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Implicit Bias and Inattentional Blindness

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IMPLICIT BIAS AND INATTENTIONAL BLINDNESS

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
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Master of Art

in

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by
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ABSTRACT

This thesis will explore the problem of implicit bias and motivate a negative definition of implicit bias. The first chapter takes a survey of implicit bias research in psychology and engages with Tamar Gendler's proposal of aliefs. Based on her description I argue that she is advocating for a model of implicit bias that consists of an addition or distortion to visual perception. I then explored implications of this model, including the tenacity of the additions to visual perception in the face of conflicting evidence and beliefs. Ultimately, I argue that her primary Cosmos Club example does not support her model of implicit bias and reinterpret her example to motivate a new model of implicitly biased perception.

Combining the Cosmos Club example with alternative epistemologies, the second chapter demonstrates the importance of perspectival knowledge in formulating a model of implicit bias. Attention research indicates that executive control of attentional processes is motivated by top-down processes, and therefore the personal experiences, habits, and biases of the observer must necessarily be taken into account. Rather than focusing on *individual* differences in perceptual capacities and cognitive biases, I claimed that the occurrences of implicit bias in particular social groups (white, wealthy, etc.) demonstrates that the loci of measurable difference in perspective is at the intersection between different social groups determined by race, gender, age, sexuality, etc. After establishing the indispensability of group perspective, I then argued for a model of implicit bias as inattentional bias.

The third and final chapter will delve into the cognitive science research into attention, and inattentional blindness. It will draw a comparison between positive and negative implicit bias and bottom-up and top-down attentional processes on visual perception. I will propose a model of perception that provides an explanation for inattentional blindness that is in accordance

with the claims of epistemologists of ignorance that ignorance is active and can lead to implicit bias as de-selecting evidence. The thesis ends by suggesting what future research of negative implicit bias should focus on.

INTRODUCTION

This thesis project's aim is to distinguish between two types of implicit bias; positive implicit bias and negative implicit bias. Implicit bias is of rising concern and as such an attempt to understand its genesis, perpetuation, and manifestation is a vital project in philosophy as well as in psychology and cognitive science. Traditionally, implicit bias has been examined by measuring implicit attitudes towards social and ethnic groups. This is what I name positive implicit bias. This thesis will bring together contemporary research in psychological philosophy, feminist epistemology, epistemologies of ignorance, and cognitive science and in so doing I hope to motivate a definition of negative implicit bias that has hitherto not been discussed. This thesis will also discuss when and if we have an epistemological responsibility to confront our implicit biases.

The first chapter of this thesis will examine implicit bias from the perspective of Tamar Gendler, whose research has charged the implicit bias debate. Implicit bias is generally thought of as being epistemically vicious. Tamar Gendler challenges that assumption when she proposes an addition to the current mental ontology, "aliefs" and claims that these are responsible for implicit bias. Aliefs are automatically activated associative clusters containing a *representative*, *affective*, and *behavioral* component (R-A-B), and can be belief-occurrent or belief-discordant. Rather than claim aliefs as a whole are harmful to our epistemic practices, she claims that they are for the most part beneficial. Aliefs help us make fast time decisions, using little cognitive effort. In this paper I will give a brief account of current research of implicit associations and explore research by Gendler. Using a thought experiment, I will demonstrate that Gendler is using a model of implicit associations that indicates they serve as additions to perceptual experience. This model helps elucidate several examples of implicit associations and also

explains how these associations are not always conscious. I will demonstrate that Gendler also gives us a clear method of distinguishing epistemically harmful implicit associative content from epistemically beneficial content. Ultimately, I will argue that this distinction fails by offering an alternate interpretation of one of her prime examples. This alternate interpretation will show that implicit bias does not only occur when we are adding to our perception but also when we are subtracting from it. This indicates that failing to notice certain evidence is a failure in your epistemic duty, which can lead to implicit bias. In this sense what *we do not see* is just as significant as what we do see.

The second chapter will explore what alternative epistemologies have to contribute to this formulation of implicit bias as a systematic *not seeing*. This section begins with a move to perspectival knowledge in response to the concern that every person does not suffer from implicit bias. This opens up the question of who suffers from it, and why do they suffer it? Perspectivalism can illuminate how different perspectives can access different things as warrant. Perspectivalism in general focuses on individual perceptual abilities and access to warrant based on past experience and semantic knowledge. Utilizing perspectivalism, feminist standpoint theory argues that particular social groups can have access to knowledge that those outside of the group do not. This is also setting up a positive epistemic position in regards to what other people can know better than us. The final step is taken by looking to the epistemologists of ignorance that make the radical claim that ignorance is active. Ignorance is active in perception by causing an inattention to salient details in order to confirm a bias.

The third and final chapter will delve into the cognitive science research into attention, and inattention blindness. It will draw a comparison between positive and negative implicit bias and bottom-up and top-down attentional processes on visual perception. I will propose a

model of perception that provides an explanation for inattentional blindness that is in accordance with the claims of epistemologists of ignorance that ignorance is active and can lead to implicit bias as de-selecting evidence. The thesis will end on a note regarding what future research of negative implicit bias should focus on.

CHAPTER 1

IMPLICIT BIAS AND PERCEPTION: A CRITIQUE OF TAMAR GENDLER'S ALIEFS

1.1. An Opening Story

A recent online video—though humorous—reveals something disturbing about American social cognition. The video, “Trump Glasses” depicts what the world looks like as seen through the eyes of supporters of then-presidential candidate Donald Trump (Manscuso 2016). The video begins with a young man discovering a pair of glasses lying next to him. He puts them on and precedes to look at various groups of young adults having conversations around him.

First, the young man turns towards two young black men seated on a nearby bench. Without the glasses, we see them as wearing ordinary clothing for their age, jeans and t-shirts, looking at a cell phone screen and discussing what they see there. However, the same scene through “Trump Glasses” involves a jarring transformation; the young black men are transformed into “thugs”, wearing gold chains, and holding guns with masks over their faces. One of them is even seen eating a watermelon. Our young man removes the Trump glasses, and turns his attention to an unremarkable man whose appearance suggests he is of Middle Eastern descent. He too is gazing into his cellphone screen; through the Trump Glasses, however, he is wearing a gutra and petting a goat with enthusiasm. The same sequence is repeated with an Asian man who the trump glasses transform into a samurai. Lastly, the young man goes to the bathroom and with some trepidation peers at himself with the glasses. What he sees is not the Mexican American that he is, but a mariachi musician complete with sombrero and maracas. Horrified, he throws the glasses away.

While probably intended for a good laugh at the expense of Trump supporters, the video may also tell us something serious about social cognition with respect to racial and ethnic

groups. Specifically, the Trump glasses serve as a metaphor for implicit racialized perception¹ Social psychologists who study racial and social cognition explore how information regarding different racial and social groups is processed, stored, and applied in social contexts. While we want to believe that we treat people fairly and equally, and not as if the embodiment of stereotypes, research on implicit associations indicates that stereotypes are so prevalent in society that we are influenced by them whether or not we are conscious of them² The question of how associations about social groups interact with cognitive processes is important for social psychologists, but also the philosophers, and anyone concerned about social justice. This is because it is not sufficient to have egalitarian beliefs, we must also be on our guard against associations which might influence our behavior and perception.

The Trump Glasses scenario present us with a visual metaphor of how implicit associations shape perception, and how we might become aware of our perception as stereotype-laden perception. This “thought experiment” gives us a way to think of racial and social associations in terms of their effect on perception, rather than focusing solely on how they occur in cognition³. If we take the lenses to be implicit associations, the latter distort perception by adding to the scene what is objectively not there. On the other hand, since these association overlay perception, they may in principle be subtracted, we may restore objective vision by

¹ Research on the amygdala demonstrates differences in the reaction when confronted with difference races, for discussion of how racial perceptions develop through adolescence see Telzer, Eva H., Humphreys, Kathryn L., Shapiro, Mor., & Tottenham, Nim. (2013).

² For evidence demonstrating that biases can be implicit, automatically activated, and working unconsciously see Devine, P. G. (1989), Fazio, R. H., Jackson, J. R., Dunton, B. C. & Williams, C. J. (1995), and Greenwald, A. G. & Banaji, M. R. (1995).

³ Racialized perception can be very dangerous. Studies have shown that participants who were shown pictures of black faces (compared to those who were shown white faces), were faster to identify pictures of guns as guns and were more likely to falsely identify pictures of tools as guns, Payne et al. (2002) Conrey et al. (2005).

removing the trump glasses...if only we knew how. Perhaps this may be achieved by attempting to find a subject that is stereotype neutral.

While wearing the glasses our young man also views a group of five white adults. Viewed through the glasses they are wearing polo shirts, drinking Starbucks coffee, and generally appearing like liberal upper middle class whites. Without the glasses they are wearing jeans and hoodies. This is a less drastic change than we see in the case of the black men and the other minority groups. What does it mean that the stereotype of what it means to be white is more difficult to pin down? Charles Mills discusses how whites in our society are in a sense, unmarked. Whites do not see themselves in racial terms which emphasizes individualistic explanations for economic and social achievement (Mills 2007).

The white case perhaps provides us with a neutral point of view, a perception that is not laden with implicit associations or racial stereotypes. The suggestion of a neutral point of view indicates that the model of implicit associations is one of addition to perception. Guns and chains were added to the black men, a samurai sword to the man of Asian descent, and a gutra and goat added to the young man of Middle Eastern ancestry. The model of implicit associations as additions to perception is adopted by psychologist and philosopher Tamar Szabó Gendler.

Implicit bias is generally thought of as being epistemically vicious. Tamar Gendler challenges that assumption when she proposes an addition to the current mental ontology, “aliefs” and claims that these are responsible for implicit bias. Aliefs are automatically activated associative clusters containing a *representative*, *affective*, and *behavioral* component (R-A-B), and can be belief-occurrent or belief-discordant. Rather than claim aliefs as a whole are harmful to our epistemic practices, she claims that they are for the most part beneficial. Aliefs help us make fast time decisions, using little cognitive effort. In this paper I will give a brief account of

current research of implicit associations and explore the research performed by Gendler. Using the above thought experiment, I will demonstrate that Gendler is using a model of implicit associations that indicates they serve as additions to perceptual experience. This model helps elucidate several examples of implicit associations and also explains how these associations are not always conscious. I will demonstrate that Gendler also gives us a clear method of distinguishing epistemically harmful implicit associative content from epistemically beneficial content. Ultimately, I will offer an alternative interpretation of Gendler's prime example to demonstrate why her distinction fails. This alternate interpretation will show that implicit bias does not only occur when we are adding to our perception but also when we are subtracting from it. This indicates that failing to notice certain evidence is a failure in your epistemic duty, which can lead to implicit bias. In this sense what *we do not see* is just as significant as what we do see.

1.2. Implicit Associations and Bias

Recent empirical evidence to support the claim that racial cognition is widespread and implicit, that is, it contrasts explicitly held beliefs regarding racial categories. This conclusion is established through laboratory evidence such as the IAT and statistical patterns of behavior. The Implicit Association Test⁴ (IAT) is a way to indirectly measure implicit attitudes. Rather than ask participants how they feel about members of particular subject groups, the test measures the speed and accuracy with which the participant can associate certain categories and words.

In one version of the IAT, the participants might be presented with two columns, "bad" and "good," and are presented with various white and black faces. They are asked to put the

⁴ The IAT has various different formats and tests for implicit associations in many different social groups including: race, age, sexuality, gender, and religion. The most referenced of these is the black/white racial test. The test asks the participant to sort words into columns and tests the speed and accuracy of these attempts.

black faces in the “good” column and the white faces in the “bad” column. Then they are asked to do the inverse. Studies show that 70% of white participants can more easily associate black faces with negative words and white faces with positive words, and more disturbingly: all races share this difficulty (Brownstein 2015). The data collection from the IAT is widely taken to establish that implicit associations are active in cognition.⁵

It is important to emphasize that implicit associations are not inherently bad. As the work of Daniel Kahneman demonstrates, implicit associations underlie a vast number of cognitive processes. In system one cognition, or fast thinking, associations lead us to arrive at “snap” judgements faster and with minimum cognitive effort. This is beneficial in any situation in which it is too time consuming or cognitively taxing to engage in slow reflective thinking. This is the system that allows you to detect hostility in a voice, to turn quickly towards a sudden noise, or even drive a car on an empty road.⁶ However, the same processes that often lead to successful and efficient cognition, can lead us to be unfairly biased towards particular social groups

An example of a statistical pattern of behavior is the oft repeated resume example in which employers are not judging in the way they should, on the basis of expertise, but on the basis of racial-sounding names (Bertrand and Mullainathan 2003). This is an issue both for rationality (we are judging about the wrong thing) and morality (we are treating like, equally

⁵ Those that argue against the conclusions drawn by the IAT argue that it is not obvious what it is that the test is measuring and also accuse advocates of the tests as exaggerating the consequence of their findings. For these arguments see Blanton & Jaccard (2008), Blanton & Jaccard (2006), Fazio & Olson, (2003), and Karpinski & Hilton (2001). Even if IAT-skeptics are correct in arguing that the test is not measuring what its proponents claim, they would still have to come up with an alternative explanation for the existence of the patterns of behavior. For an argument to this effect see Nozick, Greenwald & Sriram (2006).

⁶ System 1 also controls things such as detecting that one object is closer to you than another, understanding simple sentences, recalling the answer to simple mathematical problems ($2+2=?$), and recognizing stereotypes. Daniel Kahneman (2011, p. 23).

qualified candidates, in an unlike way). However, we are often perfectly unaware that we may acting either irrationally or unethically. Hiring managers in the resume test report making decisions on the basis of rational criterion. They are unaware of the discord between implicit associations and their explicitly held beliefs regarding those social groups.

Returning to Trump Glasses, we can now explore some further implications of this presentation of implicit associations. Recall that above we said that “Trump Glasses” provide a picture where our implicit associations add something to our perception. How should we understand the nature of this addition? Do these association overlay perception, structure it, and are they “constitutive elements”? Do we ever have perception that is not IA-laden?

The task of defining the role of associations in perception and cognition is an important one for epistemic and practical reasons. For example, if we are capable of taking off our Trump Glasses then we have a moral obligation to do so. If we cannot take the glasses off; we would have to discover the means through which we can compensate for these IA when they interfered with good epistemic and moral outcomes, which would be a matter of dulling the effect these biases have on our interactions and judgments rather than eliminating them⁷. Recent work in psychology and epistemology by Tamar Gendler may be of some help in providing a theoretical account of the way that IA structure cognition and perception. In particular, her work helps us to think through the question of whether we can, in principle, take off our Trump Glasses.

In the succeeding sections, I am going to argue that Gendler’s account of aliefs and beliefs follows the model set forth by the Trump Glasses of implicit associations as addition to our perceptions. Then I am going to demonstrate why this account is problematic. I will also

⁷ Researchers have found that stereotyping and prejudice can be countered by self-regulation through people’s egalitarian personal beliefs, Devine, P. G. (1989), and also Amodio, D. M. (2010).

explore how Gendler's account might provide a way out of this trap by providing a standard by which we can distinguish between acceptable implicit associative content and content that distorts perception. Ultimately we will see that Gendler's account fails to encompass all cases of implicit bias, though it does successfully account for some. Those cases which cannot be explained by Gendler can be explained by an epistemology of ignorance, but that argument will be given in the next chapter of this thesis.

1.3. Introducing Alief

According to Gendler, "to have an alief is to have an innate or habitual propensity to respond to an apparent stimulus in a particular way. In paradigm cases and on strict usage, this response involves an automatized representational-affective-behavioral triad", which I will refer to as RAB's (T. Gendler 2011, 41). Aliefs *represent* "some object or concept or situation or circumstance, perhaps propositionally, perhaps non-propositionally, perhaps conceptually, perhaps nonconceptually" (T. S. Gendler 2008, 9). They are intrinsically *affective*, meaning that the representation of content triggers an emotional state related to that representation. This affect will ready an automatic *behavioral* response. *The representation, affect, and behavior* associated cluster is the standard structure of aliefs and Gendler's explanations thus follow this three part formula.⁸

To illustrate the distinction between alief and belief, Gendler provides the example of a person feeling fear on the Grand Canyon Skywalk. While the person has the belief that the glass under his/her feet is stable, they are still afraid and clutch the railing as if to keep themselves

⁸ Eric Mandelbaum challenged this formulation of aliefs. He argues that if aliefs are propositional then they are indistinguishable from beliefs. If aliefs are associative then they cannot perform the explanatory work that Gendler sets out for them. I am not going to address this issue here. I am taking Gendler's account of alief as providing a new addition to mental ontology. For the argument see Mandelbaum (2013).

from falling. For Gendler, this is an instance of a belief-discordant alief. The RAB content is comprised of the visual appearance as of a cliff, the feeling of fear and the motor routine of clutching the railing, all while currently holding the justified true belief that the skywalk is safe (T. S. Gendler 2008, 2). We have all experienced that type of discord within ourselves, most often in cases involving a phobia. For an alternate example, consider the difficulties in throwing darts at a dart board that is decorated with a picture of a loved one. Throwing the dart towards the picture is not easy to do. It is not that you are scared that you will actually hurt your loved one by throwing a dart at the board, but the reluctance to do violence to the image of a person you love is the result of RABs. The RABs might contain the visual of your *mother*, feeling of *protect!*, *reluctance* to throw the dart.

One might argue that something like RABs are happening in cognition but that they could be the result of other mental states, and there is not much reason to posit a new ontology that could not be explained in pre-existing terms. The RAB resists such moves to separate it into its composite parts.⁹ Without delving into detail about how Gendler makes the case for aliefs not being reducible to, nor identical with, other mental states such as imagination, I will provide here the evidence she uses to separate beliefs and aliefs. Though Gendler does not detail exactly what her position is on the construction of belief, we can only assume that it does not contain RABs. She identifies two properties of beliefs that are not shared by aliefs; they are reality-sensitive and

⁹ Aliefs seem to fit into a picture of dual process theory in which cognition happens in two systems. System 1 is characteristic of fast time responses. It is generally low-effort, implicit, associative, pragmatic, automatic, perceptual, unconscious or preconscious, and the default process. System 2 is slow, conscious, high effort, abstract, logical, explicit and reflective. If aliefs are placed in this model then they would belong in system 1 and beliefs (as Gendler has described them) would be in system 2. The former characterized by their quick activation and high margin of error, and the latter by slower more deliberate thinking. For further discussion of dual process theory see Daniel Kahneman *Thinking Fast and Slow*, (2011).

they are accepted (T. S. Gendler 2008, 14). What beliefs seem to be constitutive of is the acceptance of the *representation* (R) as part of one's real environment, and beliefs can be true or false because they are reality-sensitive.¹⁰ Aliefs and beliefs both share the R component of the RAB structure suggesting they are both grounded in perception, but where beliefs can be either true or false, aliefs cannot. Aliefs are adding content to the perception and therefore the perception itself cannot be taken as evidence of its truth or falsity in the same way it can for beliefs. To further this point, Gendler posits that aliefs do not rely on reasons but something Gendler refers to as "eason". An eason is "something that is not sufficiently well-conceptualized to call a reason but that (in a way in between a reasony and a causy fashion) *eases* us towards a certain outlook on the world" (T. Gendler 2011, 51). An eason is more substantial than an instinctual reaction but somewhat less than an actual reason that provides justification to beliefs.

We have talked about how aliefs can be in conflict with beliefs but aliefs do not always cause discord. Aliefs can be in tandem with our beliefs and when they are, they allow us to make quick reactions due to the automaticity of the associated behavioral response. Gendler claims that aliefs are the result of the beneficial ability to categorize objects into categories such as, *things that pose a danger to me* however, this beneficial cognitive apparatus does not only categorize objects but people as well. This is the reasoning behind Gendler's claim that aliefs are responsible for instances of implicit bias. Stereotypes are a direct result in categorizing people in society. Pair stereotypes with an automated response and you have a recipe for implicit bias.

¹⁰ Gendler is adopting a representational account of belief. There is controversy over this picture of belief. The instrumentalist view of Daniel Dennett would not support the distinction she is drawing between alief and belief. For space considerations I will not argue Gendler's position against the instrumentalist objections here. The burden of proof should fall on the instrumentalist to provide an account of implicit bias.

Gendler identifies aliefs as being responsible for things such as stereotype threat, difficulties in cross-race face identification, and cognitive depletion following interracial interaction.

Gendler additionally claims that the ability to form associative clusters like aliefs is on a beneficial one and to attempt to change them would result in an epistemic cost (T. Gendler 2011, 23). In order to get rid of an unwanted alief one would have to not be attentive to evidence (such as base-rates). If you instead wanted to resist the automatic behavior response they entail you would need to expend cognitive energy. This second form of epistemic cost is related to the persistence of aliefs in the face of contradictory beliefs.

1.4. Tenacious ABs and Conflicting Beliefs

The reality-insensitive character of aliefs owes to their persistence when confronted with conflicting beliefs. I will now provide two separate examples to illustrate this. Suppose that I am walking down the street at night and hear footsteps behind me. I turn, see that the person is a black man and I cross to the other side of the street. The RAB content would be *black man*, *danger!*, and *move*. It is rational to feel in danger in this situation and to cross the street. I am alone, it is dark, I am aware of statistics that more crimes are committed at night when the victim is alone, and I am also savvy to statistics that lead to the conclusion that black men commit more crimes than other racial groups. In this example my beliefs and aliefs are accordant.

Let us contrast this with an alternate but similar example. Let us say that I am sitting alone in the cafeteria and a black man is standing near me. I see him, suspect he is a student who is in the cafeteria for the same reasons I am, and at the same time, find myself reaching down to secure my bag. In this case, my belief and my alief are discordant. In the cafeteria example, I do not have a belief that the man poses no danger to me, rather I have an alief that causes me to perceive him as a threat. With that in mind, I still reach down to secure my bag. I will refer to

this phenomena as Tenacious ABs. The ABs are tenacious in the sense that even though I can be aware that my perceptions might be unfaithful to reality, as in the cafeteria example, I cannot prevent them from directing my actions. The name refers to the *affective* and *behavior* component of aliefs. The *representation* component has not been included because the representation that occurs via perception serves as the ground for both beliefs and aliefs. The representation of a black man has changed in both instances but the AB associations have remained the same and therefore, my response to the representation is the same.

There is reason to suspect that perception is not separate from judgment. In both examples above the perception is the judgement, the judgement being that the black man presents a danger to me. In the first example, slow rational deliberation would tell me that I am justified in crossing the street *but that is not what dictated my behavior*. The judgement was made in the seeing of the man. If my aliefs are active in the perception itself, then the perception cannot serve as the ground for aliefs. There would also be no clear distinction between what might count as alief and what would count as a belief because, beliefs might contain an *aliefy* component via the perception that is laden with aliefs which is serving as the basis for belief formation. With implicit bias and Tenacious ABs in mind let us return to the Trump Glasses thought experiment and see what clarification we can provide.

The savvy observer is confronted with the disturbing awareness that his perceptions might be influenced by something he is unaware of by means of the disparity between his perception with the glasses on and with them off. The perceptual aliefs regarding social groups in this case are an instance of *adding* something to the perception such as the man of Middle Eastern descent having a goat, and the black men wearing masks. For the savvy observer, the Trump Glasses serve as a mechanism for revealing their aliefs because those aliefs are discordant

with their explicit beliefs. It is obvious that the savvy observer does not endorse the stereotypes he is viewing, yet he has encoded them nonetheless. When he takes the glasses off he experiences “reality” and forms perceptual beliefs based on it, when the glasses are on he is viewing the hidden influence his aliefs have on his perception.

Considering what we discovered in the problem of Tenacious ABs, the question we posed earlier of whether we can take our Trump Glasses off with an alief view of implicit associations seems to be *no*. If aliefs are active in perception in such a way that beliefs can be based on them, and they cannot be changed by conflicting second order beliefs, then it does not follow that they can be taken off to reveal a perception that is not laden with implicit association. That is not to say that it is impossible to attempt to fight against the Tenacious ABs if we become aware of them. The conclusion to be drawn here is that the perception is not providing a neutral foundation for the justification for beliefs because the aliefs are active in the perception itself.

Since we cannot take off our Trump Glasses then how can we distinguish between what may be good associative content and what is harmful associative content? It seems that Gendler did not help us with identifying implicit bias because aliefs, which were supposed to serve as our implicit bias as addition to perception, can also share the property of addition with beliefs. That being said, Gendler still might be able to provide us with some clarification.

1.5. John Hope Franklin at the Cosmos Club

With our emphasis on perception in mind let us consider one of Gendler’s examples in her article “On the Epistemic Cost of Implicit Bias”. Gendler tells a story about John Hope Franklin and the Cosmos Club. It is as follows; a woman is attending an event at the prestigious Cosmos Club, a social organization in Washington DC. She hands her coat check to a man she takes as an employee of the club and tells him to bring her the coat. The man she hands the coat

check to inform her that if she will give her coat check to an attendant, who are in uniform, she will receive her coat. Little did she know the man was John Hope Franklin who was hosting a dinner that night at the Cosmos Club in honor of receiving the Presidential Medal of Freedom (T. Gendler 2011, 35). She took a quick glance at him and determined that he must be an employee because he is a black man at a club which has in the past been attended exclusively by whites.

Obviously the woman made a mistake and Gendler wants to explore what kind of mistake that was. Gendler states that the mistake is not one of base-rate neglect because it is the case that there are few, if any, black members of the Cosmos Club at that time. She quickly consulted the data from her experience indicating that there are little to no black members of the club, and that there are quite a few black employees of the club. Seeing a black man she thought that this man must be an employee. Gendler says this woman made a mistake but it was not an epistemically vicious mistake (T. Gendler 2011, 36). This was just one of those instances in which reality does not line up with rational expectation.

Gendler's reliance on base-rate data is important. Base-rates are statistics used to describe the percentage of a population that demonstrates some characteristic. Base-rates give us objective verification for our inferences.¹¹ Base-rate neglect, also called the base-rate fallacy, occurs when an agent is provided with relevant base rate data (general statistics) and specific information only pertaining to a particular case, and uses the particular information rather than the base-rate data to come to a conclusion. Stereotypes have a way of making us neglect base-rate information. Stereotypes serve as representatives of certain social groups. When we are

¹¹ Base-rates are also considered to be prior probabilities (i.e. the probability of something occurring based on past observations). This is derived from Bayes Theorem which is still a prevalent way to evaluate competing hypotheses in the scientific community. For further discussion of Bayes Theorem and prior probabilities see Hajek and Hartmann (2010).

making a judgment about a person, their success or failure to serve as a representative of the considered group will determine the judgment about whether they belong.

Kahneman, in his discussion of prediction by representativeness, provides the example of a young woman riding the New York subway reading *The New York Times*. Given the choice between guessing the girl has a PhD, and the girl does not have a college degree, the average person would probably guess that the girl has a PhD when judging by representativeness. However, statistics indicate that more nongraduates ride the subway than people with PhDs and therefore the second option is more likely (Kahneman 2011, 148-49). Being attentive to base-rates is more difficult than judging by representation and is more easily abandoned when given a situation in which they are not in accordance.¹² The first problem with representativeness is that it leads you to ignore base-rate data, the second problem is that it causes insensitivity to the quality of evidence (Kahneman 2011, 150). You are more likely to make a quick decision that accords with your stereotype than to take the time to analyze if the evidence is trustworthy.

With Kahneman's exposition of base-rates in mind, we can analyze the Cosmos Club woman. Can the mistake she made be attributed to implicit bias? Gendler states that the existence of social categories gives rise to implicit bias. Encoding information regarding social categories also includes encoding the stereotypes that are attributed to them. The woman at the club is not guilty of base-rate neglect because it is the case that there are few (if any) black members of the club, which means she is properly encoding data regarding social categorization however, a common symptom of implicit bias is ignoring base-rate data in order to support a bias. Gendler agrees with Kahneman that attentiveness to base-rates "minimizes your likelihood of making

¹² In terms of system 1 and system 2, judging probability by representativeness is a function of the system 1 cognitive process. System 2 is responsible for attentiveness to base-rates.

mistakes in situations where you are operating under something less than certainty” (Kahneman 2011, 2). Gendler’s judgment of the woman is that she was acting rationally, and not guilty of implicit bias, because she was not guilty of base-rate neglect. Therein we might have the answer to our question about how to distinguish between epistemically good associative content and bad. The associative content, of which beliefs and aliefs are probably composed, is okay as long as it does not encourage you to ignore base-rates.

Gendler provided a clean picture of the difference between implicit bias and regular associative content. We now have a model of implicit bias in terms of addition and I suppose it is time to wrap up this paper and call it a day. If only it were that easy. This would in fact be a lovely solution to the problem. However, I think it is not the right solution. This can be demonstrated by providing an alternative interpretation of the Cosmos Club example by recalling Kahneman’s second problem of representativeness. The woman at the Cosmos Club was not simply being attentive to base-rates but actually had to perform a lot of epistemic work to make Franklin appear as an employee. She erased the indicators of his being a guest such as his tuxedo and perceived him in terms of one trait; his race. The woman is not *being attentive to base-rates*, rather her desire to confirm the base-rates required her to be inattentive to evidence. She is guilty of performing perceptual neglect in order to confirm her bias. The woman is not adding something to her perceptual experience such as the thug clothing or the goat. Rather she is not paying attention to objects available for her observation that would have led her to a correct belief about him.

Being confronted by a man that does not fit into her picture of the world should be something that provokes her into reassessment of the situation at hand, and her mistake is that she does not do so. It is clear that we tend toward preserving our beliefs until we are forced to

call them into question.¹³ If the woman was doing her epistemic duty this would have been a moment to call her beliefs into question. The fact that she does not makes her guilty of *not seeing*.

Let us suppose that the woman actually did notice Franklin's tuxedo. Gendler claims that the woman is, "rational to assume that even though he was wearing a suit rather than a uniform, he was nonetheless an employee rather than a host" (T. Gendler 2011, 35). It seems that his outfit is inconsequential to the judgment regarding Franklin because base-rates are only evidence that is required to be rational. The problem with Gendler's example is her overreliance on base-rate information. There are three steps in using base-rates to make a judgment: deciding that a base-rate is necessary, making sure you are considering the right base-rate, and then utilizing that base-rate correctly to make a judgment. Gendler already assumes that we need a base-rate. As we saw in the last chapter, Gendler agrees that when we are faced with a situation where we have limited information base-rates are the way to go¹⁴. Conceding to the point that a base-rate is the proper way to reach a judgment, is the Cosmos Club woman being attentive to the right base-rate? The Trump Glasses examples are instances of being guilty of neglecting base-rates and endorsing stereotypes (very few Mexicans are Mariachi musicians, few black men are thugs, few Arabs are terrorists). It is unclear in the Cosmos club example whether the woman is having an alief that causes her to come to the wrong conclusion about Franklin. Perhaps her alief is her reluctance to look to other base-rates to make her decision.

Consider another possible example: Franklin attends the Cosmos Club in a clown outfit. Is the woman still rational to assume Franklin is an attendant? If the woman is attending to the

¹³ See Kahneman (2001) for further discussion.

¹⁴ Koehler (1996) offers significant critique of relying on base-rates because they do not map unambiguously onto real world situations.

base-rate regarding race membership to the club then she would still be rational. However, if she considers the prior probability of clowns as attendants at fancy clubs, then she would not be rational to assume that Franklin is an attendant. Gendler and does not stop to consider a situation in which a person is faced with various base-rates that might lead to conflicting conclusions. This may be taken to imply that Gendler is relying on an aperspectival view of epistemic justification. The next chapter will critique the aperspectival approach to knowledge practices and Gendler's glossing over of perceptual warrant in the Cosmos Club example.

In conclusion, I have argued that the picture of implicit bias as the addition of associative content (RABs) Gendler provides is inadequate. While her account can elucidate some instances where implicit and explicit beliefs are in conflict (e.g. the Skywalk) her account cannot give a satisfactory answer to question raised by the woman at the Cosmo Club, namely, what is the nature of her error in misidentifying a tuxedo-ed scholar with a coat-room attendant. Because Gendler takes implicit bias to be a case of adding, rather than subtracting, she misses the source of the women's error—or at least the error that may plausibly be attributed to her. Namely, that she fails to be attentive to the right sort of details. While, as I argue, the addition model may be sufficient to explain some instances of bias, it certainly cannot account for all of them.

It is not only what we see that is important, it is also *what we do not see*. *Indeed*, this is the very claim defended by theorists working on an epistemology of ignorance. Connecting these two, seemingly very different, approaches will be achieved by focusing on the role perception is playing in both accounts. The next chapter will tackle the task of developing an alternative definition of implicit bias that is born out of an active systematic ignorance.

CHAPTER 2

PERSPECTIVALISM AND EPISTEMOLOGIES OF IGNORANCE: THINKING IMPLICIT BIAS NEGATIVELY

The last chapter left off with the claim that what we do not see is just as telling (and potentially epistemically and ethically perilous as what we do see. Gendler provides us with a model of implicit bias as an addition or distortion of perception. We saw this in the case of the Cosmos club woman, whom Gendler deemed was not guilty of implicit bias because her perception was not distorted. The woman was performing her epistemic duty because her decision was influenced by her base-rate data regarding the Cosmos Club membership. However, I have shown with my reinterpretation of the Cosmos Club example, it is equally plausible to think that the woman at the Cosmos Club was not tracking base-rates, but was judging according to her bias regardless of the information available to her. She was guilty of de-selecting information in order to confirm her bias. In this case, we would have a case of implicit bias as inattention. My point in the last chapter was not to imply that one must choose between Gendler's definition of implicit bias and my own—but rather to argue that the case of the Cosmos Club arguably did not exemplify Gendler's definition, but rather motivated my own definition.

This chapter will focus on drawing a contrast between positive and negative types of implicit bias (addition and subtraction). In this chapter I will argue that Gendler ought to be concerned about implicit bias that occurs via inattention. The difference in understanding when implicit bias via aliefs and when implicit bias via inattentional blindness is occurring will determine the sorts of strategies (if any) we use to overcome it. For Gendler, differences in perceptual ability or practice will not alter the aliefs that are causing implicit bias. We can only fight against them or not encode important base-rate and background information, both of which

will incur an epistemic cost. I will argue that the epistemologists of ignorance are forwarding an account of implicit bias as inattentional blindness. For epistemologists of ignorance, implicit bias is a result of failing to see what should be obvious to a virtuous perceiver. This failure to see is not passive, rather it is the active selecting of information that reinforces your privilege. As such, we do not incur an epistemic cost from attempting to eradicate our implicit biases rather it is our epistemic duty to do so.

Implicit bias understood in the negative sense relies on the claim that the manner in which we allocate our attention can demonstrate a bias. The allocation of attention is perspectival. It is unique to the task at hand and influenced by the observer's past experiences and semantic knowledge. Gendler's claim that attentiveness to base-rates serves as a criterion for determining acceptable epistemic practices does not take into account that verification might be different for individuals in certain epistemic positions. Gendler is not concerned with particular histories of experience which can lead to different perceptual abilities and different entitlements of things as warrant. Gendler's account relies on the claim that we are all encoding the same base-rates regarding racial and social categories by virtue of all participating in the same society. This reinforces an aperspectival account of epistemic justification because base-rates have democratic accessibility as warrants.

For Gendler, base-rates provide epistemic warrant however Gendler ignores perceptual warrant. Franklin's tuxedo would provide a perceptual warrant for judging him to be a member of the club rather than an attendant. We can be fairly certain however, that the attendants would not have mistaken Franklin for one of their own even though they have the same access to base-rate information and would, on Gendler's reasoning, be rational to make that judgement. A focus

on perspectivalism and the different perceptual warrants that can be found between members of differing social groups might provide us some answers here.

The first part of this chapter will look into the claims of perspectivalism and how perspective, and perceptual warrant, can be determined by your social group. The work of feminist standpoint theorists claims that the social position that you occupy can give you access to knowledge that those outside of your position do not. Occupying a less privileged social position can actually put you in a better epistemic position.¹⁵ Elucidating how members of different social groups can have different access to things as warrant, and thus attend to different stimuli (or particular features of those stimuli), is imperative to our exploration of negative implicit bias.

The next section of this chapter will demonstrate how perspectivalism is used in epistemologies of ignorance, drawing a critical distinction between feminist standpoint theory and epistemologies of ignorance.¹⁶ Rather than conceiving of perspectivalism as describing a situation in which someone can have a better epistemological standpoint due to their membership in a group as the feminist standpoint theorist propose¹⁷, epistemologists of ignorance demonstrate how a position of social privilege requires an active editing of perceptual experience to create ignorance. This ignorance keeps the privileged ignorant of the conditions of those in oppressed groups, as well as keeping them ignorant of their status as oppressors. This active

¹⁵ I am not claiming that being in a marginalized social location *necessarily* implies that you are in a better epistemological position.

¹⁶ That is not to say that feminist standpoint theory and epistemologies of ignorance are wholly separate doctrines. In fact, there is a great deal of overlap between them. Epistemologies of ignorance build off the foundation that is set by the feminist standpoint theorists.

¹⁷ A group can mean a specific gender, ethnicity, socio-economic position, etc.

editing manifests as inattentional blindness and is perhaps more dangerous than the implicit bias which is the result of aliefs that Gendler proposes.

2.1 Feminist Standpoint Theory and Perspectivalism

Alternative epistemologies¹⁸ arise from the concern that the dominant epistemology of today is an epistemology of exclusion. The typical candidates for exclusion, be it from knowledge, equal rights, or respect, are those that do not fall under the category of “white male”. This exclusion can occur in a few ways such as when claims made by members of oppressed groups are not given credence because they do not cohere with the dominant view. Examples of this include the difficulty in getting women’s testimony about rape and abuse heard, and how we are still unwilling to accept the testimony from individuals who are profiled by the police because they belong to a particular race or community.

The critical claim of traditional epistemologies that feminist epistemologists are attacking is aperspectivalism, in which any knower can be substituted for another. It is imperative for us to challenge this assumption as well. This is particularly relevant to us because it is not the case that everyone is suffering from implicit bias. The woman at the Cosmos Club suffers from implicit bias not because she lives in an unjust society but because she is wealthy and white in a society in which being wealthy and white is the highest position of privilege. It is hard to fathom that the black men who actually were attendants would mistake John Hope Franklin for an attendant because he also happens to be black.

¹⁸ Epistemologies of ignorance and feminist epistemologies are often referred to as “alternative epistemologies” though I think this does an injustice to the project. To call them alternative epistemologies sounds too reminiscent of the problem of “alternative facts”. The feminist standpoint’s project is aiming at creating a knowledge for women however this is not to say it is incommensurate with other epistemology.

On what grounds do feminist standpoint theorists deny the viability of aperspectival knowledge? Feminist epistemologists identify two main problems with the aperspectivalism assumption. The first is that it applies only to very simple examples (is it a barn, or a barn façade?) but it cannot tackle the complex situations in which knowing or not knowing can have real consequences. The question of whether or not someone is trustworthy is one such example of a complex epistemological question that cannot be tackled by aperspectival views of knowledge practices because a judgment of this sort relies on emotion and intuition as much as background knowledge of that person. The second, is that aperspectivalism divorces the knower from the community such that a discussion about the politics of knowledge is impossible. This obfuscates the connection knowledge has to power. According to feminist epistemologists, the knowledge you have access to is directly influenced by the social position you occupy therefore knowledge and power have a direct relationship.

Lorraine Code is famous for critiquing aperspectivalism and argues that the relationship between knowledge and ignorance is problematic, “In fact, integral to the structure of mainstream epistemology is this either/or (either knowledge or ignorance) structure that is too crude to engage well with the complexities—the ecological questions and the responsibility imperatives, both epistemic and moral—invoked by ignorance” (Code 2012). She further elaborates that there is an asymmetrical relationship between knowledge and ignorance in that having one does not necessarily displace the other, though it can. Code asserts the political investedness of most knowledge-producing activity and insists upon the accountability – the epistemic responsibilities – of knowing subjects to the community, not just to the evidence” (Code 2012, 89). This can be taken to imply that there is a moral as well as epistemological component to knowledge practices.

Rebecca Kukla's perspectivalism, which will be gone into more detail below, argues that perceiving accurately includes perceiving morally important features of others. An example of this is having the experience to perceive members of the gay community, who purposefully display particular features so that they might be distinguished by other members of their subculture (Kukla 2002). The woman at the Cosmos Club should feel shame at misjudging Franklin. This shame is not only the result of making a false judgment, it is the result of knowing you made a false judgment because you were judging someone according to their race. This is an immoral judgement.

The perspectivalist position relies on two claims: most knowledge is a product of judgement calls rather than coming directly from perception or deductive reasoning, and anyone giving a judgment relies on their own specific experiences. What a person finds relevant in any given situation will be determined by what has been relevant to them in the past and as such what appears to one person as warrant, can possibly not appear at another person at all.¹⁹ This position escapes the problem of relativity by asserting that judgments from any situation would still be subject to challenge. By correlating knowledge to personal experience factors such as "the individual's social location or social identity, habits of perceptual attention," become salient in the discussion of what we can know and when we can know it (Alcoff 2007, 41).

Harding describes feminist standpoint theory as, "a kind of organic epistemology, methodology, philosophy of science, and social theory that can arise whenever oppressed peoples gain public voice" (Harding 2004, 3). It claims that specific communities have their own epistemic situation, with members of oppressed groups having "fewer reasons to fool themselves

¹⁹ EI has received a lot of criticism on grounds of relativism. It would be remiss to not include some defense against this legitimate concern.

about this being the best of all possible worlds and have strong motivations to gain a clear-eyed assessment of their society” (Alcoff 2007, 43). This claim is less about the individual’s situation but on the significance of identifying with a social groups (gender, race, etc.) on epistemic practices. On this position, what we do not know, our ignorance, can be patterned according to social and group identities (Alcoff 2007, 47). This critique focuses mainly on the differences in the epistemic situation of men versus women. Harding contends that women must be attentive to more things owing to the fact that they occupy a vulnerable position in society. They have the same material concerns of their male counterparts but also a decidedly more oppressed position.

Feminist standpoint theory claims that the conceptual frameworks of western traditions produce systematic ignorance of oppressed groups including ignorance of their lives and ignorance of the oppression they suffer. The first step in creating a feminist epistemology would be generating knowledge of the oppressive system, how it works and why it works. Thus feminist epistemologists would need to be adept not only with their own alternative epistemology²⁰ but with the traditional epistemology they are attempting to break out of. The next step in the project is to start research from women’s experiences: mothering, marginality, violence against women, women’s labor, etc. The goal is to identify intersections of social locations wherein common experiences of marginalized groups may be found. The ultimate objective would be to “transform a source of oppression into a source of knowledge and potential liberation” (Harding 2004, 10).

In “Objectivity and Perspective in Empirical Knowledge”, Kukla advances a more comprehensive perspectivalism that focuses on the individual perceptual capacities of epistemic agents. She argues that objectivity and perspectivalism are not mutually exclusive concepts. The

question under contention here is whether or not there needs to be democratic warrant for claims in order for them to count as objective. In arguing that there need not be democratic warrant for objective claims we can address for the possibility of “some social positions yielding better, more objective perceptual possibilities than others” (Kukla 2006, p. 82). Kukla argues that perspectivalism is not necessary for objectivity, but that taking perspective in account is imperative for objectivity. The problem with this is determining which social positions have access to perspectives that yield more objective perceptions. It cannot be the case that every person’s perspective is objective because that can lead to the terrifying possibility of giving epistemic authority to racist/sexist positions²¹.

Kukla, like many other feminist/critical race epistemologists, advocates for an Aristotelian account of perception. According to them, there is no reason to think that Aristotle’s theory of moral perception, should not apply to perception in general. If we allow this possibility, then perception is an exercise of reason, not simply the tool by which information regarding the world is gathered and delivered to our reasoning capacities. Truth is not perspectival, it is independent of the observer, but different perspectives can yield different rational access to the truth (Kukla, *Objectivity and Perspective in Empirical Knowledge* 2006, 87). Perceiving things accurately as they actually are in the world is itself a rational capacity and must be something that can be learned or educated for it to count as a virtue.

Although the problem is of the perceptual abilities of the individual agent, it is not within the individual’s ability to improve their perceptual abilities and tendencies on their own. Kukla maintains that we must look to others in certain situations what might be in a better epistemic position to check our own perceptions. Suppose I am a man that wants to work on what I know

²¹ This is a concern that Mills points out in *Alternative Epistemologies* (1988).

to be implicit biases in my own cognition. How would I do this? Perhaps I would consult with a friend, who is in a better epistemic position to understand the given situation because they are a woman. Kukla claims that situations like these are akin to asking a doctor how to look at diagnostic images and a critic to tell me where to find the best food in the city. Social perception occurs in the same fashion and requires developing a proper theoretical framework. At first, a perceiver would have to rely on the judgments of others, perhaps an individual, perhaps a community, and eventually they will have become adept enough to make more reliable judgements on their own.

Kukla claims that by allowing ourselves to be educated by other perceivers that are in a more epistemologically virtuous position we can develop the same types of perceptual skills. In fact this is already done on a daily basis, most extensively in the scientific community, but also in the society at large.²² We already look to the experts to gain expertise because we are cognizant that they are *seeing something we do not* (Kukla 2006, p. 89). Although we should in principle be taught to perceive things in a more virtuous way, there are certain things that hinder this possibility including, “Insouciance, inattention, impairment, and biases and prejudices that block or distort certain kinds of information (Kukla 2006, 87). It is our *epistemic responsibility* to cultivate our perceptual capabilities. An added benefit of Kukla’s position is that she does not differentiate between social cognition and cognition generally. When she discusses improving perceptual abilities this refers to all of perception, not only perception of other people from different social groups.

²² Theory-ladenness of perception in science see Churchland (1979), Kuhn (1962), Feyerabend (1962).

Why is this relevant to our project of implicit bias? Going back to the Cosmos Club example, Gendler says the woman made a mistake but it was not an epistemically vicious one. On Kukla's account of perception, the Cosmos club was guilty of an epistemically vicious mistake. In Kukla's words, "We need to take it as an *epistemic failure* and not just a piece of bad luck if we are unable to access warrant that others seem able to access. Likewise, occupying a perspective that enables accurate, objective perception is an *achievement* and not just a given feature of our found location" (Kukla, Objectivity and Perspective in Empirical Knowledge 2006, 88). Gendler is relying on the warrant afforded the epistemic agent by base-rate information whereas Kukla is considering the warrant afforded by perceptual experience. The perception of Franklin's tuxedo is the warrant for the correct judgment of his club membership.

Interpreting the Cosmos Club example through Kukla does not quite get us to where we need to be as far as motivating a negative implicit bias. What we are really looking for here is not that some positions are better able to access things as warrant, but that certain positions *necessitate* the inattention in order to preserve a view of the world in which they maintain a privileged position. This is the epistemic crime I am accusing the Cosmos Club woman of. The answer to this question is not going to be found in perspectivalism and feminist standpoint theory alone.

Feminist standpoint theory utilizes perspectivalism to validate the claim that men are necessarily ignorant of women's lives by virtue of not being women but this does not talk about exclusion in the right way. They claim that women are excluded as knowers, such as when their testimony is pushed aside. Women are also set up as having a positive condition for knowledge. However, they do not engage with the important question of how evidence can be excluded from perception due to your perspective. In other words, the feminist standpoint position does not

require us to talk about perception as an editing process. It could accommodate such an account of implicit bias, but it just as easily can accommodate the positive implicit bias of Gendler. Therefore, in order to get at how ignorance acts on us as perceivers we must look to epistemologies of ignorance.

2.2 Epistemologies of Ignorance and Negative Implicit Bias

In the effort of arriving at a negative implicit bias I will now utilize the work of Charles Mills and Jose Medina on epistemologies of ignorance. The central claim of epistemologists of ignorance is that ignorance is active. It is something we engage in doing and also something that acts as a force on us. Mills' work is very distinct from the situatedness of knowledge that the perspectivalists and feminist standpoint theories advocate for because racism is the result of failures in cognition *due* to ignorance. Ignorance is a causal force rather than the result of occupying a particular social position. He does not claim that all beliefs are subject to this type of ignorance. His proposition is much narrower and focuses on racism and sexism.

Mills' theory incorporates the ideas of perspectivalism and feminist standpoint theory but takes it a step further. Linda Alcoff explains Mills' position as not one in which there is a *lack* as in the first case (lack of personal experience) or in the second (lack of motivation due to social position), instead the dominant social group has specific epistemic practices that perpetuate ignorance. Racism on this account, is a "type of subjectivity that forms identifiable *patterns*²³ of perceptual attentiveness and supplies belief-influencing premises that result in a distorted or faulty account of reality" (Alcoff 2007, 48). This would amount to an epistemology that is geared toward maintaining a particular faulty view of the world. This faulty view of the world Mills is the essence of "white ignorance". White ignorance promotes the idea of

²³ My emphasis.

individualistic explanations for success which provides support for the claims of white supremacy. Whites are more educated, have had more significant achievements, they occupy more positions of power. White ignorance consists of obfuscating the fact that this is made possible by the privileged position in society they hold.²⁴

His focus is on the structural nature of oppressive systems and the perpetuation of ignorance as a “sustainable epistemic practice”. For feminist standpoint theorists the focus is maintained on gendered relations of power and the implications on knowledge practices, whereas Mills is concerned with how race plays a significant factor in systematic ignorance. Mills’ thesis is that whites have a decidedly positive interest in keeping the oppressive systems in place which consists of “seeing wrongly”. This seeing wrongly consists in a “collective amnesia” regarding the achievements of marginalized groups (people of color) and the atrocities afflicted upon them.

Mills points out that that cognitive science tells us that, “the lack of appropriate concepts can hinder learning, interfere with memory, block inferences, obstruct explanation, and perpetuate problems.” (Mills 1997, 6). He therefore proposes that the social contract theory that has played a huge role in developing western political thought has left out a very important detail, namely race. Mills explores how the exclusion of race from social contract theory leads to problems in its normative theories and practices. The veil of ignorance, proposed by John Rawls is supposed to ensure that when establishing a social contract no one is cognizant of their particular position in society. This includes being ignorant of your race, ethnicity, socio economic position, etc. such that when creating rules for your society you do not create an institution that favors those in your position at the deficit of others (Rawls 1971). Mills argues

²⁴ An amazing cartoon by Toby Morris illustrates white ignorance. Find it here, <http://thewireless.co.nz/articles/the-pencilword-on-a-plate>.

that the veil of ignorance is not the great equalizer it was intended to be. Rather, introducing this veil of ignorance exacerbates the problem by not addressing, even erasing, the monumental influence race has on political thought. We do not need more ignorance, we need less.

Regarding the power of ignorance, Mills claims that ignorance is a tool for oppression. There are two ways of accomplishing this task 1) not allowing the marginalized groups to know and 2) keeping the center powers ignorant, consciously or unconsciously, of the injustices they inflict on the marginalized. Although ignorance is used as a tool for the powerful, at the same time it can be a resource of survival for the victimized. (Tuana 2007). The ignorance of the oppressive system regarding those it oppresses allows the oppressed to sometimes remain unseen and therefore escape. This escape might manifest as ignorance of their own oppression in order to be content.

We can connect Mills to Kukla's perspectivalism through the work of Jose Medina. Like Kukla, Medina adopts an Aristotelian account of perception. He builds upon the foundations laid by feminist standpoint theorists and Mills but he goes further to describe how social positions engender particular epistemic virtues and vices. He clarifies epistemic vice as, "a set of corrupted attitudes and dispositions that get in the way of knowledge" and epistemic virtue as, "a set of attitudes and dispositions that facilitates the acquisition and dissemination of knowledge" (Medina 2013, 30). Rather than fixating on how the privileged class has access to certain benefits such as educational institutions and serving as credible authorities, with the oppressed having the opposite, Medina proposes specific disadvantages of the privileged and the advantages of the oppressed.

The epistemic vices of the privileged include epistemic arrogance, laziness, and closed-mindedness. (Medina 2013, 39). The epistemic virtues of the oppressed include epistemic

humility, curiosity/diligence, and open-mindedness (Medina 2013, 42). It is not the case that everyone who is a member of an oppressed group possesses all of the virtues and none of the vices they can even be developed²⁵. Those who lack virtues may cultivate them by experiencing "beneficial epistemic friction," which forces the knower to grapple with alternative views and generates dissonance that might cause a change in her beliefs or habits.

Medina elucidates that ignorance is active, which he describes thusly, "one's participation in the collective bodies of ignorance one has inherited becomes *active*, because one acts on it and fails to act against it, whether one knows it or not, and whether one wills it or not" (Medina 2013, 140). Implicit bias is one result of ignorance, of ignorance causes us to "mis-see", which is something that acts on us and also something that we ourselves do (Mills 2007).

The contrast between feminist standpoint theory/perspectivalism and epistemologies of ignorance can now be articulated more clearly. For the feminist standpoint theorists, knowledge is situational. Some people have better access to particular knowledge than others because of what appears to them as warrant. On the epistemology of ignorance account, ignorance is not the lack of knowledge but the de-selecting of salient details because it is not in accordance with your faulty view of the world.

Kukla's insistence on perception as a rational capacity maps perfectly onto the picture provided by Mills; and Medina's theories. Medina already places us into this framework of considering the different epistemic virtues and vices that are cultivated in social positions of

²⁵ Medina can be accused of romanticizing oppressed groups by claiming that they possess all of the epistemic virtues. He is not claiming that they necessarily have these virtues, rather that they have a decided interest in being more attentive to various types of evidence. Of course, many members of oppressed groups could have considerable interest in being less attentive to evidence of their own oppression. For the purposes of this paper I am not going to challenge Medina on his assignment of epistemic virtues and vices, especially because it is in accordance with the literature on standpoint theories.

power and oppression. Mills critiques traditional western political thought for perpetuating bad perceptual tendencies such that the “rational” basis for white privilege can be maintained. An epistemology of ignorance is an epistemology in which we are teaching that “misperception” *is* objective perception.

In “Alternate Epistemologies” Charles Mills claims that proponents of EI, “do not see themselves as offering alternate analyzes within the conventional framework of memory, perception, truth, belief, etc.” (Mills 1988, 237). This is a problem for EI, just as it is for Gendler, because perception, and how it is allocated through attention, is undeniably important for the study of implicit bias. Ignorance is performing work, but what kind of work? The work is perceptual in nature. The ideal work of perception is to provide us with accurate information of the world around us. Presumably, we would have certain expectations of what our environment is supposed to be like, then this can either be verified or adjusted according to the information we received via our perceptions. Unfortunately, we know that we do not often, if ever, function ideally. This leaves us to determine how our perception is actually working when it is not functioning it should.

We can either add to our perceptual content things that are not there (as in the Trump Glasses example) or we can subtract things from perceptual content that actually is there (John Hope Franklin’s tuxedo in the Cosmos Club example). When does addition happen versus subtraction? Is one more harmful than the other? In the case of Gendler, we might become aware of the additions to our perceptions. In some cases, such as the Skywalk example, it is quite obvious and alarming that we are experiencing something that we do not rationally endorse. In cases of subtraction, where we do not see something that is in plain sight, there would not be the same sort of cognitive dissonance that happens on the Skywalk. On the one hand, Gendler’s

account is worrisome because there is little chance of improvement if you are unwilling to incur an epistemic cost. However, what chance of improvement is there when you are, quite literally, blind to the problem?

In every account provided of EI there has been an emphasis on perceptual attention, but none of the theorists discussed actually delve into cognitive science to determine how being a part of a group identity can shape the manner in which you allocate your perceptual resources. The next chapter will explore research from cognitive science that describes attentional processes. I hypothesize that bottom-up and top-down attentional systems demonstrate a parallel between positive and negative implicit bias and understanding them as separate systems may answer some questions regarding epistemic responsibility to correcting for implicit biases.

CHAPTER 3

ARE YOU PAYING ATTENTION? A SPECULATIVE LOOK INTO ATTENTION AND BLINDNESS

The previous chapter presented an argument for why we should consider epistemologists of ignorance forwarding an account of implicit bias as inattentional blindness, more specifically as a purposeful inattention to evidence that would contradict the carefully constructed system of power in which we exist. Researchers studying attention are concerned on what makes us attend to certain things over others. How our attention captured, and how it is sustained thereafter, are their main concerns. The question they are trying to answer is, what perceptual inputs are relevant and which ones are not?

The literature on attention is vast and does not currently have a strong consensus. Some of the questions plaguing cognitive scientists today regarding attention include; does it occur early? Late? How much influence do top-down processes have on attention? Bottom-up? Both? Most of the research is concerned with the conditions for attention. They are looking for the answer as to why we notice some things and not others. We might draw a comparison here between how attention and implicit bias are traditionally considered. The treatment of positive implicit bias in current research is similar to studies on attention. They both set up positive conditions for perception. In positive implicit bias, going back to aliefs and the RAB structure, we are seeing a representation of some object, proposition, etc. and have an implicitly associated affective and behavior response. Typical accounts of attention concern themselves with what we see and why those attended to objects capture our attention. Attention, like positive implicit bias, is always directed towards something, some object, person, or location. Negative implicit bias however, does not share this characteristic of having an object to be directed at. It is rather a problem of directing your attention away from some object or representation.

This chapter will give a short survey of attention, focusing on top-down and bottom-up processes of attention allocation. The latter relates to conditions external of the agent that capture attention such as the color, size and shape of objects. The former refers to internal conditions of the observer such as past experience, semantic knowledge, and task orientation to determine what becomes the focus of attentional resources. Top-down processes, as we will see, constitute the brunt of the evidence for why inattentional blindness occurs.

The latter half of this chapter will forward the perceptual cycle model of attention, where top-down and bottom-up processes occur in a feedback loop. The top-down processes appear in the form of schemata which form a general picture of the situation the observer finds themselves in, and an attention set is formed according to the observer's schema. An attention set serves as a plan for distributing attention appropriately. When evidence is gathered via perception, determined by the attention set, it can lead to the refinement of the attention set, modification of it, or the adoption of a new attention set to accommodate new evidence. This presents a checks and balances relationship between our schema of how we think the world should appear, and the visual perception of how it actually appears to us. Inattentional blindness results when the observer's attention set does not adequately adjust itself according to the evidence. If the schema is not adjusted, or abandoned, it will not redirect attention to the stimuli that have become relevant. This could provide us with a perceptual model of how negative implicit bias occurs. I will additionally, present some justification for the claim that inattentional blindness can occur at the conceptual level, which would necessarily have to be the case in order to form an account of implicit bias as inattentional blindness.

3.1 Bottom-Up vs. Top-down Inattention

Before we can delve into our model of attention we must first distinguish between bottom-up and top-down attentional processes. Bottom-up, or *stimulus-driven* attention²⁶, is described as, “passive, reflexive and involuntary” (Carrasco 2011). Bottom-up attention is captured by the salience of stimuli without any necessary directedness on the part of the observer. It is often thought of as being phylogenetically older in that it is beneficial in quick time responses which are necessary in survival situations.

Top-down attention, also called *goal-oriented* attention²⁷, refers to attention that is voluntarily allocated by the observer. It is usually thought of as being controlled and sustained by the observer according to the task they are attempting to engage in (Pinto, et al. 2013). Top-down attention is influenced by an observer’s past experience, semantic knowledge, goals, etc. The relationship between top-down and bottom-up processes is controversial in cognitive science. Some argue that the initial capture of attention is stimulus-driven and only after that can the goal-oriented attentional processes engage with visual selection (Theeuwes 2010). Others argue that top-down mechanisms serve as the initial directors of attention by establishing an attention set (S. Most, D. J. Simons, et al. 2005).

The research on inattentional blindness is directed towards determining what will “break through” the blindness. They are concerned with the conditions for capturing attention or awareness²⁸. Experiments in attention manipulation have found that attention actively performs

²⁶ Also, referred to as exogenous attention which stresses the reliance on external cues to capture attention and awareness.

²⁷ Additionally, this is named endogenous attention wherein the cue is internal.

²⁸ Attention capture and awareness capture are not the same thing. Attention can be captured implicitly without any conscious awareness. To simplify things, when I mention attention capture in this paper I be referring to instances in which attention and awareness are captured.

work in the suppression of information that would be disruptive to the observer. For example, the distractor suppression formulation of external noise reduction states, “attention affects performance in a given area by actively suppressing the strength of representation for areas outside its locus” (Carrasco 2011). However, researchers have yet to address situations in which inattention is a mechanism of exclusion of information that does not accord with how we see the world, in effect making us blind to counter-examples. Inattentional blindness is also interpreted as resulting from limited attentional capacity, such as when your attention is directed towards a task you tune out the irrelevant stimuli that might distract you. Capacity is not the only cause of inattentional blindness. Expectation of a stimulus can also play a role in whether or not your attention will be captured. The cause of inattentional blindness that concerns us here is that which is caused by attention sets. Attention sets serve as plans for the distribution of attention to particular items. Attentional sets are a top-down process and are usually the result of past experiences and habits. They can be adjusted quickly in response to new evidence, and can be specific to any number of situations and environments.

The next section will explore a model of attention that is highly dependent upon attention sets. I will argue that this model is the best method for considering how implicit bias as inattentional blindness occurs because this model has been resurrected recently to account for inattentional blindness at the conceptual level, which is what will be needed to construct a model for implicit bias.

3.2 One System: Perceptual Cycle Model

The perceptual cycle model consists of a feedback loop between bottom-up visual processing and top-down processing. According to the perceptual cycle model, conscious perception is a gradual, constructive process, rather than an all or none phenomenon. Observers

have schemas, or expectations for what belongs in the scene (i.e., which objects should be present, what they should look like, etc.), which are modified by information in the environment. These schemas guide attention, thereby allowing the observer to pick up more information from the scene. As observers gain more details about the objects in the world, they accommodate their schemas to these details and adjust subsequent visual exploration appropriately (Most and Simons 2001, 160).

The perceptual cycle model has two central principles which are that the conscious awareness of a stimulus accumulates gradually, and the observer plays an active role in this process. Therefore, awareness of a stimulus requires a degree of sustained processing and unless it is incorporated into a cycle of expectation and exploration, it might not be “seen” at all. In order for unexpected stimuli to be seen they must either modify the existing perceptual cycle or trigger the formation of a new cycle. (Most and Simons 2001, 161). Forming a new cycle can be very quick and simple, such as the sudden onset of a loud noise, or bright lights. In other instances it is much harder. Engaging in other attention demanding tasks, a perceptual cycle in itself, would reduce the chances of noticing an unexpected stimulus because to do so would require the interruption of the cycle the subject is engaged in. The failure to perceive an unexpected stimulus would be the result of the failure to interrupt/modify a perceptual cycle.

A schema is held by the observer and informs a person about the objects or people one is likely to encounter in a particular situation. The schema can be relatively basic for instance, in an office one expects to find things like computers and desks and does not expect to find a disco ball. The observer’s schema will help them to adopt an attention set which, “determines which specific objects or features the observer will attend to and then guides sustained attention to those aspects of the scene consistent with the attention set” (Most and Simons 2001, 167). The

attention set allows the observer to gather new information. The new information will be added to the attention set and the scene will build gradually with the accumulation of more information.

Schema are very beneficial to cognition because schemata are the semantic knowledge we can access in a given situation (groupings, generalizations, etc.). These are necessary in order to form judgments in a timely manner and with less effort. A judgment can be more easily made when we have pre-established groups into which new phenomenon can be incorporated.²⁹ They are more prone to error, but the benefit of making quicker decisions outweighs the potential for wrong judgment.

The benefits of this conception attention is that it does not rely on the features of the objects perceived, but on the top-down schema that an individual brings to bear on a situation³⁰. The effect on perception due to implicit bias is the result of a schema that incorporates social injustice as objective truths rather than as errors in epistemological practices. I might here be accused of taking the perceptual model too far, in the sense that I am applying it to much higher level processes than it is intended. Indeed, most of the research on attention focuses on features that distinguish one item or another, not the conceptual category that some item occupies rather than another. The next section will provide a brief justification for this move.

²⁹ Gendler discusses the benefits and problems of schemata (though she does not use this word). Gendler claims that encoding base-rates and background knowledge about social groups lead to aliefs which are active in perception. Background knowledge is just another work for schemata. We can then view Gendler as possibly fitting into this model.

³⁰ At first glance this appears to be the same general story that proponents of the cognitive penetration of perception are telling. However, the cognitive penetrationist maintains that in order for an instance of cognitive penetration to occur, an individual must be capable of having a different experience while attending to the same stimuli. The question of how/why your attention is allocated to a particular stimulus is never in question. Top-down processing on perception

3.3 Attentional Sets: Where is the glass ceiling?

Although the majority of studies performed up to now have focused on featural properties of the objects attended or not attended to in order to determine what types of features (or combination of features) can capture our attention in particular tasks, there have been a few studies directed at determining if higher level conceptual categories can also be a part of an attentional set and direct attention. The answer has been yes. According to cognitive scientist Steven Most, what you see is what you set (S. Most, D. J. Simons, et al. 2005). It has been accepted since the famous studies on inattention blindness performed by Mack and Rock (1998) that there is no perception without attention. Attentional sets serve as a plan of action for attention in a situation. Unexpected stimuli are more likely to be noticed if they are featurally similar to items in the attention set. Those items that are too dissimilar are likely to go unnoticed.

One last step lies before us before we can apply what we have discovered regarding attention sets to our definition of implicit bias. We must determine whether or not attention sets can function at a high conceptual level. Typical inattention blindness tasks focus on simply features such as color. Some recent studies indicate that attentional sets can function at the conceptual level as well. One such study measured how well participants were able to identify a stimulus as either a letter or a number when they were primed with an attention set of either letters or numbers. The participants are told to look for either letters or numbers. While they are completing this task they are confronted with an unexpected stimulus. This takes the form of a 3 or an E. Both of these stimuli have the same features, three horizontal lines and one vertical line, and appear as mirror images of each other. The results were as follows.

The attentional set effect was stronger when the unexpected object was an 'E' than when it was a '3' possibly because a block-letter character is more readily identifiable when it is an 'E' than when it is a '3'. Consistent with this interpretation, some noticers described

the unexpected '3' as a 'backwards E'. When the unexpected object was an 'E', 71% of those attending to letters noticed it on the critical trial and only 39% of those attending to numbers did. (S. Most 2013)

The assumption underlying this experiment is that in order to distinguish between two things that are as featurally similar as the number 3 and the letter E the observer must have a pre-employed concept for the image to be categorized under. Those that were attending to letters, which our minds have been trained since childhood to recognize, more easily noticed the stimulus, and they noticed it as an E even when it genuinely appeared as the number 3.

After several similar trials, Most concludes that attentional sets can be conceptual rather than simply feature-based and claims, "Although feature-based attentional set powerfully influences conscious perception, a potentially simultaneous factor shaping visual awareness might be the way that people prioritize certain categories over others." (S. Most 2013). A typical example used to describe feature-based attentional sets explain the inattention blindness suffered by car drivers for motorcycles to be the result of motorcycles not possessing the similar features of a car. Car drivers are being attentive, but what they are being attentive to are features that would correspond to other cars on the road. Therefore, when they are confronted with an image of a motorcycle that does not possess all of the defining features of a car, they are less able to see it. A conceptual-based attention set can explain the same phenomenon while maintaining the importance in differences of features between objects. This explanation would be that the car driver is focusing their attention on the concept of "car" as well as car features and this is the reason why the motorcycle is not noticed.³¹

³¹ This seems related to the question of perception as *seeing that*, and *seeing something as*.

Additionally, Most's study supports the hypothesis that unexpected objects undergo fairly advanced level of analysis prior to being selected for awareness.³² If true, this conclusion, in conjunction with the perceptual cycle model of attention, could plausibly support our definition of negative implicit bias in which evidence is de-selected for because it would provide counter examples to biases sustained by privileged ignorance.

3.4 Retelling the Cosmos Club Story One Final Time

We have seen that the perceptual cycle model claims that there is a feedback loop between a person's top-down attentional sets and their bottom-up perceptual data. Attentional sets are influenced by past experience and habitation. An attentional set must also align with a person's general schema of the situation at hand, but it should ideally be modified according to new information gathered by observation.

I will now apply the perceptual cycle model to The Cosmos Club example to see how we might employ the model to inform us about negative implicit bias. The woman at the Cosmos Club has a task to complete. She must get her coat check from an attendant. We might suppose that this woman has been at the club before, due to having base-rate information regarding club membership, and has asked for her coat check from an attendant during her previous visits. This woman has prior knowledge of what attendance at this club look like such as their features and attire.³³ Her schema of the Cosmos club informs her to expect that there are no black members in the Cosmos club, and to expect that all the attendants are black. Her attentional set, directing her attention in order to accomplish her task of getting the coat check, is directed towards finding a

³² A similar study was performed by (Guo, You and Li 2016) in which they tested for differences in inattention blindness in identifying a chinese character or a picture.

³³ Gendler certainly suggests this when she claims that the woman has access to base-rate information that tells her there are few, if any, black members of the club and that all the attendants are black.

black man, because the schema tells her that black men are attendants. When she finds a black man, John Hope Franklin, she hands him her coat check. We know the rest of the story from here, John Hope Franklin informs the woman that she has misidentified him as an attendant. What we should be asking here is, why did the woman not adjust her schema after realizing that she made a mistake?

Perhaps the woman did adjust her schema for that particular night, in that particular club, to account for a black member of the Cosmos Club. Let us say she did. The next time she tried to approach an attendant she was careful, looking at the person's dress as well as their race, before deciding to hand her coat check to them. Do we think that her overall schema regarding the general attendance at prestigious clubs was changed? From what we know about the intransigence of racial biases we may assume this answer to be no. These biases are constantly reinforced by the mainstream media and other individuals. The next time she enters a similar situation she is likely to be functioning under the same biases and therefore the same schema. However, if she was never confronted by Franklin, never forced to face the error in her judgment, her schema would never have the opportunity to be revised in any way. The problem that inattentional blindness possess to correcting our implicit biases is a powerful one because we cannot revise our beliefs and behavior based on evidence that is not perceived.

The purpose of this chapter was not to provide a definite theory of attention, but only to point out a plausible one that could be explored through further research. Experiments in inattentional blindness have yet to set their sights in such a lofty direction, however it is credible, considering the research that has already been performed, that we may possess most of the tools we need to pursue such a task. The difficulty lies in designing an experiment that could measure

attention sets determined by higher level cognitive processes. The evidence suggests that attention sets can be formed at this level, but it has not yet been measured.

Creating a distinction between Gendler's automatic, valenced formulation of implicit bias and implicit bias that is the result of the influence of top-down cognition on perception, allows us to maintain that we have an epistemic duty to correct for our implicit biases. Harkening back to epistemologies of ignorance, social privilege creates a faulty view of the world upon which our epistemological practices are built. This faulty picture serves as the schema for establishing our attentional sets. Theoretically, we should be able to modify this faulty picture and our attention sets would adjust accordingly. It is not only possible for us to do this, but it is our epistemic responsibility to do so.

CONCLUSION

This thesis was a project with the objective of bridging the gap between several disparate disciplines. In conclusion I would like to reiterate the arguments made in this paper and indicate the direction that future research can take. The first chapter took a survey of implicit bias research in psychology and engaged with Tamar Gendler's proposal of aliefs. Based on her description I claimed that she was advocating for a model of implicit bias that consists of an addition or distortion to visual perception. I then explored implications of this model, including the tenacity of the additions to visual perception (affect and behavior) in the face of conflicting evidence and beliefs. Ultimately, I argued that her primary example does not support her model of implicit bias and later reinterpreted her example to motivate an additional model of implicitly biased perception.

Combining the Cosmos Club example with alternative epistemologies, the second chapter demonstrates the importance of perspectival knowledge in formulating a model of implicit bias. Attention research indicates that executive control of attentional processes is motivated by top-down processes, and therefore the personal experiences, habits, and biases of the observer must necessarily be taken into account. Rather than focusing on *individual* differences in perceptual capacities and cognitive biases, I claimed that the occurrences of implicit bias in particular social groups (white, wealthy, etc.) demonstrates that the loci of measurable difference in perspective is at the intersection between different social groups determined by race, gender, age, sexuality, etc. After establishing the indispensability of group perspective, I then argued for a model of implicit bias as inattentional bias.

The final chapter proposes a theory of inattentional blindness in which inattention is produced when a stimulus differs too significantly from the attention set that you are utilizing,

suggests that future research on inattention blindness should focus on furthering our understanding of attentional sets and how they interact with/are determined by higher level cognitive processes.

The objective of project was to demonstrate two things. First, it should have demonstrated that that research into implicit bias is only in its infancy. We do not yet have an adequate theory of who is biased, why they are biased, and what type of responsibility we have towards correcting for our biases. Secondly, it should have made it apparent that creating a theory of perception must consider the effect social position can have on epistemic practices.

REFERENCES

- Alcoff, Linda Martin. "Epistemologies of Ignorance: Three Types." Chap. 2 in *Race and Epistemologies of Ignorance*, by Shannon Sullivan and Nancy Tuana, 39-58. Albany: State University of New York Press, 2007.
- Amodio, D.M. "Can Neuroscience Advance Social Psychological Theory? Social Neuroscience for the Behavioral Social Psychologist." *Social Cognition* 28 (2010): 695-716.
- Bertrand, M., and S. Mullainathan. "Are Emily and Greg More Employable than Lakisha and Jamal?: A Field Experiment on Labor Market and Discrimination." *nber.com*. The National Bureau of Economic Research. 2003. <http://www.nber.org/papers/w9873> (accessed 2016).
- Blanton, H., and J. Jaccard. "Arbitrary Metrics in Psychology." *American Psychologist* 61 (2006): 27-41.
- Blanton, H., and J. Jaccard. "Unconscious Racism: A Concept in Pursuit of a Measure." *Annual Review of Sociology* 34 (2008): 277-297.
- Blum, Lawrence. "Stereotypes and Stereotyping: A Moral Analysis." *Philosophical Papers* 33, no. 3 (2004): 251-289.
- Brown-Iannuzzi, J.L., K.M. Hoffman, B.K. Payne, and S. Trawalter. "The Invisible Man: Interpersonal Goals Moderate Inattentional Blindness to African Americans." *American Psychological Association* 143, no. 1 (2014): 33-37.
- Brownstein, Michael. "Implicit Bias." *Stanford Encyclopedia of Philosophy*. 2015. <https://plato.stanford.edu/entries/implicit-bias/> (accessed November 10, 2016).
- Carrasco, M. "Visual Attention: The Past 25 Years." *Vision Research* 51, no. 13 (2011): 1484-1525.
- Code, Lorraine. "Culpable Ignorance." *Hypatia* 29, no. 3 (2014): 671-676.
- . *Ecological Thinking: The Politics of Epistemic Location*. New York: Oxford University Press, 2006.
- . *Epistemic Responsibility*. London: University Press of New England, 1987.
- Code, Lorraine. "Ignorance, Injustice, and the Politics of Knowledge." *Australian Feminist Studies* (Routledge) 29, no. 80 (2014): 148-160.
- . *Rhetorical Spaces: Essays on Gendered Locations*. New York: Routledge, 1995.
- Code, Lorraine. "Taking Subjectivity Into Account." In *Education, Culture, and Epistemological Diversity, Contemporary Philosophies and Theories in Education 2*, edited by Claudia W. Ruitenberg and D.C. Phillips, 85-100. New York: Springer, 2012.

- . *What Can She Know? Feminist Theory and the Construction of Knowledge*. Ithaca: Cornell University Press, 1991.
- Connor, Charles E., Howard E. Egeth, and Steven Yantis. "Visual Attention: Bottom-up Versus Top-Down." *Current Biology* 14, no. 19 (2004): 850-52.
- Conrey, F., J. Sherman, B. Gawronski, K. Hugenberg, and C. Groom. "Separating Multiple Processes in Implicit Social Cognition: The Quad-Model of Implicit Task Performance." *Journal of Personality and Social Psychology* 89 (2005): 469-487.
- Cooper, R., and R. David. "The Biological Concept of Race and its Application to Public Health and Epidemiology." *Journal of Health Politics Policy and Law* 11 (1986): 97-116.
- Devine, P. G. "Stereotypes and Prejudice: Their Automatic and Controlled Components." *Journal of Personality and Social Psychology* 56 (1989): 5-18.
- Fazio, Russell H., and Michael A. Olson. "Implicit Measures in Social Cognition Research: Their Meaning and Use." *Annual Review of Psychology* 54 (2003): 297-327.
- Fazio, Russell H., J.R. Jackson, B.C. Dunton, and C. J. Williams. "Variability in Automatic Activation as an Unobtrusive Measure of Racial Attitudes: A bona fide pipeline?" *Journal of Personality and Social Psychology*, 1995: 1013-1027.
- Gendler, Tamar. "On the Epistemic Cost of Implicit Bias." *Philosophical Studies*, 2011: 33-63.
- Gendler, Tamar Szabo. "Alief and Belief." *Journal of Philosophy* 105 (2008): 634-663.
- Greenwald, A. G., and M. R. Banaji. "Implicit Social Cognition: Attitudes, Self-Esteem and Stereotypes." *Psychological Review* 102 (1995): 4-27.
- Greenwald, A. G., B. A. Nozick, and N. Sriram. "Consequential Validity of the Implicit Association Test: Comment on the Article by Blanton and Jaccard." *American Psychologist* 61 (2006): 56-61.
- Guo, Yaning, Xuqun You, and Ying Li. "The Role of Stimulus Type and Semantic Category-Level Attentional Set in Sustained Inattentional Blindness." *Japanese Psychological Research* 58, no. 4 (2016): 332-341.
- Hajek, Alan, and Stephan Hartmann. "Bayesian Epistemology." In *A Companion to Epistemology*, edited by J. Dancy, 93-105. Blackwell Publishing Ltd., 2010.
- Harding, Sandra. "Introduction: Standpoint Theory as a Site of Political, Philosophic, and Scientific Debate." In *The Feminist Standpoint Theory Reader*, edited by Sandra Harding, 1-16. New York, New York: Routledge, 2004.
- Harding, Sandra, ed. *The Feminist Theory Standpoint Theory*. New York, New York: Routledge, 2004.
- Kahneman, Daniel. *Thinking Fast and Slow*. 1. New York, New York: Farrar, Straus and Giroux, 2011.

- Karpinski, Andrew, and James L. Hilton. "Attitudes and the Implicit Association Test." *Journal of Personality and Social Psychology* 81, no. 5 (2001): 774-788.
- Kelly, Daniel, and Erica Roedder. "Racial Cognition and the Ethics of Implicit Bias." *Philosophy Compass* 3, no. 3 (2008): 522-540.
- Koehler, Jonathan J. "The Base-Rate Fallacy Reconsidered: Descriptive, Normative and Methodological Challenges." *Behavioral and Brain Sciences* 19 (1996): 1-53.
- Kukla, Rebecca. "Attention and Blindness: Objectivity and Contingency in Moral Perception." *Canadian Journal of Philosophy* (319-346) 28 (2002).
- Kukla, Rebecca. "Objectivity and Perspective in Empirical Knowledge." *Episteme: A Journal of Social Epistemology* (Edinburgh University Press) 3, no. 1-2 (2006): 80-95.
- Mack, A., and I. Rock. *Inattentional Blindness*. Cambridge, MA: MIT Press, 1998.
- Mandelbaum, Erik. "Against Alief." *Philosophy Studies* 165, no. 1 (2013): 165-197.
- Trump Glasses*. Performed by Rudy Mancuso. Youtube, 2016.
- Medina, Jose. *The Epistemology of Resistance: Gender and Racial Oppression, Epistemic Injustice, and Resistant Imaginations*. Oxford University Press, 2013.
- Mills, Charles. "Alternative Epistemologies." *Social Theory and Practice* 14, no. 3 (1988): 237-263.
- . *The Racial Contract*. Ithaca: Cornell University Press, 1997.
- Mills, Charles. "White Ignorance." In *Race and Epistemologies of Ignorance*, edited by Shannon Sullivan and Nancy Tuana, 11-38. Albany: State University of New York Press, 2007.
- Most, Steven B., and Daniel J. Simons. "Attention Capture, Orienting and Awareness." In *Attraction, Distraction and Action: Multiple Perspectives on Attention Capture*, edited by Charles L. Folk and Bradley S. Gibson, 151-176. New York, New York: Elsevier, 2001.
- Most, Steven. "Setting Sights Higher: Category-Level Attentional Set Modulates Sustained Inattentional Blindness." *Psychological Research* 77 (2013).
- Most, Steven, Daniel J. Simons, Brian J. Scholl, and Erin R. Clifford. "What You See is What You Set: Sustained Inattentional Blindness and the Capture of Awareness." *Psychological Review* 112, no. 1 (2005): 217-242.
- Payne, B., C. M. Cheng, O. Govorun, and B. Stewart. "An Inkblot for Attitudes: Affect Misattribution as Implicit Measurement." *Journal of Personality and Social Psychology* 89 (2005): 277-293.
- Pinto, Yair, Andries R. van der Leij, Ilja G. Sligte, Victor A. F. Lamme, and H. Steven Scholte. "Bottom-up and Top-down Attention are Independent." *Journal of Vision* 13, no. 16 (2013).

- Rawls, John. *A Theory of Justice*. Cambridge, Massachusetts: Harvard University Press, 1971.
- Simons, Daniel J., and Daniel T. Levin. "Failure to Detect Changes to People During a Real-World Interaction." *Psychonomic Bulletin and Review* 5, no. 4 (1998): 644-649.
- Tamar, Gendler Szabo. "On the Epistemic Cost of Implicit Bias." *Philosophical Studies* 156 (2011): 33-63.
- Telzer, Eva H., Kathryn L. Humphreys, Mor Shapiro, and Nim Tottenham. "Amygdala Sensitivity to Race is not Present in Childhood but Emerges over Adolescence." *Journal of Cognitive Neuroscience* 25, no. 2 (2013): 234-244.
- Theeuwes, Jan. "Top-down and Bottom-up Control of Visual Selection." *Acta Psychologica* 135, no. 2 (2010): 77-99.
- Truong, Grace, Kevin H. Roberts, and Rebecca M. Todd. "I Saw Mine First: A prior-entry effect for newly acquired ownership." *Journal of Experimental Psychology: Human Perception and Performance*, 2017: 192-205.
- Tuana, Sharon Sullivan and Nancy. "Introduction." In *Race and Epistemologies of Ignorance*, by Sharon Sullican and Nancy Tuana, 1-10. Albany: State University of New York Press, 2007.
- Wu, Wayne. *Attention: New Problems of Philosophy*. New York, New York: Routledge, 2014.

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