Unconscious Influences and Women in Philosophy

There is by now a well-established body of research in psychology showing that human beings are strongly influenced by a range of unconscious biases and dispositions related to categories like race, sex, age, disability, sexual orientation, etc. So far, there has been little to no empirical work on whether *philosophers* are influenced by theses biases. But given that philosophers are human beings, it seems very likely that they are. My goal in this paper is to explore the effects these biases may be having in philosophy with respect to women, and to propose and explore some remedies philosophers could implement. In Part One, I review some of the main findings from the empirical literature. In Part Two, I show how these findings may apply to philosophy. In Part Three, I argue that philosophers should want to do something about this situation. And in Part Four, I explore possible remedies.

My focus on unconscious bias is not due to a belief that conscious bias is a thing of the past. Unfortunately, it does still exist. But unconscious bias is a far more widespread phenomenon, yet a far-less well-known one. It is especially important to discuss because it is something that even the best-intentioned among us are prone to. Study of unconscious bias reveals that even those with very strong conscious commitments to equality may be unconsciously helping to perpetuate a situation of inequality. Most philosophers do have strong conscious commitments to equality. But the research on

¹ Nor do I mean to suggest that biases are the only factors involved in the underrepresentation of women in philosophy. Other factors may well also play a role, like the gendered differences in intuitions suggested by Buckwalter and Stich (2010).

unconscious bias shows us that this is not enough: we also need to tackle what is happening at an unconscious level.

1. Unconscious Influences

There is a substantial psychological literature showing that human beings are prone to *unconscious* biases that play a significant role in how we evaluate people, how we evaluate their work, and how we interact with them. Sometimes these effects are individually small but cumulatively they can have an enormous impact that serves to disadvantage members of certain groups such as women, racial and religious minorities and disabled people— to name just a few.²

I will divide my discussion of unconscious influences into two categories—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". Stereotype Threat is equally unconscious, but 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 biases that affect the way we perceive (for instance) the quality of a

² For an overview of these effects on women in academia, see Valian 1999.

³ 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.

woman's work, leading us to evaluate it more negatively 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.) 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. (If you haven't already, do try some of the tests at https://implicit.harvard.edu/implicit/>. Be prepared to be disconcerted.) They are also, it has been argued, manifested in behaviour: studies have shown that those with antiblack 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.

One key idea that is helpful in understanding the working of implicit bias is that of a schema: "A schema is a mental construct that, as the name suggests, contains in schematic of abbreviated form someone's concept about an individual or events or a group of people or events" (Valian1999: 103). Haslanger writes that "Schemas work somewhat like hypotheses in that "they give rise to expectations. They interpret

⁴ For an excellent overview of this research, see Jost.

behavior in ways that are consistent with the schema rather than inconsistent with it. They supply explanations where data are missing or ambiguous. They direct the search for new information...However, schemas are often more primitive than hypotheses and are more like a patterned set of dispositions in response to one's circumstances. Schemas are also typically intersubjective in a way that an individual's hypothesis is not" (Haslanger 212). Schemas themselves are not necessarily a problem. But they can give rise to problems in certain situations, as when they cause us to systematically misjudge groups of people.

Most academics hold egalitarian explicit beliefs. Yet we may nonetheless be influenced by unconscious schemas that are not so egalitarian in their effects.⁵ Consider the following:

Women's journal submissions

Research on anonymous refereeing shows fairly clearly that biases play a role in evaluating work. Anonymous review⁶ 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.).

Women's CVs

⁵ A very dramatic illustration of this from outside academia is the rise in women musicians being hired for orchestras once auditions began taking place behind screens (Goldin and Rouse 2000).

⁶ By 'anonymous review' I mean a process in which the author's name is not made available to referees.

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.

A schema-based explanation of this would turn on the thought that professional excellence (or ability, or attainment) is a better fit with the schema for *man* than with that for *woman*, making it natural for academics (even those with egalitarian beliefs) to evaluate the women more negatively than the men. Unconscious associations affect behaviour, including how members of the field (both men and women) expect women to fare, how they advise women, how they evaluate women's work, what tasks women are assigned, etc. (Haslanger 2008, Valian 1999, 2005).

These sorts of effects add up. So do less quantifiable differences in behaviour, such as (to name a few possible examples) a tendency to call on male students rather than female ones, expectations regarding who will find logic easy, whether an early-career hire is given lots of time-intensive pastoral duties or lots of research time, and so on. Taken

together, even small effects can create large disparities. The power of all of this is now coming to be widely accepted in the sciences. The MIT Gender Equity Project, for example, examined the experiences and treatment of women faculty in an effort to understand the gender imbalances at MIT. What they found was an enormous range of small inequities (now known as "micro-inequities") that cumulatively added up to serious barriers for women at MIT. Some were very easily quantifiable, such as less square footage of lab space. Others were less so, such as being left out of informal networks. The President of MIT, Charles M. Vest, concluded: "I have always believed that contemporary gender discrimination within universities is part reality and part perception. True, but I now understand that reality is by far the greater part of the balance" (Vest 1999).

There has also been a great deal of research on how to combat implicit bias. This research shows very clearly that a deliberate, conscious efforts to avoid bias by e.g telling oneself not to be biased don't work. Several studies even suggest that this can increase implicit bias (Stewart and Payne 1333). It also shows that one common strategy—making sure that members of stigmatised groups are involved in hiring decisions where one wants to increase the representation of that group *doesn't work*. Members of stigmatised groups may well (unconsciously) share the attitudes toward their

⁷ For an excellent discussion of micro-inequities, see Rowe 2008.

⁸ Some research has shown that the formation of very specific *implementation intentions*, such as "If I see Jane, I will ignore her gender" or "If I see a black man, I will think *safe*" can be effective (Stewart and Payne 2008). These, however, are quite different from a general intention to be unbiased, which does not work. More research needs to be done on exactly what implementation intentions do and don't work.

group found in society, so they can't be relied on to lend a less biased perspective (See e.g. Lane et al. 434, which shows a particularly high level of unconscious biases regarding women from *women* participants; also Valian 2005).

So what does work? Where it is possible, anonymising works. It's very difficult for a bias against some group to affect one's decision-making if one doesn't know which people are members of that group. Another thing that works is *exposure to counterstereotypical exemplars*—members of the stigmatised group who very clearly don't fit the negative stereotype. Interestingly, even spending five minutes *imagining* such people can work (Blair 2002: 249). But the effects are stronger still if one gets to actually interact with counterstereotypical exemplars. The importance of counterstereotypical exemplars has led some legal researchers to argue that implicit bias provides a new rationale for affirmative action: counterstereotypical examplars act as "de-biasing agents", who help *all* of those around them to overcome their implicit biases, leading to more accurate judgments (Kang and Banaji 2006). 9

1.2 Stereotype Threat

Stereotype threat is a very different sort of unconscious 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 underperform on the relevant tasks because they are unconsciously

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⁹ More traditional justifications focus on their capacity to act as role models for the stigmatised group, which is very different.

preoccupied by fears 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.

You may be wondering how psychologists could know that such victims are unconsciously preoccupied in this way. Here's one compelling experiment showing this. 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.

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. But when the threat is removed, performance from the stigmatised group improves dramatically—often to the point of equality. ¹⁰

¹⁰ 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.

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 with ways to dissipate it. This is the case, for example, with blacks taking academic tests.

So how does one remove stereotype threat? Steele and his colleagues found several effective strategies. One slightly disturbing but very effective way is to remind subjects of a competing stereotype. East Asian girls who were induced to focus on being Asian (colouring in a picture of chopsticks) performed dramatically better on maths tests (Steele 92-3). But the more general strategies are really the most interesting ones. One very general strategy that worked was to tell black students that the test they were about to take was not a test of ability but rather one designed to help scientists better understand problem-solving (Steele 51). Another was to tell subjects that women and men were known to perform equally well on the test (Steele 38-40). But those strategies just cover specific tests. Steele and his colleagues have also found that some interventions can have long-term threat-dissipating effects. These include such things as having subjects reflect

 $^{^{11}}$ In the US at least, East Asians are stereotypes as good at maths.

on data showing that intellectual ability is not a fixed entity for each individual, but rather something that can be shaped and developed through one's chosen activities (Steele 168-169); and exposing beginning university students to narratives from members of their group describing how they initially felt ill at east but then thrived (165-166). Finally, stereotype threat is (unsurprisingly) reduced as a group becomes less under-represented (Steele 134-137).

2. Unconscious influences in Philosophy

Given that philosophers are human beings, it's pretty safe to assume that we're susceptible to all of these well-confirmed phenomena. 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, we will find a range of biases against women that will affect behaviour in a variety of ways (discussed 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. Sally Haslanger (213) writes:

As feminist philosophers have been arguing for decades, the familiar dichotmies with which Anglophone philosophy defines itself map neatly onto gender dichotomies—rational/emotional, objective/subjective, mind/body; ideals of philosophy—penetrating, seminal, and rigorous; and what we do—

attack, target, and demolish an opponent, all of which frame philosophy as masculine and in opposition to the feminine.

Anglophone philosophy also makes heavy use of logic, and mathematics is strongly stereotyped as male (see e.g. Nosek et. al. 2002). Haslanger suggests that the schemas for *woman* and *philosopher* clash, and this seems likely to be correct.

It seems very likely, then that philosophers will display implicit bias against women and that women in philosophy will experience stereotype threat. ¹³ (The literature on both these topics also tells us that people will almost certainly 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. And we would expect to find that these effects continue unless we do something to combat them. ¹⁴

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

¹² Interestingly, most people do not explicitly endorse this stereotype. But tests of unconscious biases show that it has considerable force below the level of consciousness.

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.

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

to be objective. Even more importantly, it turns out that 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 the schemas for *woman* and *philosopher* clash). Even if correct, it would have no bearing on the claim that philosophers are likely to make 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 (Vedantam 2005). So why shouldn't philosophers share the same sorts of biases about women in philosophy?

What roles are these unconscious phenomena likely to be playing in philosophy? One way to work through this is to think about various phases of one's career. Although some of these effects may be small ones, they may cumulatively produce a much stronger effect. 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. ¹⁵

2.1 Undergraduate career:

An undergraduate woman in philosophy will probably be in the minority as a woman in her department ¹⁶, 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. 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

¹⁵ Preliminary results from the British Philosophical Association Newsletter, 2010: Women are 45% of undergraduate students in philosophy, 35% of MA students, 30% of PhD students accepted, 23% of lecturers (equivalent to assistant professor), 27% of senior lecturers and 15% of professors (equivalent to full professor). The UK shows quite a good representation among undergraduates, which steeply declines at MA/PhD level then steadily declines through the ranks. The US is different: In the US, there's no real drop between BA and PhD, but that's because the percentage at these levels—29-30.8% is pretty much the same as the UK level for PhDs (Solomon and Clarke 2009: 4). One thing this shows is that merely raising levels of BA students won't fix the problem. But it also raises the interesting question of why the US should be so different. My guess is that it has to do with differences in how degrees are chosen. In the US, students choose their BA majors after at least 2 years of shopping around, which gives plenty of time for stereotype threat to set in. In the UK, they choose degrees at their time of application to university. At this point, most students have never had a philosophy class. Most commonly, they have been exposed to philosophy through Religious Education and Religious Studies classes (these cover comparative religions and ethics). Religious Education is not gender-stereotyped. So the maleness of philosophy is something that UK students do not discover until they have already started on their degrees. (It is harder to compare the Australian data with the US and UK, since students in Australia do not specialize in the same way that students in the US and UK do, but see Goddard 2008 for the Australian figures.)

 $^{^{16}}$ This varies a bit by country, as noted in footnote 15.

threat. Since stereotype threat is known to have a very negative 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. (This will only be heightened if it's right that the schema for *philosopher* clashes with that for *woman*, as seems likely.) 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're likely to (unconsciously) expect better contributions from the male students. This may mean that they're more likely to call upon men. It may also mean that a man's somewhat confused comment is more likely to be taken as a grappling after something interesting and original, while a woman's is viewed as a far less interesting confusion. If marking is not anonymous, men are likely to be given higher marks than women for the same quality of work (in the UK, undergraduate marking is usually anonymised. In the US this is almost unheard-of.) Finally, if the lecturer 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. If the woman does decide to continue on, she is likely to get a weaker letter of reference than a similar man (Valian 2005: 201).

2.2 MA/PhD

If a woman continues on to graduate work in philosophy, she is likely to find herself in an even smaller minority as a woman. Once more, the readings she is directed toward and examined on (if she has qualifying exams) are likely to be overwhelmingly male. Stereotype threat is likely to be felt even more strongly, due to reduced numbers of women and to greater pressure: anecdotally, many women who had no trouble participating in discussion as undergraduates have reported feeling unable to speak in graduate school. Again, males are likely to be called on more, assumed to be making better points and to gain higher marks and more praise/encouragement. Women at this stage are also likely to be trying to get publications. Men may be given more encouragement during this process. But implicit bias can also 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%). 17 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 at this stage.

¹⁷ Lee and Schunn 2010: 3.

2.3 Job Market

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. 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, as noted above. Women will also 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.

2.4 Early Career

Women will continue to experience the negative effects of implicit bias as they submit papers to journals that do not practice anonymous review and editing. They will continue to experience stereotype threat as they settle into their first job(s) in departments that are likely to have overwhelmingly male faculty. But they will also experience some new effects of unconscious associations. Because women are more associated than men with interpersonal and helping skills, they're likely to be assigned more of the time-intensive (and emotionally wearying) student support tasks that tend to be poorly rewarded in terms of promotion (Valian PAGE). 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 an Antony (2005). This behaviour, and the

biases that produce it, may well also affect their teaching evaluation scores, which can be crucial for getting tenure. If their first job is a temporary one (as it's 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).

2.5 Later Career

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 to be taken seriously in leadership roles. They are likely to find this more difficult than men. In studies using actors trained to behave identically 18, women in positions of leadership were judged far more negatively than men were—as "bossy and dominating" and less competent (Valian 131.) This undoubtedly also plays a role in the problems that women experience as teachers of philosophy, mentioned in the last section.

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

¹⁸ 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.

had its own seminar room. Since they had their own seminar room, they'd decorated the 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.

2.6 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 have shown that there are very substantial biases against mothers in the workplace. Their study 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 (especially though not exclusively at the student levels), one would also expect mothers in philosophy to suffer from stereotype threat.

2.7 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 underrepresented 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 (as in the case of East Asian girls doing maths), in which case focusing on the non-stigmatised identity can at least sometimes be helpful for combating stereotype threat. 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?

There are quite a few reasons why philosophers should care about the effects of implicit bias and stereotype threat on women in philosophy.

3.1 Fairness

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 class 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.
- Talented and committed women philosophers are producing less good work than they otherwise would. (Recall that stereotype threat has its strongest effects on the most committed.)

Both of these effects will be reducing the quality of philosophy that is being done. 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. 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? Let's begin by setting aside some popular, well-intentioned remedies that won't address the problem.

4.1 What won't work

4.1.1 Put a woman on a hiring committee to combat bias

Many people suppose that hiring committees will be less biased if they contain members of stigmatized groups—so, for our purposes, a woman. But as far as implicit bias goes, there is no reason to believe that this would be effective, since members of target groups are very likely to share the biases against their groups. It may be effective in other ways, though. Certainly having more women present in an interview might help to reduce stereotype threat. And it is often suggested that men are less likely to express overtly sexist sentiments when women are present, so having a woman on a committee could prevent such sentiments from playing a part in the discussion of candidates. So this may be helpful. But if we want to combat implicit bias, we need to find other methods.

4.1.2 Choose known egalitarians for hiring committees to combat bias

One might think that those known to be committed to gender equality would prevent committees from acting on biases, or at least serve as a check against the biases of others. But unfortunately conscious beliefs, no matter how deeply felt, are a poor guide to the presence or absence of implicit biases. Known egalitarians may be very useful in other ways—helping to ensure an absence of overt sexism, for example. But they cannot be relied upon to counteract implicit bias.

4.1.3 Focus on merits rather than gender to combat bias

Many people seem to think that they can *decide* to focus purely on merit rather than on gender (or race, or nationality, or...). Even if they don't think this is a matter of volition, they think that they can introspect and see that they are making decisions

purely on the basis of merit.¹⁹ The literature on implicit bias shows very clearly that both of these assumptions are wrong. We cannot directly control whether or not we are influenced by implicit biases, nor can we introspectively discern whether we are subject to them.

4.2 What might work

The literatures on implicit bias and stereotype threat give us many pointers to strategies that might help to alleviate implicit bias and stereotype threat in philosophy. As we'll see, there are some worries and even some tensions between proposals.

4.2.1 Include women: put women on syllabi and candidacy exams (and walls!), invite women to speak at conferences and contribute to volumes, and cite women in your papers²⁰

This strategy is extremely well-supported by what we know about implicit bias and stereotype threat, and in several ways:

• If we have more difficulty associating women than men with excellence in philosophy (which is very likely), women's names will be less likely to come

¹⁹ If you doubt that people would genuinely insist on this, or that philosophers would do so, do take a look at the comments on this blog post: < http://feministphilosophers.wordpress.com/2010/02/15/being-frank-is-not-for-women/#comments>.

²⁰ How many women should you include? I don't know. 30-40% would do much more to normalize women in philosophy than lower percentages. But one might argue that we shouldn't expect to be able to include women at a level higher than their representation in the profession—e.g. 21%. Realistically, however, even 21% would be a vast improvement in most cases. And anything above 0% would be an improvement in a startling number of cases. (For more on such cases see < http://feministphilosophers.wordpress.com/gendered-conference-campaign/>.)

to mind when we're trying to think of works for a syllabus or people we should invite to contribute. This means that we're likely to overlook excellent people on the basis of their gender, rather than their merits. Making an effort to include women will help to overcome this implicit bias that we're likely to have. Doing this will lead to greater fairness, and also to the inclusion of excellent work that might otherwise have been overlooked.

- Including more women on syllabi and in conferences and volumes will also help to *reduce* implicit bias in the philosophical world by exposing people to more counter-stereotypical exemplars. It will help to break down the association between maleness and excellence in philosophy.
- Including more women will help to reduce stereotype threat by (a) helping to break down the stereotype that women are less good at philosophy and (b) creating an environment that is less stereotype-provoking. 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.

How to implement this:

Remember to look at your syllabus, candidacy exams, list of speakers, or list
of contributors for gender balance. (And also look at your walls.) If it's

looking really unbalanced, that means something may have gone wrong. Fixing it is trickier—you may not think of many female names. Try using Google Scholar or the Philosopher's Index, and also try asking around. 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.

One common barrier to including women is the thought that one should focus on the "big names". But implicit bias means that there are likely to be women who are at least as good as the big names who have not met with the same success. This is only perpetuated by organisers/lecturers/editors who seek big names. Your position as a lecturer, editor or organiser is a powerful one that you can use to help to rectify the pernicious effects of implicit bias. But that may require you to invite people who are not yet as famous as they deserve to be. It seems to me this is well worth doing.²¹

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

²¹ What should you do if you try all this, and you still aren't finding any women suitable for your conference or volume? One possibility is to consider slightly shifting or expanding your topic. Often small shifts can lead to a more diverse line-up without compromising the integrity of the topic.

4.2.2 Get More Women into Philosophy

Getting more women into philosophy at every level will help 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.

At the student level: Women students will experience less stereotype threat if they are exposed to women philosophers. If you don't have very many women in your department, you can try to add women to syllabi, or make sure that you invite women visiting speakers (and publicise these talks to students at all levels—even if they don't go, it will help to show them that there are women in philosophy). (But, of course, you should also work on hiring women.) When selecting graduate students, be aware of the ways that implicit bias may affect your perceptions of applicants, and follow the suggestions on hiring listed below. Many admissions committees (like many 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.

Hiring women: It's not enough, as noted above, to make sure that women are on shortlisting and hiring panels. 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 online. A few key suggestions:

- Try to increase the representation of women in your applicant pool, as gender is less likely to negatively affect evaluations when a larger proportion of the applicant pool is women.
- Make sure that you agree on key criteria before evaluating candidates, and that you apply the same criteria to all candidates (research shows that criteria will often shift with gender, without the hiring panel realising this).
- Give yourself enough time for each applicant: bias has stronger effects when one is rushed.
- Evaluate the whole application, not giving too much weight to any one factor (which may itself have been affected by bias, as in the case of references, discussed above).
- Be able to defend decisions to one another, explicitly. Make sure that stereotypical assumptions (e.g. about mothers' level of commitment) are not influencing your decisions).
- Periodically check to make sure that you are doing all of these things.

4.2.3 Anonymise²²

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). We know that implicit bias causes inaccurate evaluation of work. If this is going on in philosophy (and there is no reason to suppose it isn't), then philosophical works are being inaccurately evaluated. This can be prevented by using anonymity in at least the following ways.

²² A further use for anonymity *might* be for hiring purposes. It would not be difficult to strip names off CVs and writing samples. However, it would be very difficult to bring it about that letters of reference give no indication of gender, since this would require widespread changes in pronoun use.

- Student work should be marked anonymously, as far as possible. This is now pretty much universal in the UK, so it clearly can be done. Students can submit work to the department office with a detachable cover sheet containing both their name and their student number. This cover sheet can be removed by a secretary, who then passes it on to the marker with only student number. After marking takes place, the secretary de-anonymises the work. This could also undoubtedly be automated by institutions that use electronic submission. The widely used submission and plagiarism detection software, Turnitin, now facilitates anonymous marking. 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 biases, biases against the less well-known, those with foreign names or low-prestige institutions and in favour of the famous. 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.

4.2.4 Raise Awareness of Implicit Bias

There is very little general awareness of implicit bias amongst philosophers. The picture of bias that seems to prevail 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.

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 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.²³

4.2.4.1 A Problem

Unfortunately, spreading awareness of implicit bias in philosophy involves talking about how under-represented women are, about how women are stereotyped as

²³ For a fuller discussion of blame and implicit bias, see Kelly and Roedder 2008.

bad at reasoning, about how men, not women are associated with excellence in philosophy, and so on. And doing all of those things only *heightens* stereotype threat. So it might seem counterproductive.

In fact, however, it can't be avoided. *Even if* the only thing we cared about was stereotype threat, the only way to get people thinking that this is worth worrying about is to discuss precisely these things. And since we also care about fighting implicit bias, there's even more need to discuss all of this. How, then, should we deal with this very real problem? By making sure that we take other actions to fight stereotype threat.

4.2.5 Expose Students to Successful Women's Narratives

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. ²⁴ Further, women students can be told to remind themselves of these narratives before entering 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).

²⁴ Another method might be to hold get-togethers for women in philosophy within one's department, perhaps inviting guest speakers where appropriate.

Unfortunately, it's not clear to me that this would always have the result of reducing stereotype threat—if women get together and talk about all of the *problems* they face, it could in fact increase stereotype threat, by heightening their awareness of negative stereotypes and under-representation (Though it would still be valuable in other ways—e.g. helping to build solidarity and comparing coping strategies.)

4.2.6 Break down inter-group barriers

Steele also discusses an experiment that got positive results by bringing together both minority and non-minority students in their first year at university. Doing so helped to break down the segregation that students otherwise fall into, making the minority students more aware that many of the problems they faced were ones that the non-minority students faced as well. This reduced stereotype threat, showing them that stressful experiences they were having were not necessarily a result of their membership in a stigmatised group (Steele 166-167). It is possible that similar measures could be helpful in philosophy, especially if a department finds that its students are tending to segregate themselves in some way. Steele also discusses the ways that a mentor from outside a stigmatised group can be very helpful-- studies show that the key is to tell students that one has high standards, but to express confidence that the student will be able to meet those standards (Steele: 163). This is especially important for departments to bear in mind if they have not yet been able to do much to improve the gender balance of their faculty.

4.2.7 Stop talking about "who's smart"

As we noted earlier, one very effective way of fighting stereotype threat is to get people to stop thinking of intellectual ability as a thing that people possess in some fixed quantity. Viewing intellectual ability in that way helps to set members of stigmatized groups up for stereotype threat, because it then becomes very easy to worry about whether one lacks intelligence (just as, stereotypically, other members of one's group do). If intellectual ability is viewed as a more complicated set of abilities and skills, which can be developed through one's activities, stereotype threat has less potential to take hold. 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 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 Schwitzegebel (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. Now my sample size is small and philosophy is about 75% white male anyway, so I want to be cautious in this inference. Women and minorities must sometimes "seem smart". And older people maybe have already proven or failed to prove their brilliance so that remarks about their apparent intelligence aren't as natural. (Maybe also it is less our place to evaluate them.) But still 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. This is probably especially true when one is overhearing a comment about a complex subject that isn't exactly in one's expertise, so that the quality of the comment is hard to evaluate. 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 foreswear judgments of "who's smart" and "who's stupid".

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're 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 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. Cheshire Calhoun (2009: 221-222) suggests some other experiments that one could try, directed at combating the stereotype of philosophy as male by "courting cognitive dissonance":

...use images of women to represent philosophy on one's website and announcement boards; teach an intro, ethical theory, or epistemology course using only texts by women (and without structuring it as a feminist ethics or

feminist epistemology course)...Construct a visiting lecture series where there is only one man. And... don't think of this as affirtmative action; think of it as therapy for a deeply embedded, culturally pervasive aversion to figuring philosophy as female.

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. 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).

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 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

- Blair, I. 2002. "The Malleability of Automatic Stereotypes and Prejudice", *Personality and Social Psychology Review*, 3: 242-261.
- 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.
- Hanrahan, R. and Antony, L. 2005. "Because I Said So: Toward a Feminist Theory of Authority", *Hypatia* 20: 4, 59-79.
- Jost, J.T., Rudman, L.A., Blair, I.V., Carney, D., Dasgupta, N., Glaser, J. & Hardin, C.D. (in press). 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*.
- Nosek, B., Banaji, M., and Greenwald, J. 2002. "Math = male, me = female, therefore math ≠ 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.)
- 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. "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 selfperceived 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>.