adequately study, and so difficult to decisively rule out.² Some move from this to the thought that we shouldn't try to do anything about women in philosophy since we don't *know* that these hypotheses are false.

I take this to be a mistake. The reason that I take it to be a mistake is that there is another hypothesis which we have good reason to believe is true. This hypothesis is that women's progress in philosophy is impeded by the presence of two well-supported psychological phenomena, implicit bias and stereotype threat. In this paper, I argue that we have good reason to take this to be true, and that this gives philosophers good reason to want to do something about the under-representation of women in philosophy—both for reasons of justice, and for the sake of philosophy. Moreover, there would be good

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² Though for some evidence against such generalisations, see Fine 2010 and Jordan-Young 2010.

reason to do this *even if* it were also true that there were some differences of the sort hypothesised by those who suggest that philosophers should not worry about women in philosophy.

By focussing on the phenomena that I discuss in this paper, I don't mean to suggest that bias as traditionally understood (e.g. the conscious belief that women are bad at maths) is a thing of the past. Unfortunately, it does still exist.³⁴ But the phenomena that I discuss here are less well-known, and they may also be more widespread.

1. Surprising Psychological Results

Here I will be focussing on two psychological phenomena: Implicit Bias and Stereotype Threat. The implicit biases that we will be concerned with here are unconscious biases that affect the way we perceive, evaluate, or interact with people from the groups that our biases “target”.⁵ Stereotype Threat is sometimes consciously felt but also sometimes unconscious⁶, and it concerns ways that a person's (awareness of their) own group membership may negatively affect their performance. So, in the case of women in philosophy, implicit biases will be unconscious biases that affect the way we perceive (for instance) the quality of a woman's work, leading us to evaluate it more negatively

³ Those who doubt this are invited to browse the blog www.beingawomaninphilosophy.wordpress.com.

⁴ Nor do I mean to suggest that biases are the only factors involved in the under-representation of women in philosophy. Other factors may well also play a role, like the gendered differences in intuitions suggested by Buckwalter and Stich (2010). Though also see Louise Antony's critique of this work (Unpublished MS).

⁵ One may also use the term 'implicit bias' in a more general way, to refer to unconscious associations more generally. Even in the more specific way that I am using the term here, implicit biases need not have negative effects: one might unconsciously associate groups with different flavours of ice cream without this having any negative effects. However, my focus here will be on implicit biases that may have negative effects.

⁶ Steele (2010) discusses both conscious and unconscious stereotype threat. For conscious stereotype threat, see for example his Chapter 5; for unconscious stereotype threat see for example his Chapter 7.

than it deserves; while stereotype threats may lead a woman to genuinely underperform in philosophy.

1.1 Implicit Bias

Psychological research over the last decades has shown that most people— even those who explicitly and sincerely avow egalitarian views— hold what have been described as implicit biases against such groups as blacks, women, gay people, and so on. This is true even of members of the ‘targeted’ group (See e.g. Steinpreis et. al. 1999, Vedantam 2005). So, for example, women as well as men are biased against women. These biases are manifested in, for example, association tasks asking subjects to pair positive and negative adjectives with black or white faces: most are much speedier to match black faces with negative adjectives than with positive ones.⁷ They are also, it has been argued, manifested in behaviour: studies have shown that those with anti-black implicit biases are less friendly to black experimenters and more likely to classify an ambiguous object in a black person’s hand as a gun while classifying it as harmless in a white person’s hand.⁸

Academics are clearly affected by implicit bias, even if (as seems likely) explicit commitments to egalitarianism are widespread. First take the case of journal submissions. Anonymous review⁹ is apparently only rarely practiced in ecology and evolution journals. But one such journal, *Behavioural Ecology*, recently decided to do it. They found that it led to a 33% increase in representation of female authors (Budden et. al.).

⁷ To take one of the tests, go to <<https://implicit.harvard.edu/implicit/>>. The Implicit Association Tests (IATs) are not without critics. See, for example, Blanton and Jaccard 2006. But see also the replies in Greenwald et. al. 2006 and Jost et. al. 2009. And note, as discussed in Jost et. al., that the IATs are represent just one paradigm for demonstrating the existence of implicit bias.

⁸ For an excellent overview of this research, see Jost et. al. 2009.

⁹ By ‘anonymous review’ I mean a process in which the author’s name is not made available to referees.

Next, take the case of CVs. It is well-established that the presence of a male or female name on a CV has a strong effect on how that CV is evaluated. This is true both inside and outside of academia. Philosophers have not specifically been studied, but we do know that those academics most likely to be aware of the existence of unconscious psychological processes—psychologists—exhibit just this bias. In Steinpreis et. al.’s US study, 238 academic psychologists (118 male, 120 female) evaluated a curriculum vitae randomly assigned a male or a female name. Both male and female participants gave the male applicant better evaluations for teaching, research, and service experience and were more likely to hire the male than the female applicant.

What data like these seem to show is that people-- including academics, including those with explicit egalitarian beliefs, and including those who are themselves women—more readily associate the sorts of traits valued in CVs and in articles with men than with women. Research indicates that traits like originality, excellence, leadership and intellectual ability seem to be more readily associated with men than with women (Valian 1999).

1.2 Stereotype Threat

Stereotype threat is a very different sort of phenomenon. Rather than affecting the way that members of a stigmatised group are *perceived or evaluated*, stereotype threat affects the way that members of that group actually *perform*. Victims of stereotype threat underperform¹⁰ on the relevant tasks because they are unconsciously preoccupied by fears

¹⁰ The term ‘underperformance’ may be a bit misleading, as using it could seem to involve a commitment to the idea that there is some *right* level of performance for each individual, that represents the truth about them. It should not read in this way. Instead, the idea is that some people face barriers that impede their performance. These people underperform in the sense that their performance is negatively affected by these barriers.

of confirming the stereotypes about their group—so preoccupied that they show elevated heart rate and blood pressure (Steele 119-20, 149). Rather tragically, the effect is strongest with those most committed to doing well in the area in question. Victims of stereotype threat are often, though not always, unaware of what is happening.¹¹

The effects of stereotype threat are dramatic. When in a threat-provoking situation, blacks perform worse than whites on standardised tests; girls perform worse than boys in maths; white people perform worse than blacks at sports (Steele 2010). But when the threat is removed, performance from the stigmatised group improves dramatically—often to the point of equality.¹²

Obviously, the notions of “threat-provoking” and “threat-removing” situations are incredibly important. Stereotype threat is likely to be provoked where one is from a group that is negatively stigmatised in a certain context, one is in that context, and one’s group membership is made salient. This can happen in many ways. For example, if you ask five to seven year old girls to colour in drawings of girls holding dolls before taking a maths test, their performance is significantly reduced (Steele 170). You can also provoke stereotype threat simply through visual reminders of their group’s under-representation (Steele 149). In some cases, one does not need to do anything to make the group membership salient enough to provoke stereotype threat— what’s difficult is coming up

¹¹ You may be wondering how psychologists could know that such victims of stereotype threat are preoccupied in this way, especially when the preoccupation is unconscious. Here’s one compelling experiment showing that they are. If you place black subjects in a situation that provokes stereotype threat for them (and it doesn’t take much to do this, as we’ll see), then ask them about musical preferences, they will choose music stereotyped as white at a higher rate than white subjects will. But if you place them in a situation that doesn’t provoke stereotype threat, they will choose music stereotyped as black (Steele 53). Clearly, *not confirming the stereotypes* is on their minds in the threat-provoking situations. For more, see Steele.

¹² It is actually to be expected (even by those who discount claims of biological difference) that performance wouldn’t always equalize. Stereotype threat isn’t, after all, the only manifestation of an unequal society. Racism, sexism and the like abound—as do their effects in the form of reduced income, reduced encouragement, lesser access to certain opportunities, and so on.

with ways to dissipate it. This is the case, for example, with blacks sitting tests that they take to be tests of intellectual ability (Steele 51). We will discuss “threat-removing situations” later, when we come to the topic of solutions.

2. Implicit Bias and Stereotype Threat in Philosophy

As we have seen, there is by now a well-established body of research in psychology showing that human beings are strongly influenced by a range of disturbing and often unconscious biases and dispositions related to categories like race, sex, age, disability, sexual orientation, etc. So far, there has been no empirical work on whether *philosophers* are influenced by these biases. But given that philosophers are human beings, it seems very likely that they are.

So what would one expect to find? The literature on implicit bias tells us that, if philosophers are like other human beings, including those in academia (See for example Steinpreis et al 1999, Valian 1999), we will find a range of unconscious biases against women that will affect behaviour in a variety of ways. Moreover, specific stereotypes about philosophy may lead to further biases. Both of these will be discussed in more detail below.

The literature on stereotype threat tells us that we would expect to find underperformance by those stereotypically taken to be less good at philosophy. There has been no direct empirical research on stereotypes about gender and philosophy, but there is very good reason to believe that philosophy is stereotyped as male. (As I write, however, I am in the process of conducting a study on this in collaboration with Sheffield psychologists, using an IAT for philosophy and gender.)

As other papers in this volume attest, feminist philosophers have long argued that there is a tradition in philosophy of associating reason, objectivity and philosophical thought with maleness and emotion, subjectivity and the non-philosophical with femaleness (see e.g. Haslanger, this volume). And although psychologists have not

studied philosophers' stereotypes of philosophy,¹³ they have extensively studied stereotypes of mathematics. Mathematics is strongly stereotyped as male (e.g. Nosek et. al. 2002), and it seems reasonable to suppose that Anglophone philosophy, with its heavy use of logic, will inherit this stereotype. (It is true that not all Anglophone philosophy makes heavy use of logic, but nonetheless logical competence is generally viewed as a necessary condition for success in the field: logic courses are widely required of both undergraduate and postgraduate philosophy students.)

It seems very likely, then that philosophers will display implicit bias against women and that women in philosophy will experience stereotype threat.¹⁴ (The literature¹⁵ on both these topics also tells us that people will often be unaware that either of these things are happening.) It would be very surprising, then, if these forces did not play a role in the under-representation of women in philosophy.¹⁶

I have sometimes heard it suggested that philosophers would not be subject to implicit bias against stigmatised social groups, due to their greater ability to be objective. Research has shown, however, that people systematically overestimate their own ability to be objective (Uhlmann and Cohen 2006). Even more importantly, it turns out that

¹³ The study I am currently involved with, noted above, is the one exception.

¹⁴ One might worry that accepting the existence of stereotype threat would commit one to the thought that women are actually performing less well than men at philosophy—so we shouldn't be worried by (for example) all-male conferences, since these simply reflect the fact that women are producing inferior philosophy. But there is no reason to suppose that the women in philosophy are producing work that is less good than that produced by the men in philosophy. In fact, given the likely effects of implicit bias, we might suspect just the opposite. However, stereotype threat is likely to mean that at least some women are performing less well than they otherwise might, and that women are likely to leave philosophy. I discuss other issues related to this point later.

¹⁵ E.g. Jost et. al. 2009, Steele 2010.

¹⁶ Sally Haslanger has also argued for this in her 2008.

being primed with objectivity (e.g. asked to tick a box rating one's own objectivity) increases susceptibility to gender bias in job applicant evaluation (Uhlmann and Cohen 2006). If that's right, then philosophers may be *especially* subject to implicit biases, rather than especially immune from them.

One might also object that philosophers are unlikely to hold the same sorts of views of women in philosophy as the public at large—after all, our views about philosophy are in general different from those in the broader population. The first thing to note is that this objection is only applicable to claims specifically about women in philosophy (e.g. that philosophy is stereotyped as male). Even if correct, it would have no bearing on the claim that philosophers are likely to make the same sorts of negative evaluations of women in general that other humans do. But I don't really see any reason to suppose that the objection is correct. Scientists, even women scientists, share the same sorts of biases about women in science that others do (Steinpreis et. al. 1999, Vedantam 2005). So it is reasonable to suppose that philosophers share the same sorts of biases about women in philosophy. If what I have argued here is right, these factors very likely contribute to the fact that women's representation in philosophy drops off as women work their ways through from undergraduate education to jobs in philosophy of various ranks.¹⁷ Below I show how they may combine to produce this effect.

2.1 Implicit Bias, Stereotype Threat and Women's Career Trajectories

A female philosophy student will probably be in the minority as a woman in her department, and she'll almost certainly be in the minority as a woman if she takes classes in the more stereotypically male areas like (for example) logic, language and metaphysics. As she continues on to higher levels of study, the number of women will be steadily diminishing. In any class she takes other than feminist philosophy, she's likely to encounter a syllabus that consists overwhelmingly (often exclusively) of male authors. The people teaching most of the classes are also very likely to be male. All of these factors calling attention to low numbers of women are known to provoke stereotype

¹⁷ See Beebee, Calhoun, Haslanger, this volume.

threat. Since stereotype threat has its strongest effect on the most committed students, this means that the most committed women are likely to underperform.

Those teaching undergraduates are human beings, and therefore susceptible to implicit bias. Whatever their egalitarian beliefs and intentions (and even if they are themselves women), they are likely to be affected by implicit biases that lead to more negative evaluations of women's abilities. (If it's right that philosophy is stereotyped as male, this will only be heightened.) What will this mean for their teaching? It's likely to mean that when they're drawing up their syllabus, the names that leap to mind as the best, most important authors will be male. As they conduct in-class discussions, they are likely to (unconsciously) expect better contributions from the male students. This may mean that they're more likely to call upon men.¹⁸ If grading is not anonymous, men are likely to be given higher grades than women for the same quality of work. Finally, if a teacher unconsciously associates men more easily with philosophical excellence they will be more likely to encourage men to major in philosophy and to go on to further work in philosophy after graduation. At the graduate level, supervisors may be more likely to encourage men to publish their work. Both graduate and undergraduate women are likely to get a weaker letter of reference than a similar man (Valian 2005: 201, Madera et. al. 2009).

Eventually, women philosophers will try to publish their work. As we have seen, implicit bias can affect the review of articles submitted for publication. If refereeing is not anonymous, women's work is likely to be evaluated more negatively than men's. Even if refereeing is anonymous, 81% of philosophy journals allow editors to see names as they make the initial cut of how many papers get sent out for review. And editors reject up to 65% of submissions at this stage (the mean rejection rate is 22%).¹⁹ If submissions are not anonymous to the editor, then the evidence suggests that women's work will probably be judged more negatively than men's work of the same quality.

¹⁸ This asymmetry is well-documented. See Bartky 1990: 91, Sadker and Sadker 1995.

¹⁹ Lee and Schunn 2010: 3.

Both stereotype and implicit bias may have strong effects on a woman's performance in the job market. CVs with women's names are likely to be seen as less good than CVs with men's names. As we have noted, letters of recommendation are likely to be weaker for women than for men. And women may well have had more trouble than men at getting publications. Women will also very likely face stereotype threat, often in the form of an overwhelmingly (or wholly) male team of interviewers adding to the stress of the already hideously stressful interview process.

Once a woman philosopher has managed to get a job, she will continue to experience the effects of implicit bias and stereotype threat in all the ways we have seen so far. But new aspects may also be added. Because women are more associated than men with interpersonal and helping skills, they're likely to be assigned more of the time-intensive student support and administrative/service tasks that tend to be poorly rewarded in terms of promotion.²⁰ This will take away from time that they could otherwise use for the research that could help them to obtain permanent jobs, tenure or promotion. Women's experiences as teachers are also likely to be different from men's. For example, a recent study (Goodyear et. al) suggests that they are more likely to encounter incivility in the classroom, ranging from sleeping or checking email to aggressive and bullying interruptions. Examples of such behaviour in philosophy are recounted in Superson (2002) and Hanrahan and Antony (2005). Here is one from personal correspondence with Louise Antony:

If students (or conference participants) challenge women more than they do men, women have to face choices that men do not, and these choices are likely to be double binds. So for example, when I taught a course to engineers that was usually taught by a male colleague, he advised me to brook absolutely no excuses for late papers, and to announce (as he always did) that students would simply be docked 5 points for every day late. When I found that I had over 40 late papers (in a class of 300+), and that many of them were so late they would have a failing grade before I even read them, I asked him what he did: did he disregard the

²⁰ See Link et. al. 2007; Misra et al. 2011.

announced policy, or did he let the chips fall where they may (leading to failing grades for quite a few students). His answer: that's never happened to me. Thus, he never had to face the dilemma of either undermining his own authority by not following his announced policy, or evoking the ire of 40 students in a class that didn't like you to begin with.

This behaviour, and the biases that produce it, is likely to also affect their teaching evaluation scores, which can be crucial for getting tenure. It can also affect whether they are chosen as supervisors, which can affect tenure and promotion prospects. If their first job is a temporary one (as it is increasingly likely to be), they will suffer all the effects of implicit bias and stereotype threat as they go on the job market again (and possibly again and again).

Women later in their careers will continue to experience many of the same problems. A new one, however, is that women at later stages may want (or need) to be taken seriously in leadership roles. They are likely to find this more difficult than men. In studies using actors trained to behave identically²¹, women in positions of leadership were judged far more negatively than men were—as “bossy and dominating” and less competent (Valian 131.)

One might speculate, however, that if a woman achieves success and security she will at least cease to suffer from stereotype threat. And it probably is true that stereotype threat will be reduced and perhaps even eliminated for some. But, sadly, it probably won't completely disappear for many. I am a full professor, with plenty of publications and a job I love in a fantastic department that I love—and where I feel completely at ease despite the fact that women are pretty poorly represented among permanent staff (2 out of 15). But this hasn't made me immune. I recently presented a paper at a department that had its own seminar room. Since they had their own seminar room, they'd decorated the

²¹ Interestingly, the actors didn't actually succeed in behaving identically. The non-actors in the experiments failed to pay attention to what the women leaders said, so the female leaders ended up having to speak more than the male leaders did.

walls by filling them with pictures of famous philosophers. I noticed immediately that every picture I saw was a man. (Apparently there was a lone woman, but she was behind me.) I also noticed that everyone in the audience was a man. Two women then arrived, but the room was still overwhelmingly male. As I gave the paper, I felt that it was going poorly. I found myself feeling nervous, stumbling over words, and answering questions hesitantly and poorly. While doing this, I was aware of it—and surprised, since I'd given the paper very successfully several times before. I knew enough about stereotype threat to realise that this was what I was experiencing. But unfortunately that awareness didn't keep it from happening. I now think of that room as The Stereotype Threat Room. And I did tell some department members—all of them lovely people who were very supportive of feminist philosophy—that perhaps they might want to add some women to the walls.

2.2 Motherhood

It's worth saying a little bit about the workings of bias with regard to motherhood, which of course might impact on women at any stage of their career. Shelley Correll and Stephen Benard (2007) have shown that there are very substantial biases against mothers in the workplace. Their study (of both undergraduates and employers in marketing and business) presented equivalent CVs with either male or female names, indicating parental status (through cues like "member of the Parent Teacher Association"). They found that mothers were less likely to be hired than other women, less likely to be judged as good candidates for promotion, judged to deserve lower salaries, considered less committed to their jobs and held to higher performance standards (including a lower tolerance for late arrival at work). Fatherhood did not have any negative impact on candidates, and in fact had a positive impact: Fathers were likely to be judged more committed to their jobs, offered a higher tolerance for late arrival and considered worthy of higher salaries than other men. If these effects carry over to philosophy, we would expect things to be much tougher for women philosophers who are also mothers. Given the under-representation of mothers in philosophy (and cultural associations of motherhood with emotion rather than reason), one would also expect mothers in philosophy to suffer from stereotype threat.

2.3 Other stereotyped groups

People do not belong to just one social group: some women are black, some black people are disabled, some white people are gay, and so on. Although women are under-represented in philosophy, they are far from being the most under-represented group. Blacks, Latinos and other ethnic minorities are severely under-represented, as are disabled people. All these groups will be subject to stereotype threat and implicit bias. Moreover, quite a lot of people will be subject to stereotype and implicit bias on the basis of more than one identity. Sometimes, one identity will be stigmatised and another not, in which case focussing on the non-stigmatised identity can at least sometimes be helpful for combating stereotype threat.²² But having more than one *stigmatised* identity will only magnify the implicit bias and the stereotype threat that one suffers.

2.8 Feedback Loops

It is important to note that all of these factors work together to create a kind of feedback loop. Women have trouble performing well and being fairly assessed when they are so under-represented. But it is very hard to fight the under-representation when women are being unfairly assessed and impeded in their performance. In short, the under-representation that underlies implicit bias and stereotype threat is *reinforced* by the implicit bias and stereotype threat that it helps to produce.

3. Why should philosophers care?

The sorts of problems posed by implicit bias and stereotype threat are ones that demand action from philosophers. Moreover, they demand action from philosophers simply on grounds of concern for either (a) fairness; or (b) philosophy, even philosophy as traditionally conceived. No particular concern for women, for

²² East Asian girls in the US can improve their performance on maths tests by colouring in pictures of chopsticks.

feminist philosophy, or even for enriching philosophy with a diversity of perspectives is needed in order to motivate action on the basis of these phenomena.

3.1 Fairness

It seems reasonable to assume that most philosophers believe that it is important to be fair. They want to give work the mark that it deserves, to hire the best candidate, to judge submitted papers on their merits, and so on. Anyone who cares about doing these things should be very concerned about implicit bias—since implicit bias may well be unconsciously preventing them from being fair in this way. Even if they somehow become assured that they are not personally being affected in this way, they probably also want to be a part of a profession that is fair in these ways. So they should care about reducing or eradicating the effects of implicit bias on philosophy.

Many philosophers also believe, in one form or other, in equality of opportunity. There is a lot of debate over what this means. Most proponents of equal opportunities believe that we need to equalize that which stems from people's circumstances, but we need not equalize that which results from, roughly, *who the person is*. The problem, of course, is how to draw this all-important distinction. It's clear that whether one has access to nourishing food in early childhood is a matter of circumstance, and that having such food is important for the physical and mental development needed to have any real opportunities in life. But it's far less clear what to make of inequalities resulting from differences in effort. Whether one is hard-working seems initially to be a matter of *who one is*, but of course this will have been shaped by one's circumstances— for example, the attitudes toward effort that prevail in one's family, or the prospects of success that one's society leads one to anticipate.

But the effects of implicit bias and stereotype threat are *not* difficult cases for the supporter of equal opportunities. First take the case of implicit bias. The literature on implicit bias shows us that the marks one will receive for a piece of work, or its likelihood of publication, are affected by the marker's or referee's implicit biases. A man and a woman of equal abilities, producing work that is equal in quality are likely to receive different marks and different referee reports. If this happens, the man is likely to have superior career opportunities. Because the variation is solely due to the assessor's implicit biases, there is no question that this is a failure of equal opportunity.

Now consider stereotype threat. This may at first seem like a trickier case, since stereotype threat will affect the actual performance of women, rendering it (in many cases) less good than it would otherwise be, and perhaps less good than men's. Consider the case of a female philosophy student who suffers from stereotype threat and a male philosophy student who does not. Suppose the woman and the man are equally philosophically talented (imagine for the sake of the example that we know what that means!). Suppose also that they are marked anonymously, so that the marker's implicit biases cannot influence the mark that they give. The woman may still get a lower mark than the man because the stereotype threat she suffers leads her to underperform and produce a piece of work which is less good than the man's, and less good than she is capable of producing. My contention is that this should be very worrying to the proponent of equal opportunities. Why? Because the woman's poor performance is due to her unequal circumstances. If she were in an environment that did not provoke stereotype threat—perhaps a department with lots of women, in classes where women authors were well-represented on the syllabus—she would perform just as well as the man. Again, we have a clear case of an inequality caused by circumstances, just the sort of thing proponents of equal opportunities should want to eliminate.

3.3 Benefits to Philosophy

One does not, however, have to care about either equal opportunities or fairness to think that something should be done about implicit bias and stereotype threat in philosophy. One only needs to care about philosophy. If implicit bias and stereotype threat are having the sorts of effects in philosophy that they have elsewhere, then women's work is being wrongly judged to be of lower quality than it actually is. This will lead to talented philosophers not being encouraged to continue, not getting grants, not getting jobs, not getting promoted, and not getting their work read. Moreover, talented and committed women philosophers are producing less good work than they otherwise would.

To get the best possible philosophy being done, we need the best philosophers to receive proper encouragement and good jobs, and to be working in environments where they can produce their best work. (See Helen Beebee's paper in this volume for a discussion of stereotype threat and drop-out rate.) Until we successfully do something about implicit bias and stereotype threat, this is not happening. The philosophy being produced is likely to be substantially worse than it would be in a fairer environment.

4. Remedies

So what should philosophers do to try to combat these problematic forces? The first thing to do is to note that one of the most widely used strategies—simply trying very hard to be unbiased—will do nothing to combat either implicit bias or stereotype threat. In fact, research shows that this may *increase* implicit bias (Stewart and Payne 2008: 1333).

4.1 Breaking Down Stereotypes

This does not mean, however, that nothing can be done. One set of remedies stems from realising that both stereotype threat and implicit bias stem in part from the existence of stereotypes about women, and about women in philosophy. Anything which can help to

break these stereotypes down, then, will help to alleviate the problem. A clear way to break down the stereotypes is to make sure that people are exposed to excellent women in philosophy. (Blair 2002, Kang and Banaji 2006). There are many ways in which this can be done: making sure to invite women speakers to departmental seminars and to conferences; including women in invited volumes; putting women philosophers' pictures up in departments and on websites; ensuring that reading lists include women philosophers.²³ These sorts of actions will help to break down stereotypes, but they will also help to overcome the effects of existing stereotypes. First, they will help to ensure that the work of excellent women is not overlooked, as it's likely to be due to implicit bias. Second, they will help to create a less stereotype threat-provoking environment.²⁴

Mazarin Banaji, one of the leading scholars of implicit bias, has described her own efforts to do this:

For example, when she was recently asked to help select a psychologist for an award, Banaji says, she and two other panelists drew up a list of potential winners. But then they realized that their implicit biases might have eliminated many worthy candidates. So they came up with a new approach. They alphabetically went down a

²³ Given the workings of implicit bias and the state of philosophy, it may be difficult to think of female names. However, there are many options that could be tried, including Google Scholar, the Philosophers' Index, and Phil Papers. A new web-based resource, Women's Works (<http://women.aap.org.au/papers/about/index.html>), aims to provide a database of suggested works by women especially suitable for undergraduate teaching.

²⁴ One study asked maths and science students to watch videos advertising a Maths, Science and Engineering Leadership Conference. In some videos equal numbers of men and women were depicted. In others, there were three men for every woman. Experimenters monitored heart rate, blood pressure and sweating. For men, none of these were affected by whether they saw a gender-balanced or unbalanced video. For women, all of these signs of stress were elevated by the gender-unbalanced video (Steele 149). Now think about the standard make-up of a philosophy conference, and reflect on the effects this might have on women philosophers. Bringing these conferences closer to balance could make an important difference

list of all the psychologists who were in the pool and evaluated each in turn (Vedantam 2005: 4).

Continuing along the same line of thought, it is also clear that it will be important and helpful to get more women into philosophy at every level in order to combat both implicit bias and stereotype threat. Exposure to counter-stereotypical exemplars reduces one's tendency to be implicitly biased, and seeing more women who are philosophers reduces stereotype threat for women in philosophy. It is all the more important to do this when one considers that the current low numbers are likely to be partially the *result* of implicit bias and stereotype threat. But this is far easier said than done, at least partly due to the working of implicit bias and stereotype threat. Hence, specific techniques are needed.

One very simple thing to do, at all levels, is to encourage women. Given the stereotypes of philosophy, women may need more explicit encouragement to think of themselves as good enough to go on in philosophy. This can take the form of simply encouraging those who are good at philosophy to continue: Monash university was able to increase (from around 20% to 50%) the number of women who continued on for an optional fourth year of philosophy simply by writing to *all* good students in the third year, encouraging them to continue. (This had the additional benefit of quadrupling the enrolment in the fourth year.)²⁵

Including women and encouraging women can also go hand in hand. Stereotype threat can be reduced by exposing people from stigmatised groups to narratives from other members of one's group who initially felt ill at ease, but then later became comfortable, and successful. These narratives of success *despite* adversity can help to show both that the problems can be overcome and that the problems were due to something other than lack of ability. It might be worth trying to put together a book of these narratives in philosophy, or a website. Further, women students can be told to remind themselves of these narratives before entering

²⁵ Personal communication from Rae Langton.

stressful situations. Research shows that “reminding women math students about strong women role models just before they took a difficult math test [eliminated] their typical underperformance on the test” (Steele 215).

When selecting graduate students or making hiring decisions, one should be aware of the ways that implicit bias may affect judgments. Many admissions and hiring committees have a commitment to improving gender balance, and perhaps even to choosing a woman over an equally qualified man—but implicit bias may well prevent them from seeing which women are equally qualified.²⁶ It is often thought that putting women on these panels will be enough to correct for bias, but this is insufficient: women may themselves be implicitly biased. What’s most important is to have people on hiring panels who know about implicit bias, and about techniques to keep it from wrongly disadvantaging candidates. Anyone can do this, with the right knowledge and motivation. I was once on a panel where someone reported having heard that a female candidate was a very difficult and prickly person. A male panel member was the one who pointed out that women tend to be categorised as difficult and prickly when they engage in behaviours that are considered perfectly normal for men—and that we should therefore discount this. A good brief introduction to implicit bias that everyone on a panel can easily read is “Reviewing Applicants: Research on Bias and Assumptions”, available here: <wiseli.engr.wisc.edu/docs/BiasBrochure_2ndEd.pdf>. It is important to note, though, that women on panels in sufficient numbers may help to reduce stereotype threat for applicants at interviews.

4.2 Blocking the effects of stereotypes

²⁶ There are some helpful suggestions here: <wiseli.engr.wisc.edu/docs/BiasBrochure_2ndEd.pdf>.

The remedies above are designed with the ultimate goal of undermining the stereotypes about gender and about philosophy that give rise to both stereotype threat and implicit bias. But another important kind of remedy is one that attempts to block the damaging effects of these stereotypes.

4.2.1 Anonymity

The most obvious such remedy is anonymising, where possible. Implicit bias has nothing to work with if the person whose work is being evaluated is anonymous (unless they otherwise indicate their sex, race, etc).

Student work can and should be marked anonymously, as far as possible. This is now pretty much universal in the UK, so it clearly can be done. This can readily be automated for institutions that use electronic submission. A quick, low-tech alternative, suggested by Clea Rees²⁷, is simply to have students put their identifying information on a cover sheet. Upon receipt of the essays, the marker can fold back the cover sheets of all essays before beginning to mark, thereby allowing the marker to avoid this identifying information until after grading is done. Obviously, in very small classes where drafts are read it is very difficult to obtain anonymity. But this is no reason not to try in other classes.

Journal submissions should be anonymous, both to editor and to referees. Anonymous refereeing is widespread. Anonymity to editor does require the involvement of either an assistant or some good software. But it seems worth doing, given the costs of implicit bias both to justice and to the profession. It is worth bearing in mind that this will correct for a wide range of biases, including racial

²⁷ Personal communication. Rees was not the originator of this idea, although she is not sure who was.

biases, biases against the less well-known, those with foreign names or low-prestige institutions and in favour of the famous.²⁸

4.2.2 Altering thought patterns that enhance the effects of stereotypes

It turns out that the pernicious effects of stereotypes—both in terms of implicit bias and in terms of stereotype threat-- are much stronger in people who hold the view that intellectual ability is a thing that people possess to some fixed degree. It helps to set members of stigmatized groups up for stereotype threat (Steele 168-169), because it then becomes very easy to worry about whether one lacks intelligence (just as, stereotypically, other members of one's group do). More generally, the view that traits are fixed makes one more prone to stereotype endorsement (Levy et. al. 1998), and to implicit bias. If intellectual ability is viewed as a more complicated set of abilities and skills, both of these problematic phenomena are reduced. And this latter view also has the benefit of being better-supported by the psychological literature (Steele 168-9).

I think this is an especially important point for philosophers to reflect on, because it seems to me that philosophers are very prone to claims regarding “who’s smart” and “who’s stupid”. I knew nothing of stereotype threat when I was in graduate school, but I do remember the terror I felt that I might someday be listed as one of the people who was “stupid” in the departmental lounge discussions. It could only be a good thing for the profession if philosophers stopped talking this way. (And this is so for reasons other than stereotype threat as well. Fear of being labeled “stupid” undoubtedly makes everyone more hesitant to try out a really new and

²⁸ Lee and Schunn (2010: 7) note that “a classic study found that when articles already published in highly prestigious psychology journals were resubmitted to the same journals, but under fictitious names with low-prestige institutions, nearly 90% were rejected.” But the decisions were justified (no doubt sincerely) as due to serious methodological flaws.

different idea, or to discuss one's work at an early stage, when it's still a bit inchoate but would really benefit from discussion.)

In addition, it is very likely that judgments of "who's smart" are affected by implicit bias. We've already seen plenty of reason to think that evaluative judgments are in general, but it seems likely to think that "smartness" judgments are especially susceptible to this. After all, they're judgments of what someone's capable of rather than their actual output: E.g. "He's really smart, but it just doesn't come through in his work" is a perfectly normal sort of thing to say. The same is true of the negative judgments: E.g. "She writes good papers, but that's just because she works so hard. I don't think she's really smart". The lack of sensitivity to actual results means that these judgments can be influenced *even more* by implicit biases.

Eric Schwitzgebel (2010) has written eloquently about the phenomenon of "seeming smart" in philosophy:

I have been collecting anecdotal data on seeming smart. One thing I've noticed is what sort of person tends spontaneously to be described, in my presence, as "seeming smart". A very striking pattern emerges: In every case I have noted the smart-seeming person has been a young white male....I would guess that there is something real behind that pattern, to wit:

Seeming smart is probably to a large extent about activating people's *associations* with intelligence...And what do people associate with intelligence? Some things that are good: Poise, confidence (but not defensiveness), giving a moderate amount of detail but not too much, providing some frame and jargon, etc. But also, unfortunately, I suspect: whiteness, maleness, a certain physical bearing, a certain dialect (one American type, one British type), certain patterns of prosody -- all of which favor, I suspect, upper- to upper-middle class white men.

It would seem to me, then, to be a good idea in many ways for philosophers to fore swear judgments of “who’s smart” and “who’s stupid”.²⁹

4.2.3

Another important way to block the effects of stereotypes is to create stereotype-threat reducing situations. We have already seen some ways of doing this: including more women (which also undermines the stereotypes) is an important method. But in addition there are some remedies directed specifically at stereotype threat that have been shown to make a difference. For example, reminding students—or oneself—that anxiety experienced may be the result of stereotype threat (Johns et al. 2005) has been shown to reduce the effects of stereotype threat. In addition, focusing on one’s membership in groups that are not negatively stereotyped (e.g. those that have been accepted to a top PhD programme) can reduce stereotype threat (Steele 2010: 170). Further interventions can be found at reducingstereotypethreat.org.

4.3 Raising awareness

A longer-term, yet important remedy is to raise awareness of implicit bias and stereotype threat amongst philosophers. It is only by implementing this remedy that philosophers will begin to understand these phenomena and work to overcome their influence. The picture of bias that seems to prevail among philosophers is the traditional one, on which (a) there are some very bad racist and sexist people who hold explicitly biased beliefs (e.g. “women aren’t good at reasoning”); and (b) those who hold explicitly egalitarian beliefs don’t need to worry about being biased. As long as this picture prevails, implicit bias cannot be fought in the ways that it needs to be fought, because people believe that their genuinely-held egalitarian beliefs mean that they are not biased. Philosophers need to become aware that good people who sincerely hold egalitarian beliefs may still be unconsciously biased.

²⁹ On this topic, see also Beebee and Brennan, this volume.

I think it is also important to abandon the view that all biases against stigmatised groups are *blameworthy*. My first reason for abandoning this view is its falsehood. A person should not be blamed for an implicit bias that they are completely unaware of, which results solely from the fact that they live in a sexist culture. Even once they become aware that they are likely to have implicit biases, they do not instantly become able to control their biases, and so they should not be blamed for them. (They may, however, be blamed if they fail to act properly on the knowledge that they are likely to be biased— e.g. by investigating and implementing remedies to deal with their biases .)

My second reason is far more practical. What we need is an acknowledgement that we are all likely to be implicitly biased—only this can provide the motivation for what needs to be done. If acknowledging that one is biased means declaring oneself to be one of those bad racist or sexist people, we cannot realistically expect the widespread acknowledgement that is required. Instead, we'll get defensiveness and hostility. It's worth noting, though, that disassociating implicit bias and blame does not mean failing to insist that implicit bias is *bad*. It clearly is, and it is important to insist on this—even while insisting (accurately, it seems to me) that we should not be blamed for our implicit biases.³⁰

4.2.8 Experiment

We don't know yet what will work in philosophy to combat implicit bias and stereotype threat. I've offered some suggestions, but they are only that: suggestions. And there are undoubtedly many more things that one might try. Fortunately, many of the strategies are fairly simple to implement, so uncertainty about their prospects for success shouldn't deter people from trying. For example, after reading a draft of this paper Helen Beebee has decided to discuss stereotype threat at the beginning of

³⁰ For a fuller discussion of blame and implicit bias, see Kelly and Roedder 2008.

her logic classes at Birmingham University, since that's one place stereotype threat is especially likely to arise. Jules Holroyd and Adam Caulton have included information on implicit bias and stereotype threat in the guidance given to Directors of Studies at Cambridge University. Dan Egonsson (University of Lund, Sweden) has decided to preferentially call on women students, even if men raise their hands first.³¹ Heather Kuiper, a PhD student at McMaster University, has suggested starting exams with a question that happens to refer to a woman philosopher.

Philosophers need to inform themselves about these phenomena, then try out techniques to combat them. And then we need to discuss what works and what doesn't work.³²

5. Conclusion

We really should not be surprised that women continue to be under-represented in philosophy. Until very recently, women had very little real chance to engage in philosophy. That legacy of exclusion—combined with a cultural view of women as creatures of emotion rather than reason—helped to generate stereotypes that make it far more difficult for women to succeed in philosophy. The literature on implicit bias and stereotype threat show us that such stereotypes affect both how women perform and how such performances are evaluated. If what I have argued here is correct, these stereotypes are harming women by denying them fairness and equality of opportunity in philosophy. And they are harming philosophy by causing inaccurate evaluations of philosophical work and philosophers and by impeding women's ability to do the best philosophical work that they can—which causes philosophy as a field to be less good than it otherwise might be. Barring the discovery that philosophers have some rare immunity to the biases and influences

³¹ Cheshire Calhoun's paper in this volume also suggests some strategies to try.

³² One thought might be for people to send information about their real-life experiments to the Feminist Philosophers Blog, which has been doing a lot of work on implicit bias and stereotype threat both in general and in philosophy (www.feministphilosophers.wordpress.com).

that affect others, I think we have good reason to believe that this is in fact happening. The question now is what to do about it. I have offered some suggestions above. But perhaps the most important point is the simplest: that philosophers need to start discussing this problem.

There is good reason to hope that such efforts will make a difference. One reason for thinking this is that implicit bias and stereotype threat are incredibly important forces that have only recently begun to be understood. It's not the case that we've been trying for decades and failing—we're only just beginning to try, and the literature shows us that small interventions can have large effects. Another reason for hope is that we have already seen this happen: In 1995, C. Wenneras and A. Wold performed a landmark study of Swedish scientific grant awards. It showed that women needed to be 2.5 times as productive as men to get grants. This study got a huge amount of attention in 1995 and even more in 1997, when they published their results in *Nature*. As a result of the 1995 results, procedures were changed, and what is now called The Wold Effect occurred: the gender gap vanished. Change is possible.

References

- Antony, L. "Different Voices or Perfect Storm—Why Are There So Few Women in Philosophy?", Unpublished MS.
- Bartky, S. 1990. *Femininity and Domination*, NY: Routledge.
- Blair, I. 2002. "The Malleability of Automatic Stereotypes and Prejudice", *Personality and Social Psychology Review*, 3: 242-261.
- Blanton, H. and Jaccard, J. 2006. "Arbitrary Metrics in Psychology", *American Psychologist* 61: 1, 27-41.
- Budden, A., Tregenza, T., Aarssen, L., Koricheva, J., Leimu, R. and Lortie, C. 2008. "Double-Blind Review Favours Increased Representation of Female Authors", *Trends in Ecology and Evolution* 23:1, 4-6.
- Buckwalter, W. and Stich, S. 2010. "Gender and Philosophical Intuition: Why Are There So Few Women in Philosophy?", talk given at *Society for Philosophy and Psychology*, Portland, OR.
- Calhoun, C. 2009. "The Undergraduate Pipeline Problem", *Hypatia* 24: 2, 216-223.
- Correll, S. and Benard, S. 2007. "Getting a Job: Is There a Motherhood Penalty?", *American Journal of Sociology* 112: 1297-1338.
- Goddard, E. 2008. "Improving the Position of Women in the Philosophy Profession", <<http://aap.org.au/women/reports/index.html#Ausreports>>
- Goldin, C. and Rouse, C. 2000. "Orchestrating Impartiality: The Impact of "Blind" Auditions on Female Musicians", *The American Economic Review*, 90:4, 715-741.
- Goodyear, R., Reynolds, P. and Gragg, J. 2010. "University Faculty Experiences of Classroom Incivilities: A Critical Incident Study", paper presented to American Educational Research Association.
- Greenwald, A., Rudman, L., Nosek, B., and Zayas, V. 2006. "Why So Little Faith? A Reply to Blanton and Jaccard's (2006) Skeptical View of Testing Pure Multiplicative Theories", *Psychological Review* 113: 1, 170-180.
- Hanrahan, R. and Antony, L. 2005. "Because I Said So: Toward a Feminist Theory of

Authority”, *Hypatia* 20: 4, 59-79.

Haslanger, S. 2008. “Changing the Ideology and Culture of Philosophy: Not By Reason (Alone)”, *Hypatia* 23: 2, 210-223.

Johns, M., Schmader, T., Martens, A. 2005. ‘Knowing is Half the Battle: Teaching About Stereotype Threat As a Means of Improving Women’s Math Performance’, *Psychological Science* 16:3, 175–9.

Jost, J.T., Rudman, L.A., Blair, I.V., Carney, D., Dasgupta, N., Glaser, J. & Hardin, C.D. (2009). The existence of implicit bias is beyond reasonable doubt: A refutation of ideological and methodological objections and executive summary of ten studies that no manager should ignore. *Research in Organizational Behavior*.

Kang, J. and Banaji, M. 2006. “Fair Measures: A Behavioral Realist Revision of ‘Affirmative action’”, *California Law Review* 94: 1063-1118.

Kelly, D. and Roedder, E. 2008. “Racial Cognition and the Ethics of Implicit Bias”, *Philosophy Compass* 3:3, 522-540,

Lane, K. A., Kang, J. and Banaji, M. 2007. “Implicit Social Cognition and Law”, *Annual Review of Law and Social Science* 3: 427-51.

Lee, C. and Schunn, C. 2010. “Philosophy Journal Practices and Opportunities for Bias”, *APA Newsletter on Feminism and Philosophy*.

Levy, S., Stroessner, S., and Dweck, C. 1998. “Stereotype Formation and Endorsement: The Role of Implicit Theories”, *Journal of Personality and Social Psychology* 74: 6, 1421-1436.

Link, A., Swann, C., and Bozeman, B. 2008. “A Time Allocation Study of University Faculty”, *Economics of Education Review* 27: 363-374.

Madera, J., Hebl, M., and Martin, R. 2009. “Gender and Letters of Recommendation for Academia: Agentic and Communal Differences”, *Journal of Applied Psychology* 94: 6, 1591-1599.

Misra, J., Lundquist, J. H., Holmes, E. and Agiomavritis, S. ‘The Ivory Ceiling of Service Work’, *Academe Online* January-February 2011: <<http://www.aaup.org/AAUP/pubsres/academe/2011/JF/Feat/misr.htm>>.

- Miyake, A., Kost-Smith, L., Finkelstein, N., Pollock, S., Cohen, G., and Ito, T. 2010. "Reducing the Gender Achievement Gap in College Science: A Classroom Study of Values Affirmation", *Science* 330: 1234-1237.
- Nosek, B., Banaji, M., and Greenwald, J. 2002. "Math = male, me = female, therefore math \neq me." *Journal of Personality and Social Psychology*, 83, 44-59.
- Rowe, M. 2008. "Micro-Affirmations and Micro-Inequities", *Journal of the International Ombudsman Association* 1:1. (Also available at <http://web.mit.edu/ombud/publications/micro-affirm-ineq.pdf>.)
- Sadker, M. and Sadker, D. 1984. *Failing at Fairness: How America's Schools Cheat Girls*, New York: Touchstone Press
- Sandström, U., Hällsten, M. 2008. "Persistent nepotism in peer-review", *Scientometrics* 74: 175-189.
- Schwitzgebel, E. 2010. "On Being Good at Seeming Smart", <http://schwitzsplinters.blogspot.com/2010/03/on-being-good-at-seeming-smart.html>.
- Solomon, M. and Clarke, J. 2009. "CSW Jobs for Philosophers Employment Study", *APA Newsletter on Feminism and Philosophy* 8: 2, 3-6.
- Steele, C. 2010. *Whistling Vivaldi: And Other Clues to How Stereotypes Affect Us*, Norton.
- Steinpreis, R., Anders, K., and Ritzke, D. 1999. "The Impact of Gender on the Review of the Curricula Vitae of Job Applicants and Tenure Candidates: A National Empirical Study", *Sex Roles*, 41: 7/8, 509-528.
- Stewart, B. D. and Payne, B. K. 2008. "Bringing Automatic Stereotyping Under Control: Implementation Intentions as Efficient Means of Thought Control", *Personality and Social Psychology Bulletin*, 34: 1332-1345.
- Superson, A. 2002. "Sexism in the Classroom", in Superson, A. and Cudd, A., *Theorizing Backlash: Philosophical Reflections on Resistance to Feminism*, Oxford: Rowman and Littlefield, 201-213.
- Uhlmann, E. and Cohen, G. 2007. "'I think it, therefore it's true': Effects of self-perceived objectivity on hiring discrimination", *Organizational Behavior and Human Decision Processes*, 207-223.

- Valian, V. 1999. *Why So Slow? The Advancement of Women*. Cambridge, MA: MIT Press.
- Valian, V. 2005. "Beyond Gender Schemas: Improving the Advancement of Women in Academia", *Hypatia* 20:3, 198-213.
- Vedantam, S. 2005. "See No Bias", *Washington Post* 21 January, accessed at <
<http://www.washingtonpost.com/wp-dyn/articles/A27067-2005Jan21.html>>
on 29 July 2010.
- Vest, C. 1999. "Introductory Comments", in *A Study on the Status of Women Faculty in Science at MIT*.
- Wenneras, C. and Wold, A. 1997. "Nepotism and Sexism in Peer Review", *Nature* 341-343.
- Women in Science and Engineering Leadership Institute. 2006. "Reviewing Applicants: Research on Bias and Assumptions",
<wiseli.engr.wisc.edu/docs/BiasBrochure_2ndEd.pdf>.