

Epistemic Injustices Obstruct Reliable Epistemic Practices

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Abstract: Epistemic injustice is a specific type of harm that occurs when people are unfairly treated in their capacity as knower (Fricker, 2007). One harm that may come from epistemic injustice is that people are denied their ability to become full epistemic agents either on their own or as part of a greater knowledge production process. In this paper, we address the consequences of epistemic injustices for knowledge production processes. We argue that when pertinent experiences, knowledge, or expertise that would be provided by the harmed person is left out of a knowledge production process, the community is denied that knowledge, as well as the ability to leverage that knowledge into an alternative or deeper understanding of the situation at hand. Therefore, epistemic injustices are not only unethical. Epistemic injustices obstruct reliable epistemic practices. We discuss implications of issues of epistemic injustice for scholarship on epistemic cognition.

Research into personal epistemology (Hofer & Pintrich, 2002) or epistemic cognition (see Greene, Sandoval, & Bråten, 2016) attempts to model people's ways of knowing and understanding. Various theories and models have addressed an increasing range of issues, from epistemic beliefs and epistemic development to epistemic virtue and epistemic emotions (Barzilai & Chinn 2018; Chinn, Buckland, & Samarapungavan, 2011). In this way, research on epistemic cognition has expanded to embrace more and more of the issues that have been addressed by epistemologists (Chinn et al., 2011). However, there is one topic that has been closely examined by epistemologists in recent years that has not yet figured in research on epistemic cognition: epistemic injustice. Epistemic injustice refers to unfairness, wrongs, or harms that are distinctively epistemic. That is, epistemic injustice refers to harms that occur when people are unfairly treated in their capacity as knowers (Fricker, 2007). In this paper, we will discuss epistemic injustice and the harms it produces, as well as how epistemic cognition researchers could enhance their models by incorporating issues related to epistemic justice and injustice.

Epistemic injustice

Epistemic cognition encompasses all the processes and products involved when people endeavor to develop representations of how the world is (Chinn et al., 2011; Chinn, Rinehart, & Buckland, 2014). Although earlier research on epistemic cognition often focused on beliefs, such as beliefs about what knowledge is or beliefs about how knowledge is justified, epistemic cognition also includes the practical activities involved in forming knowledge individually and socially, practices of inquiry, dispositions to seek knowledge, caring about epistemic aims, and a broader range of metacognitive regulatory processes and understandings (Barzilai & Chinn, 2018; Barzilai & Zohar, 2014; Chinn et al., 2011). In short, epistemic includes "...the whole range of efforts to know and understand the world..." (Goldman, 1986, p. 13). As people engage in epistemic processes to develop knowledge and understanding, they are epistemically agentic—meaning they are agents or subjects of their own knowledge production, even when it may be partly guided by parents, peers, or authority figures.

Miranda Fricker sought to describe a particular type of wrong that happens to people when they are "ingenuously downgraded and/or disadvantaged in respect of their status as an epistemic subject" (Fricker, 2017, p. 23). Fricker makes clear that she believes this harm happens to people as opposed to an act in which they participate. Therefore, an *epistemic injustice* is a harm that occurs to someone either by another's discriminatory practice, or an intentional discriminatory practice of some system, institution, or community, when engaged in some epistemic endeavor. An epistemic injustice always begins with some sort of power imbalance, whether it is social, economic, political, or other. More specifically, an *epistemic injustice* occurs when someone or some situation prevents another person from performing epistemic processes or tasks **and** the person is (or other persons are) harmed by being obstructed from these epistemic pursuits. An epistemic injustice may also occur when a person is harmed as a result of being unable to perform these epistemic pursuits, or when the results of their epistemic pursuits are dismissed or diminished for no reason, or based on who they are, or the perception of who they are. To unpack these ideas, Fricker uses examples from literature. In one, she highlights the epistemic injustice faced by the character Tom Robinson in the novel *To Kill a Mockingbird* by Harper Lee when Tom's testimony is not believed because of racial prejudice (Fricker, 2007). The testimony of a white woman—despite flaws in her testimony—was given greater weight than Tom's testimony because of her social status and race. The consequences of this epistemic injustice are severe, as Tom is found guilty of rape, a crime he did not commit.

Tom's testimony, his accounting of what he knew to be his experience, was not believed by the jury. Tom was denied full epistemic agency, even in his own defense.

Since Fricker's initial analysis, others have expanded the notion of what epistemic injustice is and how it can occur in various settings. In education, for example, epistemic injustice can occur when teachers or other curriculum designers make decisions about whose history is worth teaching and who has expertise in this retelling of history (Kotzee, 2017). Epistemic injustices can also occur when we dismiss or ignore someone's knowledge because they are denied an opportunity to fully participate in the social practice of knowledge production **and** the reasons for which they are denied this opportunity are based on unequal, unfair, or insufficiently verifiable grounds (Hookway, 2010). In such cases people, often from historically marginalized communities, may expect their statements to be "misheard, misconstrued, or discounted," leading them to speak inaccurately or not speak at all (Frank, 2013, p. 366). Therefore, the quality of data and hearing it can be affected by epistemic injustices.

Epistemic injustice and reliable epistemic processes

In this section, we argue that epistemic injustice does not only perpetrate moral harm to the victims of injustice; it can also decrease the reliability of epistemic processes. *Reliable epistemic processes* are processes that have a good likelihood of achieving epistemic aims such as knowledge and understanding (Chinn et al., 2014). Common reliable processes might include seeking out a broad range of ideas or evidence about a topic, argumentation with epistemic peers, sharing findings with others, and other forms of inquiry are examples of reliable processes. In part, when we evaluate expertise, we also consider the practices used by the experts during knowledge creation and substantiation (Chinn & Rinehart, 2016). It is important to examine the conditions of epistemic practices to appraise when such practices do and do not reliably produce knowledge (Goldman, 1986, 1999; Longino, 1990). An epistemic goal has a higher probability of achieving the goal if it is reliably produced. Also worth noting is that reliable epistemic processes are discipline specific (Chinn et al., 2011).

As we have noted, an important form of epistemic injustice is the exclusion of relevant people's perspectives from knowledge-producing processes. But when relevant voices are excluded, it means not only that epistemic injustice has occurred but also that knowledge-producing processes are suboptimal. For example, when women are not included in discussions or debates with legislators about reproductive policy it is an epistemic injustice because the knowledge, experiences, and perspectives of women are relevant to this debate. Indeed, women have specific knowledge about reproduction that men do not have, and this knowledge is frequently dismissed or ignored. But the dismissal of this knowledge—precisely because this knowledge is relevant—is that conclusions, drawn in its absence, will be being poorer. It is possible that legislators may believe that the exclusion of women from such decisions is based on alternative processes, such as only legislators in the governing party should make such decisions, and the elected legislators in the governing party are predominantly male. These justifications are based on inequities of privilege and power (e.g., fewer women run for elected office, women are not considered to have leadership qualities, women—and men—in the nongoverning party also have knowledge that can shape better conclusions). In this way, epistemic injustice obstructs a more reliable epistemic process because excluding knowledge prevents everyone from obtaining a more comprehensive view of the situation.

Similar arguments have been made regarding the exclusion of marginalized people and communities from science. Exclusion of people from traditionally marginalized groups (e.g., women, people in poverty, ethnic and religious minorities, etc.) from science is not only an epistemic injustice. A consequence is a reduction in the plurality of thought needed to create scientific knowledge, so that scientific knowledge is thereby impoverished (e.g., Longino, 1990; Oreskes, 2019). Less representative scientific communities can be expected to be less reliable in their production of scientific models and theories. Indeed, the exclusion may not just be of specific information or insights. Such exclusions during participatory practices minimize or hinder a more thorough epistemic endeavor and often lead to justifying more of the same sorts of exclusions (Hookway, 2010).

Similar forms of exclusion can occur in other settings such as schools, as well. For example, teachers give boys more coaching regarding higher order critical thinking and how to speak in an authoritative manner than they do girls (e.g., Sadker & Sadker, 1986). By not receiving similar coaching, the participatory potential for some students is diminished or erased.

Implications for models of epistemic cognition: Incorporating issues of social injustice

In the process of understanding people's cognitions and emotions about knowledge and knowing, most theories of epistemic cognition have not built in notions of epistemic injustice into their accounts. Indeed, it is rare even to acknowledge that issues of epistemic injustice might be considered more fully. More generally, there have been discussions about power and privilege within the learning sciences and how research can be socially unjust (e.g., Booker et al., 2014; Esmonde & Booker, 2016). These authors make ethical and empirical arguments challenging the assumption that "equal is equitable" when doing research, as well as challenging any neglect of issues of

equity and justice. Here we argue more specifically that theories and models of epistemic cognition should incorporate considerations of epistemic justice and injustice so that the work yields a more comprehensive explanation of the world.

As an example of how considerations of epistemic injustice could be structured into scholarship on epistemic cognition, we will discuss how developmental models and research might incorporate issues of epistemic injustice. Developmental models of epistemic cognition trace people's ways of knowing and their ideas about ways of knowing through a series of levels of development (e.g., King & Kitchener, 1994; Kuhn et al., 2000). For example, Kuhn's model of epistemic development presents four levels: realist, absolutist, multiplist, and evaluativist – with realist as the lowest stage of development and evaluativist as the highest. Kuhn et al. wrote about whether a person could attain the evaluativist level:

“Remaining the most fragile developmental transition – the one that may never be achieved – from embrace of the multiplist equation of all claims as equally valid reflections of their owners' subjective perspectives to the reintegration of objectivity into knowing, the latter reflected in the evaluativist's belief that, despite the respect accorded to people's rights to their own views, criteria exist for judging some claims to have more merit than others.” (Kuhn et al., 2000, p. 313).

Developmental models generally assume that people begin at lower levels and, if they have attained the right amount and proper type of experiences or education, then they may attain the highest. However, these models do not appear to reflect on who has access to education or experiences that would lead to this attainment. Nor do we know if and how the criteria for determining levels have taken account of a broad range of perspectives beyond only privileged perspectives—a requisite for an epistemic injustice evaluation.

We see three ways in which issues of epistemic justice and injustice could be incorporated into these models. First, the definitions of “high” levels of thinking should be elaborated to incorporate considerations of epistemic injustice. In the Kuhn model higher development is determined by a person's ability to moderate the subjective dimension of knowing in favor of the objective dimension of knowing (Kuhn et al., 2000). However, often the goal of objectivity is a stand-in for “status quo reasoning that works, under conditions of oppression, to justify subordinating practices...” (Haslinger, 2017, p. 280). From this perspective, favoring the objective dimension of knowing could be objectifying epistemic agents and often what is referred to as objective inquiry is not a value-free endeavor (Haslinger, 2017). It would be valuable for models of epistemic development to incorporate a more nuanced sense of objectivity to account for such concerns.

Second, epistemic injustice issues could be incorporated more explicitly into developmental models of epistemic cognition. For example, development could be viewed not only in terms of whether some claims can be viewed as having more merit than others, but also more about what the grounds are for viewing some claims as having more merit than others. These grounds could explicitly include whether people appreciate (for example) that relevant perspectives might be excluded from inquiry or other processes, and that claims based on a broader range of relevant views are likely to be more meritorious.

Third, in order to assess this broader conception of high-quality thinking, it will be necessary to develop vignettes that afford thinking about such issues. Current vignettes are written in ways that would give respondents few opportunities to articulate, for example, whether relevant people and their perspectives have been silenced in their role as a knower, or whether epistemic processes have been rendered less reliable by excluding relevant voices. Respondents often consider very brief vignettes; for example, why experts or others might disagree about complex socio-scientific topics such as whether food additives are safe, the viability of using nuclear power, and the veracity of global warming [*sic*] (King & Kitchener, 1994). In order to explore whether multiple relevant voices have been excluded a more detailed vignette that invites reflection on who has been included and excluded in different ways would be needed. As another example, consider a vignette used by Kuhn et al. (2000): “Robin has one view of why criminals keep going back to crime. Chris has a different view of why criminals keep going back to crime.” This vignette makes presuppositions that some respondents might reasonably not accept, such as the presupposition that people labeled as criminals have actually committed crimes. The vignette also ignores that some laws are created unjustly and that some people are incarcerated for one type of crime while granting more leniency for other analogous crimes (e.g., criminal incarceration for those with an addiction to heroin but drug treatment for others with an addiction to opiates; large differences in the response to crack vs. powder cocaine use). Such vignettes may underestimate high-quality thinking because some respondents' experiences may be considered irrelevant given the way the scenarios are worded.

Conclusion

The Learning Sciences generally, and this conference in particular, recognizes that social justice, identity, and

learning are intertwined. This paper seeks to pull on those intertwined threads by applying an epistemic justice lens to theories of epistemic cognition. Epistemic injustice harms people in their capacity as knowers. By excluding consideration of epistemic injustice from our models of cognition, we as researchers may ourselves be unintentionally committing acts of epistemic injustice. For example, this can occur when we ourselves develop models of good thinking that exclude some reliable ways of knowing, or when our models are built on empirical research that excludes some relevant ways of knowing, or because we do not study knowers who could illuminate other ways of knowing. In our view, the field has been moving vigorously ahead along multiple dimensions to consider new perspectives, and perspectives of epistemic justice are an additional way to enrich work in the field. The additional point this paper tries to make is that epistemic injustice is certainly a wrong that harms people—one that can also impede our understanding of exactly what we are trying to study.

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