

Mnemonic Justice

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In this chapter I identify a phenomenon that is closely allied to testimonial injustice: mnemonic injustice. Mnemonic injustice occurs when stereotypes shape memory and jointly epistemic and practical harms that constitute injustice ensue. I argue that just as people can achieve testimonial justice by combatting the negative effects of stereotypes on the process of testimonial exchange, there are ways that people can achieve mnemonic justice by addressing the impact of stereotypes on memory. It is shown that mnemonic justice, like testimonial justice, can involve personal, interpersonal and structural change. It is argued that testimonial injustice and mnemonic injustice should be treated on a par, with those concerned with reducing epistemic and practical injustices driven to tackle each.

1. Introduction

In recent work in philosophy, there has been widespread recognition of the phenomenon of testimonial injustice (see, e.g. Collins 2000; Fricker 2007; Mills 2007; Carel and Kidd 2014; Berenstain; Kidd, Medina and Polhaus Jr 2017). Testimonial injustice occurs when a stereotype about a social group influences how the testimony of members of the group is received. The stereotype operates to prevent the testimony of group members from receiving the credibility that it deserves. There are epistemic and practical harms to both the speaker and hearer.

This paper introduces a closely allied phenomenon: mnemonic injustice. Mnemonic injustice occurs when stereotypes about a social group influence what an individualⁱ recalls about the past. Stereotypes about members of a social group lead to biased recall of group members' attributes, behaviors, achievements and details of the situations in which they are encountered. The impact of the stereotypes significantly increases the chance that the person remembering forms biased memories,ⁱⁱ failing to obtain knowledge about certain features of the past. The impact of the stereotypes brings both epistemic and practical harms to the person remembered.

To establish the contours of the phenomenon of mnemonic injustice, comparisons are made throughout this chapter with testimonial injustice. First it is shown that stereotypes influence both how testimony is received and how events are remembered. It is shown that in both types of case the impact of stereotypes reduces the chance of knowledge being achieved by the person who engages in the stereotyping. Then it is shown that just as there can be jointly epistemic and practical harms to those who are stereotyped in cases of testimonial injustice, there can be jointly epistemic and practical harms to those stereotyped when stereotypes influence memory. Next it will be shown that in both types of case it is possible to adopt strategies to reduce the negative effects of stereotypes. In discussions of testimonial injustice, the adoption of strategies to counteract the impact of stereotypes on the process of testimonial exchange has been labeled *testimonial justice*. I introduce the terminology of *mnemonic justice* to label the strategies available to counteract the negative impact of stereotypes on memory. This discussion will provide reason for treating epistemic injustice and mnemonic injustice with parity, displaying similar concern about the phenomena and similar desire to tackle it.

2. The Impact of Stereotypes

The notion of testimonial injustice captures a way that stereotypes can impact upon the ability to gain knowledge via testimony. Stereotypes are mental states that associate individuals with traits due to their perceived social identity and group membership rather than due to their other personal characteristics.ⁱⁱⁱ Testimonial injustice occurs when the social identity and power relations of people involved in a testimonial exchange lead some people, who are members of stigmatized or marginalised groups, to be given less credibility than they deserve due to stereotypes about their social group. Patricia Hill Collins, for example, describes how ‘power relations shape who is believed and why’ (2000, 270). Collins focuses on black women thinkers, arguing that due to stereotypes that denigrate members of this group, they tend not to be believed. The knowledge that they possess is undervalued. Miranda Fricker argues that members of certain social groups are given less credibility than they deserve when they provide testimony, so that they are ‘wronged in their capacity as knowers’ (Fricker 2007, 1). Nora Berenstain (2016) describes how members of dominant groups can demand that members of underprivileged marginalized groups explain the injustices that they suffer but can, even after eliciting this information, dismiss the explanations provided due to the operation of stereotypes.

These ideas will be familiar to many philosophers interested in stereotyping, testimony, issues of justice and fairness, or some combination of these. What might be less familiar is the idea that stereotypes impede the ability to possess knowledge through memory.^{iv} On the traditional model of remembering there is little room for stereotypes to influence what is remembered. On this archival view of memory,^v memory systems work like a storehouse, storing complete and discreet records of events in our personal histories (Sutton 1998). It is difficult to see how stereotypes could have a causal role in the production of memories if they are discreet records of events that are stored in this way. However, the archival view has recently gone out of favor. Constructivism has superseded the view (Robins 2016; for defences of constructivism see e.g. Bartlett 1932; Neisser 1967; Suddendorf and Corballis 1997, 2007; Loftus 2005; Schacter and Addis 2007; Schacter et al. 2007; Shanton and Goldman 2010; Michaelian 2011; Klein 2013; De Brigard 2014). According to constructivism, human memory systems do not store complete records of events. Instead, they store traces of information about past events, which are constructed into mental representations of the past at the point of retrieval of information from memory. The mental representation presents a plausible picture of what might have occurred, fitting with the traces of information stored to memories, and the person who holds the mental representation takes it to be a memory of the event.

Against the backdrop of these challenges to the traditional picture of remembering we can understand how stereotypes can come to influence how we remember, as well as how their influence can impede the ability to draw knowledge from memory. Stereotypes could determine either which traces of information are stored to memory or what is viewed as a plausible construction of an event at the point of retrieval.^{vi} In either case, they prompt people to remember events in a distorted way rather than having a balanced picture of events.

There exists a vast range of psychological research studying the effects of stereotypes on our memories and establishing that we are susceptible to remembering events in a biased manner due to the operation of stereotypes. First, it has been found that under certain types of circumstances people have better recall for details of an event that are consistent with a stereotype than details that are inconsistent with the stereotype (Cohen 1981; Stangor 1988; Signorella and Liben 1984; Bodenhausen 1988; Levinson 2007). For example, C.E. Cohen (1981) found that participants who thought that a woman in a clip was a librarian were more likely to remember that she was wearing glasses than that she was drinking beer. The reverse effect was found among participants who thought she was a waitress. Second, it has been found that under some circumstances people have better recall for details of an event that challenge a stereotype than those that are consistent with a stereotype (Hastie and Kumar 1979; Hastie 1981; Srull and Wyer 1989; Srull 1981; Dijksterhuis and van Knippenberg 1995). For instance, Dijksterhuis and van Knippenberg (1995) found that participants

presented with behavioural descriptions of a professor recalled more information that was inconsistent with the stereotype of a professor than information that was consistent with the same stereotype. This suggests that you might, for example, harbor a stereotype associating professors with being bookish, engaging in indoor and not outdoor activities. This stereotype may lead you to remember that an individual professor told you that he likes to go mountain-biking but not that he told you, in the same conversation, that he enjoys reading for leisure.

People tend to display the first type of biased recall under conditions of high cognitive load (Srull 1981; Hastie and Kumar 1979, Hastie 1981), time pressure (Dijksterhuis and van Knippenberg 1995; Rojahn and Pettigrew 1992; Stangor and McMillan 1992), and where the stereotypes that they apply are familiar and well-learned (e.g. gender and race stereotypes) (Stangor and McMillan 1992; Fyock and Stangor 1994). Meanwhile, people tend to display the second type of bias under conditions of low cognitive load (Srull 1981; Hastie and Kumar 1979, Hastie 1981), when free from time pressures (Dijksterhuis and van Knippenberg 1995; Rojahn and Pettigrew 1992; Stangor and McMillan 1992), and where they are using less familiar stereotypes (Stangor and McMillan 1992; Fyock and Stangor 1994). Under the latter conditions, people have the opportunity to heavily process unexpected information, attempting to reconcile it with existing stereotypes, leading to better recall at a later time. There is also reason to believe that people tend to better recall information that is relevant to a stereotype—either being consistent with the stereotype or challenging it—than information that is unrelated to any stereotype about the individual or event remembered (Hastie and Kumar 1979; Srull 1981; Srull, Lichtenstein and Rothbart 1985).

There is thus very good reason for thinking that stereotypes impact upon two of our main vehicles for accessing knowledge: testimony and memory. They bias both the process of testimonial exchange and the process of remembering.

3. Stereotypes & knowledge via testimony and memory

Now let us consider how the influence of stereotypes on testimonial exchange and remembering can impede the ability of the person applying the stereotype—the hearer or the person remembering—to gain knowledge.

In cases of testimonial injustice the hearer who applies a stereotype can be prevented from gaining some knowledge that they could otherwise have gained through the process of testimonial exchange. Where a hearer gives less credibility to some testimony than it deserves the knowledge that a speaker attempts to convey via testimony can be refused uptake. It can fail to be transmitted from a speaker to a hearer because it is not recognised as knowledge. Fricker makes these points succinctly thus: “There is of course a purely epistemic harm done when prejudicial stereotypes distort credibility judgements: knowledge that would be passed on to a hearer is not received.” (2007: 43).

When stereotypes influence memory, this too can impede the ability of the person stereotyping to gain knowledge. When people remember some details of an event but not others due to the operation of a stereotype, they can consequently fail to track the truth. Truth-tracking involves being sensitive to the truth, believing that p if p and not believing p if not p (Nozick 1981). But say, for example, that you come to believe, due to the operation of a stereotype, that *the librarian was sensibly abstinent at the work Christmas party* when in fact she was drinking beer throughout. Here one has a belief that does not track the truth: the false belief that the librarian was abstinent. Or say that you believe that *the professor gave information to you suggesting that he preferred outdoor to indoor pursuits*, when he mentioned that he loves reading for leisure as well as that he enjoys mountain-biking. Once again we find a belief that does not track the truth: the belief that the professor supplied information that suggests he prefers outdoors to indoor activities. When stereotypes operate in this way, the memory belief is supported by only a problematically biased subset of the

available evidence: either evidence that is consistent with the stereotype or evidence that is inconsistent with the stereotype. Admittedly, it might have been that if you had not harboured a stereotype you would have formed a belief supported by a similar amount of evidence or even less evidence. However, importantly, the subset of evidence that your belief is supported by is problematically biased. Adopting terminology used by Susannah Siegel (2012) to describe how stereotypes bias perception, the memory beliefs produced under the influence of the stereotype can be said to be '*perniciously biased*': you believe the world to be a certain way because of how you previously believed it to be. Your memory system thus works as a channel for prejudiced thinking, preventing you from being open to certain possibilities that are supported by, even strongly supported by, the evidence: e.g. that the librarian displayed counter-stereotypical behaviour while drinking heavily or the professor displayed stereotypical traits by enjoying reading for leisure as well as outdoor pursuits. On some accounts of knowledge, violating epistemic norms like these (truth-tracking, evidence fitting, avoiding vice) is constitutive of a failure to know.^{vii} However, even advocates of other accounts of knowledge must admit that memories will often fail to count as knowledge if produced by a mechanism that (a) fails to track the truth, (b) produces beliefs supported by only a subset of the evidence, and (c) produces beliefs in a prejudiced way.

Stereotypes can, therefore, impede one's ability to acquire knowledge through both testimonial exchange and memory.

4. Epistemic and Ethical Harms due to Stereotyping

Let us now turn our attention to the person who is stereotyped. This section shows how the impact of stereotypes on the process of testimonial exchange and the impact of stereotypes on memory bring related epistemic and practical harms.

Fricker argues that there are primary and secondary harms associated with epistemic injustice. The primary harm of testimonial injustice is, according to Fricker, the epistemic harm of being 'wronged in her capacity as knower' (2007: 1). A speaker is treated as if they lack knowledge that they actually possess due to their membership of a stigmatized or marginalised social group. Being wronged in this way directly undermines the person's humanity:

The capacity to give knowledge to others is one side of that many-sided capacity so significant in human beings: namely, the capacity for reason. We are long familiar with the idea, played out by the history of philosophy in many variations, that our rationality is what lends humanity its distinctive value. No wonder, then, that being insulted, undermined, or otherwise wronged in one's capacity as a giver of knowledge is something that can cut deep. No wonder too that in contexts of oppression the powerful will be sure to undermine the powerless in just that capacity, for it provides a direct route to undermining them in their very humanity (Fricker 2007: 44).

In being denied the status of knower people are treated as lacking a strong capacity for reason, which is a fundamental and distinctive feature of humanity. There is a social meaning attached to the wrongful credibility evaluation, that implies that the individual judged to lack credibility is 'less than fully human' (2007: 44). The wrongful mistrust that is experienced by the person stereotyped involves an attack on their sincerity or competence that amounts to dishonour (p. 46).

There are further secondary harms inflicted by testimonial injustice, which have either a practical or an epistemic dimension (Fricker 2007: 46). For examples of practical harms consider the following. A black female scientist might not be given the career opportunities that she deserves because her contributions to the lab in which she works are undervalued due

to the operation of stereotypes. A patient might be given less credibility than she deserves when describing her symptoms due to the operation of a stereotype associating the patient's group with untrustworthiness, leading health care practitioners to fail to properly diagnose and treat her condition (Carel and Kidd 2014). A defendant might have their testimony denied credibility due to their social identity and might suffer a wrongful conviction, and be unfairly punished by the penal system. Finally, someone who has been victim of a crime might not see justice done because they are not given credibility as a testifier.

Epistemic harms can also ensue (Fricker 2007: 47-8). A person whose testimony is undervalued can suffer a loss of confidence in their beliefs or the reasons that they have for believing what they do. They can come to doubt their own intellectual abilities and lose the motivation to pursue their epistemic projects. They can lose knowledge that they already have, due to losing confidence in their beliefs, and they can fail to gain new knowledge due to refraining from engaging in activities that would otherwise enable them to gain it.

There are structurally similar primary and secondary harms that occur when stereotypes influence memory. The primary harm of mnemonic injustice is that a person is remembered in a way that fails to reflect their full agency and autonomy. As we have seen, a distinctive feature of humanity is the ability to reason. The ability to express our rationality through our choices is also crucial to our humanity. We express our agency in our attributes, behaviours and achievements, including both those that deviate from and those that adhere to the norms of our social group. But when our attributes, behaviours or achievements are remembered through the lens of social stereotypes, they can be viewed not as expressions of individual agency or rational choice but instead as the product of a social group. If treating a person as lacking a capacity for reason is, as Fricker suggests, treating them as "less than fully human", then treating them as if they do not express their own individual agency or rational choice seems to do the same. This is problematic in itself and has the further negative consequence that some of the individual's characteristics, including some that are most clearly expressions of an individual's agency, are not remembered and given appropriate recognition.

There can also be secondary harms, some of which are practical and some epistemic. Take, for example, a medical setting. There are stereotypes associating members of particular social groups more strongly than others with particular medical conditions (Moskowitz and colleagues 2012). For example, black people in the United States are more strongly associated with hypotension than White people (ibid.). This stereotype reflects the reality that hypotension is found at a higher rate among the African American population than the Caucasian population within the United States. But even though the stereotype reflects reality, it can lead to distorted memories about individual patients (Puddifoot 2019). Health care workers are human beings with human memory systems and therefore susceptible to memory biases. Therefore a health care worker could be influenced by the stereotype associating African Americans more strongly than Caucasians with hypotension when remembering the symptoms of a patient. Say, then, that the healthcare worker is reflecting on their African American patient's condition, attempting to work out what is wrong. When engaging in this reflection, they remember symptoms consistent with the stereotype of African Americans, such as hypotension, but not other symptoms. The form the memory *patient A only displayed symptoms x, and y*, failing to remember other symptoms. The diagnosis that is made of the patient reflects this biased remembering and is therefore inaccurate. The patient does not get treatment that would successfully tackle their condition. Here there is a concrete harm to an individual due to them and their situation being remembered in a distorted manner.

For another example, consider a situation in which a person is a member of a social group that is strongly associated with aggression. They become embroiled in a confrontation at a bar. They are not the aggressor, only responding defensively to an attack from someone else. However, they do push the aggressor away, making physical contact. An eyewitness remembers the scene in a biased way: they remember that the target person made physical

contact with another person in the context of a confrontation at a bar, but not that the other person was the aggressor. Participants in a study conducted by Levinson (2007) displayed a bias of precisely this type. Now imagine that the eyewitness sincerely testifies in court, providing information that is taken to support the verdict that the person is guilty of affray. A guilty verdict is reached and the innocent person gets punished. Here, once again, there is a significant concrete harm to the individual due to how a stereotype influences what is remembered.

There are also a variety of specific epistemic harms that can befall a person as a result of being remembered in a biased way due to the operation of stereotypes. First, the contributions that a person makes to knowledge can be misremembered. For example, a student might make a strong contribution in class, but her classmates and teacher might not remember the contribution due to the operation of a stereotype associating members of her social group with incompetence (or, for that matter, competence) in the subject matter. Second, a person can be denied the opportunity to gain access to the resources that would facilitate them gaining knowledge due to the influence of a stereotype on memory. For example, an Asian student might require additional tutoring to gain knowledge about maths. However, their teacher might harbour a stereotype associating their social group (i.e. Asian students) with strong ability in maths and therefore remember their achievements but not their shortcomings in maths. The student might consequently not get the additional support needed. Alternatively, a teacher might misremember the achievements of a student who is a member of a group strongly associated by a stereotype with underachievement, remembering their errors but not their achievements. The teacher might fail to ensure that the student gets access to the high quality university education that their abilities merit. In these types of cases a person is denied the opportunity to gain knowledge due to the influence of stereotypes on how other people remember them.

There will also be cases in which people suffer the kinds of loss of confidence and self-belief associated with testimonial injustice. There will be cases in which a person becomes aware that their achievements and positive attributes are not receiving appropriate credit, where this is due to the influence of stereotypes on memory. For example, a black female scientist might realise that her manager does not acknowledge her recent achievements as well as those of her white male colleagues. Feelings of anger and frustration, loneliness and isolation, as well as a lack of self-worth and agency, could justifiably follow.^{viii} For example, the female scientist might feel angry and frustrated, lonely and isolated if she feels that her colleagues will not understand the experience of being undervalued in this way. She might feel a lack of self-worth and agency due to believing that her achievements will not have the impact that they should on others working in her profession. Each of these experiences could lead to a loss of confidence in what she previously believed that she knew, and to a lack of investment in her cognitive powers, for example through further education and training, due to a sense of futility about whether such investment would result in appropriate rewards. The suggestion here is not that these negative effects will only occur if a person is aware that a memory error occurring due to the operation of stereotypes has caused them to be misremembered. Instead, the claim is that sensitivity to the consequences of the memory bias—i.e. the fact that other people are not giving due recognition to their achievements—could lead to each of these epistemic harms whether or not the person is aware that a memory bias is responsible.

We are now in a position to see how stereotypes can lead to similar epistemic and ethical harms in the process of testimonial exchange and the process of remembering. In both types of case there can be epistemic harms to the person who applies the stereotype: they can miss the opportunity to gain knowledge. There can also be harms to the person who is the object of stereotyping: they can suffer general challenges to their humanity, concrete practical harms, and epistemic harms.

5. Introducing Mnemonic Injustice: Parity Claim

Mnemonic justice is, then, a phenomenon that has previously gone unnoticed in the philosophical literature but is closely allied to a phenomenon that has received a great deal of attention. Mnemonic injustice occurs when stereotypes operate to bias memories of events involving members of social groups that are stereotyped. As a result of the operation of the stereotypes, events are remembered in a biased way, either fitting with or contradicting the stereotype. The person remembering lacks knowledge that they might otherwise have gained, if stereotypes had not influenced their memory. Meanwhile, those people who are the targets of the memory are susceptible to practical and epistemic harms. Due to similarities between testimonial injustice and mnemonic injustice there is reason to treat them with parity, with similar attention being given to each. In both cases there are the same very good reasons to seek ways of reducing the effects. Success in this goal could reduce epistemic and practical harms to both people stereotyping and people stereotyped.

6. Mnemonic Justice

Having identified mnemonic injustice by comparing cases in which memories are shaped by stereotypes with cases of testimonial injustice, it is worthwhile considering whether solutions to the problem can be found by making the same comparison. In discussions of testimonial injustice, Fricker has proposed that people can correct for or minimise the negative impact of stereotypes on testimonial exchanges by cultivating what she describes as *testimonial justice* (2007: chapter four). The suggestion in this section is that it is possible to correct for or minimise the negative impact of stereotypes on memory by cultivating what shall be called *mnemonic justice*. It shall be argued that both testimonial justice and mnemonic justice can take personal, interpersonal or structural forms.

As originally formulated by Fricker, testimonial justice is a *personal strategy*, one that involves changing one's own dispositions to respond to testimony in a biased manner. It is a virtue. The virtue involves adopting a 'reflective critical awareness' (91): a critical stance towards one's perceptions of other people's credibility, being aware of the potential for the perception to be distorted by stereotypes about the speaker's social identity. It involves awareness of how one's social position relative to the hearer is likely to impact upon one's perception of the hearer, and that where there is an imbalance of power, those who are members of non-dominant groups are especially likely to be given less credibility than they deserve due to their social identity. The agent displaying testimonial justice '*neutralizes the impact of prejudice in her credibility judgments*' (Fricker 2007: 92, italics in original). The neutralisation of the impact of the prejudice can be achieved by inflating the credibility given to people where it is understood that they have been given low credence due to stereotypes about their social identity, making judgements of credibility more vague and tentative to reflect the possibility of error, suspending judgement, or seeking more evidence (ibid.: 91-2).

By increasing the credibility that is assigned to testimony of reliable speakers, which would otherwise be undervalued or dismissed due to stereotypes about the speakers' social groups, testimonial justice can increase the sum total of knowledge possessed by individuals and shared within society.^{ix} Hearers can come to recognise and give uptake to knowledge presented by worthy informants whose testimony would otherwise be undervalued or dismissed.

In addition to this, recognition of and attempts to correct for the effects of epistemic injustice can reduce or eradicate the challenge to the humanity of speakers found in cases of epistemic injustice. A hearer achieving testimonial justice will tend to be motivated to adjust the credibility they assign to the testimony of a speaker due to recognising that the speaker has potential to contribute to knowledge. Epistemic justice will thereby be motivated by recognition of the potential for reasonableness of the speaker—an important aspect of a

speaker's humanity. Whereas testimonial injustice undermines the humanity of the speaker, epistemic justice has recognition of the humanity of the speaker at its heart.

Practical harms that would occur due to testimonial injustice can also be avoided through testimonial justice. Testimonial justice could lead appropriate credibility to be assigned to the testimony of defendants, the contributions of black female scientists being appropriately evaluated, and descriptions from patients of their symptoms being taken seriously. These phenomena could result in a reduction to unfair convictions, an increase in fair progression and promotion in the workplace for black female scientists, and an increase in correct diagnoses and treatment decisions. Epistemic harms that follow from loss of self-esteem in response to testimonial injustice could also be reduced. Consequently, the sum total of harm faced by speakers due to testimonial injustice would be reduced.

Mnemonic justice will also involve adopting a critical stance towards our cognition. In the case of mnemonic justice our critical faculties are directed towards our memories of other people, their behaviours, and events or activities with which they were involved. Mnemonic justice involves recognition that stereotypes sometimes distort these memories and making efforts to neutralize the negative impact of stereotypes on memory.

Mnemonic justice can take the form of a personal strategy very similar to the strategy advocated by Fricker as a means to counteract the negative effects of stereotypes on testimonial exchange: people can adjust the credences assigned to memories that are likely to have been shaped by stereotypes. Say that someone seems to recall that the librarian was abstinent at the work Christmas party. On a naïve view of remembering, according to which remembering involves retrieving a discreet file of information about a particular event from memory, it might seem appropriate to assign to the memory a credence of 1, or perhaps .9, to recognise the potential for some margin of error in storage, maintenance or retrieval of the memory. But once it is recognised that the memory could have been influenced by the librarian stereotype, because people tend to harbour the stereotype and it can impact upon how they remember, the credence could be lowered. As the lowering of the credence reflects the reality that the stereotype is likely to have a distorting effect, it will increase the chance of an accurate credence assignment being made.

If appropriate credences are assigned to memories about the attributes, behaviours and activities involving people who are likely to be stereotyped then the chance of epistemic and practical harms is reduced. Take a case in which a team leader in a scientific laboratory seems to recall that a high proportion of the data provided by a junior female scientist in his team was erroneous. The team leader could consider whether this recollection is likely to have been shaped by a stereotype associating males but not females with scientific expertise. On recognising that it is likely that his memory has been shaped in this way, the team leader might lower the credence assigned to this memory. The result could be that future work by the junior female scientist is given more credence than it would otherwise, and, moreover, *appropriate* credence. If the junior scientist is given appropriate credit for the work that she completes, and her work is not undervalued when it would otherwise be, due to the team leader reducing the credence assigned to a biased memory, then epistemic and practical harms will be avoided. Mnemonic justice would be achieved through the adoption of a personal strategy where a person critically reflects upon their memory and adjusts the credence given to the memory to reflect the possibility that it has been biased by stereotypes.

Another personal strategy that could be adopted to neutralise the negative impact of stereotypes on memory is suggested by recent empirical findings. In a recent study, Hartmut Blank and colleagues (2019) asked participants to recall the details of two constructed dating profiles. Some participants were given information about the putative occupations of those described in the dating profiles. These participants displayed a memory bias, remembering more features that were stereotypical than counter-stereotypical, and being less accurate

overall. A subset of this group was then told that the occupation labels had been misapplied to the dating profiles. The effect of this ‘enlightenment’ (Blank 2019) was that the initial memory bias disappeared and the accuracy of the participants’ memories increased. This experiment provides reason to hope that people could reduce the chance that their memories are erroneous by recognising that they are likely to have improperly applied stereotypes when remembering. Here then we find another personal strategy that could successfully lead to mnemonic justice. Where epistemic and practical harms would occur due to the influence of stereotypes on memory, a reduction of the impact of stereotypes due to the adoption of personal strategies would reduce the likelihood of the harms.

A second way to achieve mnemonic justice is through *interpersonal strategies*. Interpersonal strategies involve one agent engaging with another to ensure that the second party does not inflict harms on others, or suffer epistemic harms themselves. There is reason to think that people are often not accurate judges of whether their own responses to the information in their environments is biased or unbiased. People are susceptible to having a distorted perception of themselves and their credibility assessments as unbiased.^x In such cases, interpersonal interactions have the potential to elicit accurate self-ascriptions of bias (Hahn et al 2014; Holroyd and Puddifoot 2019). Evidence for this comes from a study in which participants were asked by experimenters to predict their results on a measure of implicit bias, i.e. the implicit association task. It was found that on prompting they were accurate at predicting their biases whether they were told that implicit biases were their genuine attitudes or culturally learned associations (Hahn et al 2014). These results suggest that questioning people about their biases might be able to elicit correct assessments of the biases.

Given that awareness of the operation of a stereotype can increase the chance that a believer assigns appropriate credence to their memories, and perhaps also reverse the distorting effects of stereotypes, interpersonal interaction might perform an important role in ensuring that people avoid mnemonic injustice. By interacting with other people in a way that increases their awareness of the stereotypes that are harboured—for instance, asking questions that increase their self-awareness—one might be able to increase the chance that they hold correct memory beliefs about events in their lives and reduce the probability of epistemic and practical harms occurring due to distorted memories. This discussion suggests that there might be interpersonal routes to mnemonic justice.

Although testimonial justice was initially described as a virtue of individuals, it has been noted that structural changes to society can neutralise the negative impact of identity prejudice on credibility assignments, and argued that testimonial justice should be taken to be a virtue of social institutions (Anderson 2012). Structural changes can create conditions under which individuals are more likely to make correct judgements about other people’s credibility (Anderson 2012). For example, decision-makers can be provided with explicit criteria against which to judge individuals, so that there is less room for stereotypes to influence their judgements (Anderson 2010, 168). Or changes can be made to social structures to ensure that members of groups that would ordinarily be assigned low credibility are given the opportunity to get the concrete markers of credibility that we commonly use—such as educational qualifications—that would ensure that they get the credit that they deserve. For instance, changes to education systems that are currently segregated can improve the chances that members of stigmatized and marginalised groups get the educational opportunities and the corresponding grades that they deserve (Anderson 2012, 169).

Similar structural measures could increase the chance of people achieving mnemonic justice. Reducing the presence and prevalence of stereotypes, and their influence on people’s thought, could improve the chance that people have knowledge about the past by reducing the distorting effect of stereotypes on memory. For example, reducing the prevalence and influence of the stereotype associating scientific expertise with males and not females could reduce the chance that the evidence of expertise of members of the two groups is remembered

in a biased way. It could prevent there from being epistemic and practical harms to the scientist in virtue of her expertise being underestimated. How could such stereotypes be challenged? Here are some examples. There could be increased opportunity for females to gain entry into and flourish within scientific professions. The increased number of high achieving females could challenge the current stereotype. Alternatively, there could be efforts to raise the profile of existing female scientists. For example, they could be given increased media attention. Here the thought is not that a single or small number of exposures to counter-stereotypical females would challenge an individuals' stereotype^{xi}. Instead, the idea is that an overhaul of the education system and work environment in STEM (Science, Technology, Engineering and Mathematics) subjects could ensure that people are exposed, repeatedly and systematically, to counter-stereotypical examples. Over time, the stereotype associating scientific expertise with men might be eroded and younger people may never come to possess the stereotype. In such a case there would be mnemonic justice due to the instigation of structural changes that reduce the epistemic and practical injustices associated with stereotype-induced memory errors.

Personal, interpersonal and structural methods are thus available to combat the negative impact of stereotypes on memory, and resulting epistemic and practical harms. The terminology of mnemonic justice captures this. Just as it is important to recognise that there can be epistemic and practical gains associated with reducing the negative impact of stereotypes on the process of testimonial exchange, i.e. testimonial justice, it is important to recognise allied gains associated with reducing the negative impact of stereotypes on memory: i.e. mnemonic justice.

7. Genuine Parity?

Within the scope of the current chapter, it will not be possible to consider in depth potential objections to this parity claim. However, two objections in particular are worth considering, albeit briefly. These are the *quality of injustice* objection and the *quantity of injustice* objection.

The quality of injustice objection says that mnemonic injustice is not on a par with testimonial injustice because the harms inflicted in mnemonic injustice are different, and less severe, types of harm, or less severe instances of the same type of harm. The problem with this objection is that it has been illustrated throughout this chapter that the harms associated with the two kinds of injustice are incredibly similar. They each involve a challenge to the humanity of the individual, and very similar practical and epistemic harms, and the harms in the two types of cases are equally severe.

The quantity of injustice objection might seem more promising. It might be argued that we should care more about testimonial injustices because they occur more frequently. Tackling testimonial injustice, so the argument goes, would avoid a larger number of injustices than tackling mnemonic injustice. It is difficult, if not impossible, to precisely quantify how many beliefs from different sources are influenced by stereotypes and consequently bring epistemic and practical harms. Undoubtedly, we are highly dependent on testimony, perhaps even to a greater extent than memory, for knowledge (see, e.g. Strawson 1994), especially about social actors and events. Therefore it might seem that there will be a greater quantity of testimonial injustice than mnemonic injustice, and more value to reducing the impact of stereotypes on testimony than memory. On the other hand, however, while testimonial injustices only impact the assessments of testimony, mnemonic injustices impact our judgements about a far wider range of phenomena. Stereotypes can lead to biased memories of people's testimony and signifiers of the credibility of testimony, but these are only a subset of cases of mnemonic injustice. Mnemonic injustice can also lead to biased memories of people's non-linguistic behaviours (e.g. if they were drinking beer), their attire (e.g. if they were wearing glasses), their hobbies (e.g. if they prefer outdoor to indoor pursuits), and so on. It therefore also seems

plausible that mnemonic injustices could occur more frequently than cases of testimonial injustice.

What is important for current purposes is that it does not seem as if we need to settle the empirical question about whether testimonial injustices or mnemonic injustices occur more frequently to see that it is important to tackle mnemonic injustice. If we were to wait to settle this empirical question before we decided whether to tackle mnemonic injustice, many people would suffer significant epistemic and practical harms in the duration as a result of mnemonic injustice. This seems to be completely the wrong result. Whether or not mnemonic injustice is as common as testimonial injustice, and whether or not we can even answer this question, it is important to tackle the phenomenon, to prevent epistemic and practical harms that would otherwise occur.

8. Conclusion

A large amount of attention has been given to the phenomenon of testimonial injustice and efforts have been made to identify how to tackle it. This chapter presents the case for similar attention being paid to another phenomenon and how to tackle it: i.e. mnemonic injustice. The case has rested upon parallels between how stereotypes impact testimonial exchange and memory. It has been argued that in both types of case the operation of the stereotype brings epistemic harms to speaker and hearer and practical harms to the hearer. Those concerned with reducing epistemic and practical harms due to the influence of stereotypes should therefore treat testimonial injustice and mnemonic injustice with parity: paying attention to both phenomena and how to reduce them.

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ⁱ The emphasis of the current discussion is on how the memories held by individuals are shaped by stereotypes. See, for example, Charles Mill's 'White Ignorance' for a discussion of how collective memories can be shaped by stereotypes.

ⁱⁱ Some philosophers might find it troubling that I describe as memories mental representations of the past that are shaped by stereotypes as memories. They might argue that the mental representations are not genuine cases of remembering as long as they do not count as knowledge. In my view the mental representations should be counted as memories but it is beyond the scope of the current chapter to defend this point. Therefore, the reader may choose to translate all claims about memories influenced by stereotypes into a more neutral language – say, for example, labelling them as mental representations of past episodes that are shaped by stereotypes. Mnemonic injustice would then be manifest through these mental representations.

ⁱⁱⁱ Here I adopt a neutral, non-normative definition of stereotypes rather than stipulating that they are always inaccurate or distorting. I follow Fricker in adopting this definition. For a defense of the definition see Beeghly (2015).

^{iv} Some previous recognition of the phenomenon is found in Puddifoot's (2017a, 2017b) discussion of the various ways that stereotyping leads to epistemic errors. However, the fuller implications of the effect have yet to be explored in print.

^v This terminology is borrowed from Sarah Robins (2016). Robins contrasts archival and constructive accounts of memory.

^{vi} The idea that stereotypes are used to construct a plausible representation of the past is consistent with the view found in the psychological literature that stereotypes are used as cues for retrieving person information (see, e.g. Snyder & Uranowitz, 1978; van Knippenberg & Dijksterhuis, 1996).

^{vii} For truth tracking accounts of knowledge see Nozick 1981 or Williamson 2000. For an example of an account according to which knowledge requires having beliefs fitting with the evidence see Feldman and Conee 1985. For a virtue-based approach to justification or knowledge see Zagzebski 1996 or Sosa 2007.

^{viii} See, for example, Audre Lorde (1997) on how anger at injustices can be justified. Lorde also emphasises the power and insight that is found through anger, 'Anger is a source of empowerment we must not fear to tap for energy rather than guilt. When we turn from anger we turn from insight, saying we will accept only the designs already known, those deadly and safely familiar' (1997: 283). Given that anger does seem to be so powerful and insightful it should not be assumed that there could only be negative consequences, including only negative epistemic consequences, of a person being angered due to mnemonic injustice. Nonetheless, there is good reason to believe that some people's anger, frustration and loneliness due to mnemonic injustice could lead them to withdraw from activities through which they could gain knowledge. Noticing a reliable lack of recollection of their positive attributes and achievements, they could disengage from projects that would enable them to gain knowledge.

^{ix} The claim here is not that we will suddenly become perfect at identifying who is and who is not a reliable and sincere informant. There are various biases to which we are prone when making assessments of other informants. However, by reflecting on the errors we might make in assigning credibility to speakers, and correcting for biases that make us undervalue the testimony of marginalized and non-dominant group members, we may increase the chance that we will acquire knowledge from worthy informants that we might otherwise have missed.

^x There is a vast and varied literature showing how people can lack knowledge about their biases, believing themselves to be less biased than they really are. Here are just a couple of examples. The literature on implicit bias suggests that people automatically and unintentionally associate people with characteristics due to their social group membership, often without awareness of doing so. For early studies see, for example, Devine 1989 or Greenwald & Banaji 1995. For a recent overview of the philosophical as well as the psychological literature see Brownstein 2017. Work on confirmation bias suggests that once people adopt beliefs they find evidence in support of those beliefs more compelling than evidence against them, so people are unlikely to notice the ways that they are biased, instead thinking that they have beliefs that are well-supported by the evidence (Lord, Ross and Lepper 1979; Nisbett and Ross 1980).

^{xi} A wide-ranging recent study conducted by Lai et al (2018) suggests that local exposure to counter-stereotypical group members will not have long lasting positive effects.