Culture, exploitation, and the epistemic approach to diversity

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Abstract

A lack of diversity remains a significant problem in many STEM (Science, Technology, Engineering, and Mathematics) communities. According to the epistemic approach to addressing these diversity problems, it is in a community's interest to improve diversity because doing so can enhance the rigor and creativity of its work. However, we draw on empirical and theoretical evidence illustrating that this approach can trade on the epistemic exploitation of diverse community members. Our concept of epistemic exploitation holds when there is a relationship between two parties in which one party accrues epistemic benefits from another party's knowledge and epistemic location and, in doing so, harms the second party or sets back their interests. We demonstrate that the ironic outcome of this nominal application of the epistemic approach is that it undermines the epistemic benefits which it promises. Indeed, we show that epistemic exploitation undermines the relationships and interactions among community members that produce rigor and creativity. Our central argument is that for communities to reap the benefits of an epistemic approach to diversity, to implement a genuine epistemic approach, they need to develop cultures that ameliorate the harms faced by, and protect the interests of, their diverse community members.

Keywords

epistemic exploitation; diversity in STEM; women in STEM, business case for diversity; scientific community; culture change; feminist epistemology; novelty tax; critical contextual empiricism

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1 Introduction[3]

There is a lack of diversity in many science, technology, engineering, and mathematics (STEM) communities. In some prestigious and financially lucrative areas, such as computer science, white men especially remain significantly overrepresented.[4] In fact, between 1991 and 2011, the number of women computer science students in Canada declined, and at the end of that period, women comprised only 16% of first-year computer science students (Wall, 2019). This reduction in the number of women computer science majors is significant, especially considering that, during the same period, 60% of the growth in university-level computing jobs required a computer science background. Unsurprisingly, those jobs went mostly to men. Between 1991 and 2011, the number of university-level computing jobs held by 25- to 34-year-old women in Canada dropped by 4,000, while the number held by men of the same age group increased by 25,000 (Dionne-Simard et al., 2016).

Twenty years of attention to diversity issues have not prevented the slow erasure of women from this field. Nor did this attention help the excruciatingly slow rate of progress for racialized men and women in the academy. In the United States, women comprise 37.4% and underrepresented minorities comprise 8.9% of science and engineering doctorates employed in academia (National Science Board, 2018, see Tables 5-14 and 5-16). Between 2003 and 2015, the representation of Black and Hispanic doctorates in full-time faculty positions remained very low: the representation of Black men rose from 3% to 3.3%, while the percentage of Black women stayed constant at 5%; and the representation of Hispanic men rose from 3% to 4.2%, while the percentage of Hispanic women rose from 4% to 5.2% (National Science Board, 2018, see Figure 5-14).[5] Keep in mind that these slight increases coincided with 12 years of raising

[3] We would like to thank Samantha Brennan, Shannon Dea, Peggy DesAutels, Heidi Grasswick, Daphne Gray-Grant, Tim Kenyon, Wren Lamont, Boyana Peric, Kathryn Plaisance, and Sara Weaver for rich discussions of this topic and feedback on various drafts of this paper. We are grateful for constructive feedback from the 2016 Southwestern Ontario Feminist Philosophy Workshop, the philosophy departments at Western, Wilfrid Laurier, and McMaster Universities, and three anonymous reviewers.

[4] The research we draw on in this paper assumes a gender binary, as do the cultures we examine. But we want to acknowledge that this belies a more pluralistic reality. Focusing on cis men and women is not the only relevant or the most representative way to talk about gender diversity. However, we use cis language because it reflects the current state of much research and affairs in the academy. We intend, nevertheless, to extend our arguments in this paper to more inclusive categories of men and women, such as trans* folks. Wherever relevant, we hope that readers will see the applicability and value of our insights here to folks who are traditionally excluded by cis language.

[5] For a fuller picture of the representation of women and people of color in STEM, see Ferguson, 2013; Rollock, 2019; Social Sciences Feminist Network Research Interest Group, 2017;

awareness about and efforts to correct the lack of diversity in the academy. While the representation of women has improved in some areas, such as the biological sciences, there is significant work to be done in many disciplines (National Science Board, 2018, see Appendix Table 5-15).

There is a wide range of arguments—ethical, epistemic, economic, pragmatic—for and approaches to correcting this dearth of men of color, women of color, and white women in many disciplines (Rosser, 2004; Page, 2003; Valian, 1990; Stewart and Valian, 2018; Fehr, 2011). This paper focuses on an epistemic approach to improving diversity developed by Longino (2001) and Fehr (2007, 2011), in which diversity can facilitate greater rigor and creativity in epistemic communities. Some philosophers refer to this view as a business case for diversity (e.g., Steel & Bolduc, 2020). We maintain that an epistemic approach to improving diversity has the potential to be successful, but we caution that this approach can, and in many contemporary contexts has and probably will continue to, trade on the epistemic exploitation of diverse practitioners (Arvin et al., 2013; Dotson, 2011a, 2011b; Greenwood et al., 2008; McPherson, 2006; sovereign, 2015; Steel & Bolduc, 2020). In this paper, we offer an analysis of the epistemic approach to improving diversity, describe the epistemic exploitation that can arise, and provide general guidelines for best practice.

We begin by briefly rehearsing the epistemic approach to diversity and move on to develop our notion of epistemic exploitation. Drawing on social science research, we demonstrate how an epistemic approach to diversity can trade on epistemic exploitation. In the next section, we explore an important tension: epistemic exploitation undermines the benefits that the epistemic approach to diversity boasts. Rather than setting aside the epistemic approach, we argue that epistemic communities need to embrace cultural changes that nurture a just (i.e., nonexploitative) epistemic community.

Our central argument is that, in order to meet the spirit of and reap significant benefits from an epistemic approach to diversity, a community must intentionally develop a culture that respects its members' interests and approaches, and counters oppressive norms and practices that act as barriers to its members' flourishing. We support our view by drawing on intersectional social science research and feminist epistemology regarding the experiences of diverse practitioners in epistemic communities. Toward the end of the paper, we make recommendations for cultural changes to help communities treat diverse practitioners with respect and reap the epistemic benefits that can arise from increasing diversity.

Identifying and recommending changes in the cultural features of epistemic communities is consistent with the primary purpose of the epistemic approach in the first place: digging out and assessing previously hidden and often fundamental values, and opening up

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Walkington, 2017 in addition to the National Science Board, 2018; the data from Statistics Canada in Wall, 2019; and Dionne-Simard et al., 2016.

research to new approaches, questions, methods, and goals. The epistemic approach to diversity allows communities to notice and overcome limitations that were once part of their business as usual, which they must do to improve diversity among their members and improve their knowledge-producing practices.

We focus on academic scientific communities in this paper because they are a relatively clear and well-studied example of an epistemic community, because they are often publicly funded and hopefully culture-shaping institutions, and because the lack of diversity in these communities is a current, significant problem that requires attention. However, we expect our analysis to be transferable to many other epistemic communities, including academic fields beyond STEM and philosophy; corporate, government, and nongovernmental research and development communities; and entrepreneurial business enterprises. Any community that tries to increase the rigor and creativity of its knowledge-production practices by increasing diversity has the potential to fall into the exploitative relationships that we describe.

2 Epistemic approach to diversity

2.a Defining some terms

We use the term *diverse practitioner* to refer to a member of an epistemic community who is currently underrepresented in terms of their social and material location or in terms of their projects and perspectives. In practice, the category of diverse practitioners *tends* to include people with lower socio-economic status (SES), disabled people, women, people of color, people with fewer markers of a prestigious education, and members of other minority or marginalized groups. In contrast, *commonplace practitioners* are what we call epistemic community members who are overrepresented in the community. This tends to include many white people, people with higher SES, straight cis men, and folks with a prestigious educational pedigree. It is important to keep in mind that a diverse practitioner may also be diverse in the sense that their epistemic interests are underrepresented. It is often the case that a socially diverse person also has an epistemically diverse project, but it is not always the case. There are multiple aspects of a person's identity, so community members can be commonplace in some respects and contexts and diverse in others.[6]

[6] Although we focus on diverse and commonplace practitioners, it is possible there are *goldilocks practitioners* whose representation in an epistemic community is, roughly speaking, just right. Our focus on two kinds of practitioners, diverse and commonplace, does not assume that the social categories of interest are binaristic. We acknowledge that many of these categories are complex. For example, as we show later in this paper, differences in the representation and experiences of white women, Black women, and Latinas are important in different STEM communities.

It is also useful to clarify what we mean by "diversity." We draw on and develop Fehr's (2007, 2011) distinctions between *situational* and *epistemic diversity* and between *effective* and *ineffective epistemic diversity*. A community is *situationally diverse* when it includes members from a variety of social and material locations. In other words, a situationally diverse community includes people of various races, ethnicities, class backgrounds, genders, sexual orientations, disabled and nondisabled people, cis and trans* people, and so on. Situational diversity is a matter of degree. It refers to the categories represented in a community and the proportionality of those categories. The fact that these categories overlap, and certain individuals get counted more than once—for example, one individual can satisfy four identity categories: white, wealthy, straight, man—mandates an intersectional lens when examining the situational diversity of a community.

An intersectional approach begins with the understanding that one must be very careful to avoid falsely generalizing about any one identity category; for example, a person must take care not to assume that all women are white, or cis, or straight. Another way of saying this is that, when thinking about women, one cannot assume that the experiences of white women and women of color are the same just because they are both women. It can be easy to fall into a *greatest common denominator sort of situational diversity*, in which only diverse practitioners whose identities significantly overlap with commonplace practitioners are admitted to communities or treated as colleagues and full community members. In practice, greatest common denominator diversity results in white, cis, straight, nondisabled women being recruited as diverse practitioners in communities in which white, cis, straight, nondisabled men are overrepresented; or in a diverse woman practitioner being taken seriously insofar as she acts like "one of the guys." Importantly, greatest common denominator diversity practices can minimize the changes that commonplace practitioners have to make in a community's culture. This may make things run more smoothly but can have negative effects on the community's epistemic diversity. We will return to this important point later.

Epistemic diversity is diversity of thought (Fehr, 2011). A community is epistemically diverse when there is a plurality of epistemic perspectives, values, theories, and/or worldviews among its members. Although situational diversity need not result in epistemic diversity, in many cases, it does, because knowledge is situated. *Situated knowledge* describes the influence of our social and material locations on what and how we know (Anderson, 2020; Code, 1995, 2008; Haraway, 1988). Anderson (2020) explains that knowledge can be situated in a wide range of ways: a person's social and material location can influence the information they can access and how they represent that information; their interests (and dislikes); the details they observe (or miss); and the assumptions that are salient to them. Anderson goes on to note that situatedness can also affect a person's attitudes towards their own beliefs, such as their certainty about them, and "the authority with which they lay claim to their beliefs and offer them to others." The how and why we know, captured by the idea of situated knowledge, are

central features of one's *epistemic location*. These examples of the ways in which knowledge can be situated are also examples of the ways in which diversity in social and material location can lead to diversity of thought—that is, to epistemic diversity.

Epistemic diversity that contributes to the knowledge-production practices and products in a community is *effective epistemic diversity*; the epistemic diversity of its members has some influence on the community's knowledge-production practices and products. When epistemic diversity is impeded from affecting the community's practices and products, it is a case of *ineffective epistemic diversity* (Fehr, 2011). The effectiveness of the epistemic diversity in a community is a matter of degree and will depend on whether epistemic diversity has been nurtured to the point that it can be expressed in the community. The people who hold diverse perspectives must want or feel safe enough to share them, and the community must equally be able and willing to listen to these people share these perspectives.

Carefully developed with respect to race and ethnicity, philosophical work on silencing generally describes phenomena where barriers to testimony or the uptake of that testimony inhibit communication. In *The Alchemy of Race and Rights*, for instance, Patricia Williams (1991) discusses the racial discrimination that people of color must still encounter when trying to "make the world," even though the legislation that formally barred them from doing so no longer exists. Within academic communities, world making can take many forms, such as conducting research, writing, creating art, or engaging in service work. Williams's point is that, even though people of color are legally allowed to participate fully in epistemic communities, they often are prevented from capitalizing on the opportunity to do so. As Williams puts it, the emancipation of Black slaves has only permitted them a "freedom from" and not a freedom "to be." They have been "manumitted back into silence" (p. 236). Engaging in critical democratic dialogue within epistemic communities is a form of world making, and the persistent exclusion from and marginalization of people of color in epistemic communities can inhibit the development and expression of effective epistemic diversity.[7]

More recently, Kristie Dotson (2011b) furthers this line of analysis and offers a description of two types of silencing. The first, which she links to Patricia Hill Collins (2000), is testimonial quieting. The second, she calls testimonial smothering. The former occurs when the testimony of a minority group member is not given appropriate uptake. This is partly what Williams describes; some folks, simply because of who they are, are excluded from epistemic projects and communities. Testimonial smothering, on the other hand, occurs when, after a history of silencing, a member of a minority group chooses to not speak, to remain silent, even when she may have something relevant and significant to say. Both sorts of silencing are anathema to effective epistemic diversity because, where inherited practices of exclusion block

[7] See also Williams, 2018.

diverse practitioners from contributing to a community's epistemic practices and products, situational diversity can fail to secure *effective* epistemic diversity.

2.b Rigor and creativity

With all of this defining taken care of, it is fast work to explain the approach to improving diversity that we consider in this paper. On the epistemic approach, situational diversity leads to good science. This is because situational diversity can improve rigor and foster creativity, two important values in scientific research. As we explained earlier, knowledge is situated, so the addition of diverse practitioners to relatively homogeneous epistemic communities often introduces epistemic diversity in the form of new perspectives on the community's practices, values, and structures. Helen Longino (1990, 2001) has made a specific case for this phenomenon. According to Longino, values and assumptions play a crucial role in determining whether a piece of evidence has bearing on a particular hypothesis or theory. And yet, it is difficult to determine—indeed, there is not a method for revealing—the values and assumptions that play this role. Longino argues critical democratic dialogue among people who hold different values and tend to make different assumptions maximizes the likelihood that a community's values and assumptions are made explicit and hence available for evaluation. The rigor of an epistemic community thus increases with diversity because knowledge claims and their supporting assumptions are evaluated from a greater number of perspectives. In other words, as the epistemic diversity of a community increases, so does its ability to produce well-justified or objective knowledge.[8]

The creativity argument works in parallel. Put simply, it reasons that people who are differently situated can have different goals, will notice different things, and be interested in different questions (Anderson, 2020). This can have a profound impact on the scope of scientific investigations and on the theoretical and methodological resources that a community develops and deploys. For example, the influx of feminist women researchers into primatology in the 1970s resulted in attention being paid to female primates and to the nuances of primate social structure that were previously neglected. Primatologist Sara Hrdy (1986) noted that the field lacked the theoretical and sociological frameworks not just to explore answers to questions on

[8] It is possible for situational diversity, without accompanying epistemic diversity, to improve a community's epistemic practices. For example, Katherine Phillips (2017) and Steel et al. (2021) explore the idea that the mere presence of a diverse practitioner in a group is, in some cases, correlated with commonplace practitioners being better epistemic agents—sharing dissenting views and more objectively considering the evidence and arguments available to them. The idea is that the mere expectation of epistemic diversity arising from situational diversity can lead commonplace practitioners to approach their knowledge-production practices more carefully. However, in this paper, rather than focusing on cases in which situational diversity can be beneficial on its own, we focus on cases in which the culture of epistemic communities impedes the development of effective epistemic diversity when diverse practitioners are present.

these topics but even to ask the questions in the first place. Jeanne Altmann also noticed that the field lacked the methodological resources to effectively gather data needed to answer these questions (Haraway, 1989). The theoretical and methodological resources developed by these women to conduct their situated research interests have now become part of the standard toolbox for studying the behavior of female primates *and* the study of animal behavior in general.[9] In other words, their field and others related to it benefited from creativity that was made possible by an influx of diverse practitioners.

The primatology example demonstrates that creativity not only is an end in itself but also can lead to more rigorous science. Championing a new methodology, for instance, can lead to new questions and unexpected answers, and it can also facilitate the collection of more nuanced data, both of which highlight the significance of the gendered assumptions brought to light by the influx of feminist women researchers into the field. Rigor and creativity are thus related. Moreover, because creativity and rigor are two values that can be thought of as hallmarks of "good science," they can motivate scientific communities and their commonplace members to foster diversity.

3 Epistemic approaches and exploitation

Epistemic arguments in favor of improving diversity are often directed toward existing epistemic communities overpopulated by commonplace practitioners. The central aim of these arguments is that the existing community, and its extant commonplace practitioners, will reap epistemic advantages by increasing the number of diverse practitioners among its members; simply put, they promise improved creativity and rigor. Yet, when framed this way, the epistemic approach can result in the epistemic exploitation of these diverse practitioners.

Philosophers have begun to discuss issues of epistemic exploitation. For example, Fehr's (2011) concept of diversity free-riding describes situations in which marginal members of academic communities, because they are in vulnerable social locations, can feel they have no choice but to work on diversity issues in situations where that work is uncompensated (or undercompensated), risky, and taxing. Nora Berenstain (2016, p. 596) discusses a form of epistemic exploitation that arises in cases in which a "privileged person compels a marginalized person to educate them about the nature of their oppression." For Berenstain, exploitation occurs because the marginalized person is compelled to perform emotionally and cognitively taxing labor for free. Steel and Bolduc (2020) propose yet another notion of epistemic exploitation. They identify exploitation as "taking unfair advantage of vulnerability," as an

[9] There can be times in the development of some ideas when they are best nurtured by a community of like-minded supporters, but according to this theory, at that point in development, they remain poorly justified. Once these ideas are developed, they require investigation by a diverse community to become better justified.

inequity possibly associated with the epistemic approach to diversity (p. 435). They support their claim using hypothetical cases in which epistemic benefits can arise in contexts in which diverse practitioners are treated inequitably.

In this paper, building on Fehr (2011), we characterize exploitation as a relationship in which one party is harmed and their interests are set back relative to a second party in order to benefit that second party. [10] In economic exploitation, there is a relationship in which one party harms or sets back the interests of another for the first party's financial benefit. In the case of epistemic exploitation, there is a relationship in which one party harms or sets back the interests of another for the first party's epistemic benefit. On our account, in cases of *epistemic exploitation*,

> there is a relationship between A and B, in which A accrues epistemic benefits from B's knowledge and epistemic location and in doing so harms B, setting back B's interests relative to A's interests.

In this paper, we show that diverse practitioners can be epistemically exploited in the context of an epistemic approach to diversity. Diverse practitioners are not only treated unfairly, or are harmed, or have their interests set back. Additionally, commonplace practitioners *benefit from* this relationship that sets back the interests of diverse practitioners; the epistemic benefits they accrue from diverse practitioner's knowledge and epistemic location arise from an arrangement in which diverse practitioners' interests are set back relative to their own.

For reference, Berenstain seems to identify exploitation as a relationship that allows for compelled and unrewarded epistemic labor. Steel and Bolduc, on the other hand, seem to identify the vulnerability of some epistemic agents as the source of the exploitation (i.e., exploitation cannot occur without at least one party being vulnerable). Our characterization of epistemic exploitation can be applied to situations in which there is unrewarded epistemic labor and vulnerability, but neither are what we argue make epistemic exploitation exploitative. Sometimes, as Berenstain (2016) and Fehr (2011) argue, unrewarded epistemic labor plays a role—not being compensated can benefit another party if both parties share or compete for the same resources. Sometimes, as Steel and Bolduc (2020) claim, the vulnerability of one party creates conditions conducive to exploitation. We hold that an arrangement is epistemically exploitative when members of one group derive epistemic benefits from a relationship that harms or sets back the interests of another group relative to the first group.

There is an ostensible tension in our view that epistemic exploitation undermines the epistemic benefits of diversity because epistemic benefits are included in the definition of epistemic exploitation itself.[11] But we maintain that epistemic exploitation and the benefits promised by the epistemic approach to diversity come in degrees. We expect that, in many

[10] Thanks to Samantha Brennan for helping us clarify the relationship involved in our characterization of exploitation.

[11] Thanks to an anonymous reviewer for helping us clarify this point.

cases, epistemic exploitation will diminish but not completely eliminate the benefits arising from diversity, and that a community will reap more significant epistemic benefits by treating its diverse practitioners well. Furthermore, in section 4, when exploring ways to address epistemic exploitation, we resolve this tension by introducing two distinctions: the distinction between short-term and long-term epistemic benefits, and the distinction between benefits accruing to individual commonplace practitioners and to the epistemic community as a whole. We argue that in this case of epistemic exploitation, commonplace practitioners accrue short-term epistemic benefits by harming diverse practitioners and setting back their diverse interests. This is different from the aim of the epistemic approach to diversity, which is to produce long-term epistemic benefits for whole communities, including diverse practitioners and, importantly, without harming diverse practitioners or setting back their interests.

We consider epistemic harms and interests in a broad sense. For example, they can include direct epistemic interests, such as the development of one's efficacy or credibility as a knower. They can also include indirect epistemic interests, which can provide the material conditions that facilitate knowledge production and the development of one's capacity as a knower. A well-paying and secure scholarly job, for instance, in addition to providing opportunities for producing knowledge, facilitates honing one's research skills, which can, in turn, build one's self-confidence and credibility as a knower. Additionally, institutional affiliations can contribute to the credibility of a knower and the knowledge they produce.

In the remainder of section 3, we articulate a number of ways diverse practitioners can pay more and higher epistemic costs and receive less and fewer epistemic benefits related to community membership than do commonplace practitioners. Within an epistemic approach to diversity, these are ways that diverse practitioners are harmed and their interests set back relative to and in order to benefit commonplace practitioners. This unjust relationship, combined with the fact that diverse practitioners are invited into a community in order to benefit that community (and its extant commonplace practitioners), is what makes this a case of epistemic exploitation rather than a merely epistemic, or another sort, of harm.

3.a Unjust relationship

Commonplace and diverse practitioners tend to experience membership in the same community differently. McGee and Kazembe (2015), in their research on how Black academics contend with racialized entertainer stereotypes, provide a powerful instance of a Black job candidate experiencing a department very differently from the way a white faculty member did:

> Jerald, an assistant professor, . . . had just finished a job talk on black culture and ethnomusicology for a predominately white department faculty. At the post presentation reception, the department chair, a white female, introduced Jerald to a white faculty member, who asked him to demonstrate his research by "playing his banjo" for them, presumably referring to the animated guitar music that had played

> during the presentation. It took Jerald a few seconds to get over the shock of the "joke," and he found himself laughing nervously. Another white male put his arm around Jerald and said, "As you can tell, we are a fun group here." Dismayed but at the time jobless, Jerald reluctantly accepted the position. (McGee & Kazembe, 2015, p. 15)

Commonplace practitioners often don't realize that the costs and benefits of community membership can be different for diverse and commonplace practitioners. What may be a collegial department for them may be an unpleasant one for diverse practitioners. As a result, commonplace practitioners may inadvertently engage in epistemic exploitation. In the context of an epistemic approach to diversity, commonplace practitioners may advocate for increasing the representation of diverse practitioners in a community in order to accrue epistemic benefits such as increased rigor and creativity. But in doing so, the unjust distribution of the costs and benefits of community membership between diverse and commonplace practitioners may lead to diverse practitioners being harmed or their interests set back relative to commonplace practitioners' interests. In the rest of this section, we discuss some of the epistemic hardships (both direct and indirect) that diverse practitioners qua diverse practitioners may face after accepting an invitation to join a community. All of these hardships are epistemic, faced by diverse practitioners in the context of an epistemic approach to diversity, and they are ways that diverse practitioners are harmed and have their interests set back relative to commonplace community members. They are markers of epistemic exploitation.[12]

3.a.1 Costs

The costs of community membership tend to be high for diverse relative to commonplace practitioners. This is not to say that there are no costs associated with being a commonplace practitioner. There are some very high costs that everyone who is a member of a scientific community must pay.[13] Most jobs do not require staying in school until you are 30 years old. The sacrifices in terms of income, energy, and work-life balance are immense. However, there are additional and ongoing costs for diverse practitioners that are significant and frequently overlooked by those who hold majority positions in a community. For example, there is research showing that women scientists bear a wide range of costs for community membership, including facing more significant challenges with work-life balance and making

[12] Although the empirical and theoretical points we raise in the remainder of this section tend to focus on race and gender, we do not claim that this is an exhaustive description of factors supporting epistemic exploitation or that race and gender are the only axes of oppression that are relevant to epistemic exploitation.

[13] We maintain, however, that some commonplace practitioners experience very few, if any, additional costs, beyond those which every practitioner must pay in order to be a member of an epistemic community.

more sacrifices than men in their decisions to (not) have children. Some of these costs, such as enduring higher levels of stress and enduring more social isolation than men, come with clear epistemic consequences (Social Sciences Feminist Network Research Interest Group, 2017, pp. 229–231). We explore the following epistemic costs of community membership: the costs of (1) credibility bias, (2) stereotype threat, and (3) the novelty tax."

There is a large body of literature demonstrating a range of biases against women in STEM. Most of this literature focuses on white women. Joan Williams, Katherine Philips, and Erika Hall (2014) recently published an intersectional study investigating experiences of bias among Black women, Asian American women, Latinas, and white women. Their data includes the results of an online survey of women recruited through the Association for Women in Science, and interviews with 60 scientists who identify as women of color. This study asked women about their experiences with several categories of bias including: "Prove It Again," "The Tightrope," and "The Maternal Wall." The results are striking.

Prove It Again is the tendency for women to have to provide more evidence of competence than men do to be seen as competent as men, and to be under scrutiny for errors as opposed to being under scrutiny for excellence. Williams et al. (2014) found that three-quarters of Black women and two-thirds of the Latinas, white women, and Asian American women in their study experienced some version of this bias. They also found that "Asian-American women's experiences were shaped far more by the negative stereotype that women are not good at science than the positive stereotype that Asians are" (p. 5). However, the Black women in this study tended to attribute their experiences of *Prove It Again* to race rather than to gender.

The Tightrope describes the double bind that women face between being seen as competent and assertive, and being likeable (see also Cuddy, Fiske, & Glick, 2004; Prentice & Carranza, 2002). Half of the white, Black, and Asian women and nearly 60% of the Latinas surveyed reported backlash for expressing anger. More than 60% of Asian women reported backlash for being assertive. A third category of bias, *the Maternal Wall*, describes the devastating effect that having children has on assumptions about women's work competence and commitment (see also Correll, Benard, & Paik, 2007; Cuddy, Fiske, & Glick, 2004). Williams et al. found that mothers of all races in their sample report experiencing the Maternal Wall.

The women of color interviewed also report experiencing negative racial stereotypes that circumscribe their membership in an epistemic community, especially in comparison to their nonracialized, male counterparts. For example, Williams et al. (2014) write that Black women, more than other women, tended to report a sense of "bleak isolation" with respect to their work (p. 7). The Black women and Latina participants in this study also "often reported being mistaken for janitors" (ibid.). Experiencing these credibility biases can undermine a person's sense of their own professional and epistemic competence and epistemic agency. As Lorraine Code (1995, p. 69) argues, we cannot think of testimony as mere information

exchange; it always matters who is testifying because the "'hearing is believing' expectations do not hold uniformly across the epistemic terrain." Stereotypes damage the credibility of a testifier. The biases that Williams et al. explore undermine the knowledge-producing capacity of women scientists as well as the ability of epistemic communities and society more generally to benefit from the skills and expertise of these women.[14] These biases also show a pattern of incredulity about the knowledge-producing capacities of women in STEM, which is itself a significant epistemic harm. But more closely related to the point of this section, experiencing and persevering in the face of this harm is a cost of community membership that most commonplace practitioners do not have to pay.

Stereotype threat

Stereotype threat is another cost associated with being a diverse practitioner. Stereotype threat occurs when one's performance has the risk of reinforcing negative stereotypes about one's group and that group membership is made salient to them (Steele & Aronson, 1995). It results in underperformance. For example, Steele and Aronson (1995) found that asking Black students to fill out a demographic survey question about their race before taking a test had a negative impact on their test performance. Stereotype threat has also been shown to harm the academic performance of women, as well as Black, Hispanic, and low SES students (Steele & Aronson 1995; Schmader & Johns, 2003; Croizet & Claire, 1998). Stereotype threat can be triggered simply because one is a member of a minority group. Diverse practitioners are therefore vulnerable to stereotype threat because they are members of a minority group in their epistemic community. Further, if an epistemic approach to diversity is made explicit, then one's (diverse) group membership is likely also to be made explicit, and one's vulnerability to stereotype threat will be exacerbated.

Experiencing stereotype threat is an epistemic harm because it undermines one's performance producing scientific or other kinds of knowledge. While there are strategies for minimizing stereotype threat (see http://www.reducingstereotypethreat.org), one cost that diverse practitioners bear that commonplace practitioners don't is the concern about or the actuality of underperformance due to stereotype threat.[15]

The Novelty Tax

The epistemic approach to diversity is essentially an invitation to diverse practitioners to join a community and provide dissent, to point out implicit values and methodological inconsistencies and hence improve rigor. It is also, then, an invitation to introduce new questions and theories that lack a history within a community and hence provide novelty that

[14] According to Medina (2011), these disproportionate assignments of credibility contribute to many varieties of epistemic injustices that harm not only the direct victim(s) of the injustices but also their larger community (which shares with the victim(s) a collective or social imaginary).
[15] See Jennifer Saul (2013) for a more detailed analysis of how stereotype threat and implicit biases affect women in philosophy.

increases the creativity of the community. It is an invitation based on the benefits of doing something additional to and different from the common activities of the community—to change the conversation. It should therefore be unsurprising that, in the academy, where established traditions often hold centrality, there are costs associated with this novelty. For instance, it is easier to publish not only when a person is in a subject position that is granted credibility and intellectual respect but also when the person's research can comfortably fit into extant conversations. Consider that in a well-known handbook for scholarly writing (Graff, Birkenstein, & Durst, 2018), students are advised to think about the task of writing a paper as entering into a conversation: "if there is any one point that we hope you will take away from this book, it is the importance not only of expressing your ideas ('I say') but of presenting those ideas *as a response to some other person or group* ('they say')" (p. 3). The message is clear: the academy is built upon what has been said before.

In "Notes for a Critique of Academic Meritocracy," Fiona Jenkins (2013) argues that "a bias against avowedly situated work is in play" in the academy such that "traditional" lines of research are featured more frequently in prestigious journals at the price of unintentionally discounting epistemically diverse projects (p. 91). Patricia Collins (2000) adds,

> In general, scholars, publishers, and other experts represent specific interests and credentialing processes, and their knowledge claims must satisfy the political and epistemological criteria of the contexts in which they reside. Because this enterprise is controlled by elite White men, knowledge validation processes reflect this group's interests. . . . This means that scholarly communities that challenge basic beliefs held in U.S. culture at large will be deemed less credible than those that support popular ideas. For example, if scholarly communities stray too far from widely held beliefs about Black womanhood, they run the risk of being discredited. (p. 253)

Commonplace practitioners may not realize that epistemic approaches to recruiting diverse practitioners involve inviting those practitioners to take a vulnerable and risky position within a community (Fehr, 2011). Yet it does. The epistemic approach to diversity trades on the benefits of including social and cultural positions that have been previously excluded from discussions within that community. In other words, it trades on the value of dissent from positions that have been systematically ignored, disempowered, disrespected, mocked, or made the subject of violence (Lugones, 1987). For this reason, it could very well be the case that diverse practitioners don't want to speak from their diverse identities. The costs of doing so are significant—they must invoke the history of injustices and, with it, the stereotype threat and credibility biases that threaten their membership and success in the community. It is far easier, perhaps to the point of unconsciously acquiescing, to remain silent, as Dotson (2011b) suggests. Consider again the difficulty women face in tiptoeing the line between assertiveness and anger. Why grapple with credibility biases that threaten to undermine their epistemic agency when

they can just stay quiet? Staying silent can protect diverse practitioners' intellectual interests, secure social inclusion and ease (Lugones, 1987), and maintain a modicum of confidence and safety (Collins, 2000; Dotson, 2011b). And for many diverse practitioners, these benefits are not trivial. For some, they are worth the setback to their epistemic interests and projects (Dotson, 2011a, 2011b).[16] This, in itself, is telling.

We have just explored three areas in which diverse practitioners pay higher epistemic costs for community membership than commonplace practitioners. This is only half the problem; diverse practitioners also receive less and fewer epistemic benefits.

3.a.2 Benefits

There are differences between the benefits that diverse and commonplace practitioners accrue from community membership. Generally, commonplace practitioners get a better deal. We are not arguing that diverse practitioners receive no benefits for epistemic community membership; we argue that commonplace practitioners enjoy some benefits that diverse practitioners don't and that there are important benefits that are not equitably distributed between commonplace and diverse practitioners. There are at least two categories of benefits that are inequitably distributed: professional rewards and community integration.

Professional rewards with epistemic consequences

One of the reasons why it is beneficial to be a member of an epistemic community, such as an academic department, is that it pays the rent and offers a host of additional professional rewards. It is a place of employment, and it provides social status. But research shows that commonplace practitioners accrue more than their fair share, and diverse practitioners accrue less than their fair share, of these benefits.

Forty years of social psychology research shows that people have significant, unconscious, implicit biases against diverse practitioners and in favor of commonplace practitioners and that these biases can have a significant impact on hiring, salary, and promotion decisions. Consider that, in experiments in which employers are sent résumés that are identical at every point except the name of the applicant, people with names that identify them as white men are more likely to get hired and are more likely to be hired at a higher rank and at a higher salary than are people with women's names and names that are not recognizable as being white (Fidell, 1970; Steinpreis et al., 1999; Moss-Racusin et al., 2012). Diverse practitioners within academic communities also tend to be found at lower ranks and hold less secure positions than commonplace practitioners (Allen et al., 2000).

Holding a secure academic job has epistemic benefits. The direct epistemic benefits of holding this sort of position include its being a public marker of one's credibility as a knowledge producer (because universities are scholarly institutions) and of the credibility of the knowledge

[16] Recall that Jerald from section 3.a, "[d]ismayed but at the time jobless, . . . reluctantly accepted the position" at the unfriendly/friendly department (McGee & Kazembe, 2015, p. 15).

one produces (because of assumptions that universities employ experts and produce good research). Widespread recognition of and support from a formal epistemic community, such as an academic department, may also support one's confidence in one's own knowledge-producing capacities. There are also indirect epistemic benefits of a secure job in academia, such as a salary, which is usually enough to provide access to the material conditions that facilitate developing one's skills as a knowledge producer and opportunities to produce knowledge.

Community integration

In addition to the inequitable distribution of professional rewards (and the epistemic benefits that accompany those rewards), diverse practitioners are also likely to reap fewer benefits associated with community membership. One often unnoted benefit of being a member of an epistemic community is the collegiality and intellectual stimulation of working in a group with similar interests and passions. Research suggests that some women face barriers in establishing such "egalitarian, collegial collaborations" (Sonnert & Holton, 1996, p. 66; see also Knobloch-Westerwick, 2013).[17] In a mixed methods study of women in physics, respondents identify exclusion as a source of frustration (Ivie & Goa, 2006). One respondent reported,

> Interaction with colleagues has been the most difficult. I have often felt that I am ignored or discounted when I attempt to initiate collaborations with men. (p. 11)

It is also likely that women have less access to mentoring than men (Moss-Racusin, 2012). Lugones (1987) and Dotson (2011a, 2012) talk about the benefits of being at ease in a community in which there are commonalities of language, history, and culture. This sort of ease and at-homeness is enjoyed by commonplace practitioners in many epistemic communities. Many diverse practitioners, because they are underrepresented and perhaps marginalized members of society, often can't have the same experience. In fact, it is not uncommon for diverse practitioners to spend significant time and energy in communities outside of their departments or outside the academy where they do have this sort of ease. Recall Jerald (from section 3.a), the Black job candidate who reluctantly took a position at a "fun" department. It is not hard to imagine that Jerald, feeling uncomfortable with his new colleagues, may choose to spend his free time away from the department. Yet, in doing so, he may be rebuked by his colleagues; maybe Jerald isn't serious about research or collaboration, they'll say, or maybe he isn't "fun" like us. Because the epistemic community is so warm and friendly to them, commonplace practitioners can easily fall into the trap of thinking that the engagement of

[17] Henry and Glenn (2009) provide innovative ideas for Black women in the academy who have or had problems connecting and collaborating with others. Their discussion is informed by Black feminist thought and critical race theory.

diverse practitioners in other communities is a sign of the diverse practitioners' lack of commitment and/or competence (see Haslanger, 2008; and Dotson, 2012).

The relative dearth of these social and intellectual benefits for diverse practitioners can manifest itself as the flipside of the novelty tax. When a commonplace practitioner enters an epistemic community, that community is often move-in-ready. The community members share salient aspects of one's identity, *and* they are also familiar with the theories, methods, values and assumptions in one's research. There is no need for an initial justification of one's approach; one can just start. Being an individual or a member of an underrepresented group being used to increase diversity in a community, on the other hand, can make it challenging for diverse practitioners to enjoy the benefits of ease, acceptance, and at-homeness that commonplace practitioners may take for granted. Patricia Hill Collins's (2000) description of the complexity of working as a Black woman in the sciences captures this difficulty:

> In order to refute the history of Black women's unsuitability for science, they had to invoke the tools of sociology by using positivistic frameworks to demonstrate their capability as scientists. However, they simultaneously needed to challenge the same structure that granted them legitimacy . . . [g]iven Black women's long-standing exclusion from sociology prior to 1970. (p. 256)

Not only may diverse practitioners experience a relative dearth of social and intellectual benefits then, but they also have to do more work in order to experience the same social and intellectual (epistemic) benefits that their commonplace counterparts enjoy.

Moreover, there are many important epistemic benefits that arise from social interactions within a collegial epistemic community. These benefits range from enjoying intellectual security that can facilitate scientific work, to developing and testing ideas within a community, to working with collaborators on one's knowledge-producing projects. If commonplace practitioners enjoy more of these benefits of community integration than diverse practitioners, then the interests of diverse practitioners are set back relative to those of commonplace practitioners in a community. Similarly, when diverse practitioners pay epistemic costs associated with community membership that commonplace practitioners avoid, the interests of diverse practitioners are set back relative to those of commonplace practitioners.

Even though the epistemic approach focuses on commonplace practitioners benefiting from increased rigor and creativity, it is worth briefly attending to a wider range of epistemic benefits experienced by commonplace practitioners in the context of the unfair deal. In this section, we've framed the elements of the unfair deal in terms of setting back diverse practitioners' interests relative to commonplace practitioners' interests. Since these interests are relative to one another, we could also have framed the elements of the unfair deal in terms of setting ahead commonplace practitioners' interests relative to diverse practitioners' interests. For example, in terms of credibility biases, Medina (2011) argues that credibility

deficits experienced by members of oppressed groups are accompanied by credibility excesses experienced by members of privileged groups. Similarly, if one compares the knowledge-producing capacities of someone experiencing stereotype threat with those of someone who isn't, the person escaping stereotype threat is at a relative epistemic advantage. Also, some aspects of the novelty tax refer to diverse practitioners experiencing alienation within epistemic communities, while commonplace practitioners are in a position to enjoy the at-homeness that arises through community integration.

However, our main point is that, within an epistemic approach to diversity, the unfair arrangement of epistemic costs and benefits described here represent cases of epistemic exploitation. First, a relationship is created between commonplace and diverse practitioners when diverse practitioners are recruited into an epistemic community. Second, in this relationship, commonplace practitioners and the community accrue epistemic benefits (creativity and rigor) from diverse practitioners' knowledge and social location. In an epistemic approach, diverse practitioners are recruited to provide those benefits. Finally, in this relationship, diverse practitioners' epistemic interests are set back relative to those of commonplace practitioners.

4 Exploitation undercuts the benefits associated with the epistemic approach

In the previous section, we demonstrated how an epistemic approach to diversity can trade on the exploitation of diverse practitioners. In this section, we argue that *if it does* trade on the exploitation of diverse practitioners, then the benefits promised by an epistemic approach may fail to materialize, and a community's implementation of an epistemic approach becomes nominal rather than successful or genuine. A community's location on the continuum between a nominal and genuine implementation of an epistemic approach will depend on the community's culture. Specifically, it is important to attend to a community's ability to support the development and communication of and give uptake to diverse practitioners' epistemic diversity.

4.a Epistemic effects of exploitation

Recall that the benefits of diversity don't automatically arise from the presence of situational diversity and that they don't even arise from the presence of epistemic diversity. They arise from *effective* epistemic diversity, a situation in which diverse perspectives have some influence on the practices of an epistemic community. For this to happen, practitioners require the time, energy, support, and desire to develop their perspectives to the point that they can effectively contribute to community practices and then actually share those perspectives with other community members. And further, the community needs to be able to

hear and engage those perspectives and the people who hold them. In other words, effective epistemic diversity requires at least three things: diverse ideas need to be (a) developed, (b) communicated, and (c) given uptake by the community.

Inequitable distribution of costs and benefits undermines all three of these conditions. Experiencing credibility biases is exhausting, creates barriers to social interaction within a community, and undermines one's sense of inclusion and safety and, hence, the desire to share ideas. Stereotype threat hinders people from doing their best work. The implicit biases that have a negative impact on recruitment, retention, salary, advancement, and mentoring are also associated with commonplace practitioners not recognizing the excellence and value of diverse practitioners' work. This is consistent with a lack of support for the development and expression of diverse ideas and with not giving those ideas adequate uptake. In this way, the unfair deal undercuts the benefits that motivate the epistemic approach in the first place. The community cannot benefit from the presence of situational or epistemic diversity because the harms associated with community membership for diverse practitioners inhibit diverse practitioners from influencing the community's practices.

Furthermore, the epistemic motivations for increasing the representation of diverse practitioners in epistemic communities can be framed in the context of improving *existing* research practices and the products of *existing communities of commonplace practitioners*. When this occurs, we argue that the epistemic approach is given a nominal implementation, since the central benefit is framed as allowing commonplace practitioners to do business as usual, only better. Another way of saying this is that, in practice, epistemic community membership for diverse practitioners may come with the expectation that they support existing knowledge-production practices, structures, values, and goals. The epistemic benefits that arise from conducting research from the subject position of a diverse practitioner arise because of epistemic, political, and structural arrangements that historically excluded diverse practitioners from and included commonplace practitioners in the academy. Consequently, in this context, an epistemic approach to diversity ends up being a way of using diverse practitioners as a means to the dominant culture's ends. It seems to be adding diversity in a way that adds yet another layer of patriarchy and colonialism to already deeply colonial and patriarchal institutions.

Taking advantage of the results of a past injustice and the people who are the subjects of that injustice is distinct from embracing and nurturing diversity as an epistemic resource. And indeed, it is from nurturing, respecting, and engaging the projects and goals of diverse practitioners that epistemic benefits arise. In the words of Audre Lorde (1984),

> Advocating the mere tolerance of difference between women is the grossest reformism. It is a total denial of the creative function of difference in our lives. Difference must be not merely tolerated, but seen as a fund of necessary polarities between which our creativity can spark like a dialectic. (p. 110)

This is something that some Black and Latina feminists have been saying to white feminists for a long time.

Consider briefly Marianna Ortega's (2006) notion of loving, knowing ignorance. According to Ortega, white women can create loving, knowing ignorance, despite honorable intentions, when they study or engage the work of women of color without sufficient care and skill. In such cases, they produce work that advances their interests and careers but also contributes to the continued misinterpretation and misunderstanding of women of color. Ortega writes,

> thus we may find the feminist who wants to perceive lovingly, who wants to see women of color in their own terms, does not want to homogenize them, does not want to be coercive with them, does not want to use them but who, despite her well intentions, turns women of color into something that can be used to further her own desires. (ibid., 61)

In this paper, we are not concerned with creating knowledge about diverse practitioners (although such knowledge can result from an expansion of the scope of knowledge prompted by the creative benefits of an epistemic approach). Instead, we focus on cases in which commonplace practitioners use diverse practitioners to further the ends of commonplace practitioners, which can similarly happen even in cases in which commonplace practitioners have explicit good intentions regarding their efforts to improve diversity.[18]

4.b Working toward a just epistemic approach

So far, we argued that, although an epistemic approach to diversity can and oftentimes will trade on the epistemic exploitation of diverse practitioners, this exploitative situation undermines the epistemic benefits that can arise from increasing diversity. In this section, we explore how communities can work toward implementing a just, by which we mean a less or nonexploitative, epistemic approach to diversity.

In section 3, we introduced two distinctions useful for understanding and ameliorating some of the exploitative features of epistemic communities: the distinction between short-term and long-term epistemic benefits, and the distinction between benefits accruing to individual commonplace practitioners and to the epistemic community as a whole. A nominal implementation of an epistemic approach, an approach characterized by epistemic exploitation, is associated with short-term, immediate professional benefits to commonplace practitioners. A genuine implementation of the epistemic approach provides long-term benefits to the community, including both commonplace and diverse practitioners, and in the short term can be difficult for commonplace practitioners. Consider primatology again. In 1974, Jeanne Altmann published a groundbreaking paper advocating a different methodological approach to

[18] See also Frye, 1983 for a similar discussion about the unintentional objectification of researchers.

studying behavior. There is a table in that paper identifying the contexts in which common methods were useful. In the cell referring to the method that was mostly commonly used by top scholars in the field, there was one word: "none." And the discipline of primatology has largely come to agree with Altmann on this assessment (Haraway, 1989). The epistemic diversity that Altmann provided was clearly beneficial to the community in the long run. It resulted in the replacement of a problematic methodology with better alternatives, and the influx of feminist women researchers into primatology sparked an unprecedented shift in the field.

As in the case of primatology, the shift brought on by effective epistemic diversity may not be immediately beneficial to an individual commonplace practitioner. Often, in the wake of effective epistemic diversity, commonplace practitioners may feel humbled or discouraged to learn that their methods are not as effective as they assumed or that their research is influenced by and reflects entrenched cultural/disciplinary biases. However, such changes in a community will benefit some, even most, commonplace members in the long run, insofar as they value excellence in knowledge production more than they value the ease of their everyday, privileged community life. For this reason, the distinction between benefitting a community and immediately benefiting the commonplace members of that community (even though they comprise the majority of community members) is important.

Avoiding or reducing epistemic exploitation involves addressing the unfair distributions of the costs and benefits of community membership. These costs and benefits are often embedded in the culture of an epistemic community and the wider social environment. Therefore, if epistemic diversity is to lead to improved rigor and creativity, epistemic diversity must be fostered by both a demographic shift and an accompanying culture shift. This cultural shift involves working to reduce or eliminate the effects of credibility biases, stereotype threat, and the novelty tax, and working towards building an inclusive community with a just distribution of professional rewards. A cultural shift like this is an epistemic good for a community but, at the same time, will constitute a significant cost for some commonplace practitioners, since it will involve rejiggering the costs and benefits associated with community membership. The pool of resources and positions is finite. Some commonplace practitioners will need to give up things, such as their preferred methodologies and authority. These concessions involve more than responding to new criticisms of their research. They also involve being open to changing some of the values, methods, and practices that constitute professional activities within their communities. They include working toward equitable pay, advancement, and mentoring, as well as investing the time and energy to develop work environments that are less conducive to implicit bias and stereotype threat.

A successful epistemic approach to diversity is not just a demographic change that gives commonplace researchers access to a new set of proofreaders and fact-checkers. It is an opening of the cultures that constitute our epistemic communities.

5 Good intentions

The epistemic approach that we consider can be used to address diversity problems in at least two ways. First, it can be used to argue that one cannot assume that diversity and epistemic excellence conflict with each other. Second, it can be deployed as an incentive for increasing diversity or as a tool for justifying policy designed to increase diversity. As we argued, the motivation for increasing diversity tends to focus on benefits to commonplace practitioners. Since this approach focuses on benefiting some people who are already in a majority or central position in a community, it is perhaps unsurprising that it can trade on the exploitation of diverse practitioners and seem unwholesomely selfish.

One might wonder if, given the potential for exploitation, it might be better to shift our focus away from epistemic motivations and toward "good intentions" (i.e., motivations arising from a sense of fairness or some other ethical principle). If one were to frame this concern for fairness in a roughly liberal context, one might note that underrepresentation of diverse practitioners is not due to a lack of skill, talent, or drive, but because of their arbitrary exclusion from epistemic communities.[19] It is the demographic result of a failure of meritocracy. Insofar as one values meritocracy, then one should take steps to increase diversity. For a person who wants to do right or good, or who focuses on fairness, epistemic benefits gained from increasing diversity may be characterized as a happy epiphenomenon rather than a primary focus or goal.

But even being motivated by "good intentions" or an ethical principle like fairness does not inoculate communities against inadvertently harming diverse practitioners. Strategies for improving diversity can be born of good intentions and still be ineffective or even harmful. Consider greatest common denominator cases in which diverse practitioners are invited to join a community but only get support and uptake when they act as much as possible like commonplace practitioners and embrace the extant epistemic practices and ends of a community. One can be motivated by fairness and still end up implementing a greatest common denominator sort of diversity strategy. In practice, a diverse practitioner recruited by a community using such a strategy would still pay the high costs of credibility bias, stereotype threat, and the novelty tax. And they would still enjoy fewer professional rewards and benefits arising from community integration. A diverse practitioner can still experience these harms even when a community is not trying to extract epistemic benefits from diverse practitioners because the conditions that produce these harms are embedded in the community and the wider society.[20] Changing the reason why diverse practitioners are invited to an epistemic community does not eliminate the obstacles posed by the community.

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[19] See Wylie et al., 2007 for a review of social science literature making this point.

[20] See Heavy Head, 2006 for a discussion of how Indigenous scholarship in Canada has been impeded, even when special efforts were made to encourage and support Indigenous scholarship.

Imagine a case in which a high-ranking university administrator decides to address the underrepresentation of faculty of color with targeted hiring practices but does nothing to address a university culture that led to the absence of faculty of color and that may (likely) continue to function to marginalize and exclude faculty of color. This sort of strategy may address fairness issues in the sense of "fixing the numbers" in the short term through the recruitment of faculty of color. But it can fail to address fairness in the sense of addressing elements of the unfair deal that we discussed earlier in the paper, including the unjust distribution of professional rewards and the costs of social phenomena like stereotype threat and credibility bias. It can also fail to address fairness in the sense of "fixing the numbers" in the long term by failing to create a work environment in which faculty of color can persist, advance, and flourish.

Creating a work culture in which diverse practitioners can flourish involves addressing the same elements of the unfair deal that we described earlier. If one is motivated by a sense of fairness or general good intentions, surely one would be interested in creating a fair workplace that affords diverse practitioners the same opportunities to flourish as commonplace practitioners. Yet goodwill hardly guarantees good results. Although an approach to diversity that starts with good intentions or is concerned about ethical principles like fairness does not ask diverse practitioners to take risks by speaking from a minority position, those risks will still be present, injurious, and costly. Addressing this imbalance will take time, including time spent developing a community culture that thwarts the negative results of stereotype threat and implicit bias, and labor, in the form of working on well-informed anti-racist and anti-sexist culture changes within epistemic communities and more generally. In other words, epistemic diversity demands demographic change be accompanied by a cultural change that prioritizes and supports the flourishing of diverse practitioners.

6 Conclusion

The epistemic approach to diversity promises epistemic benefits that would be welcomed by any knowledge-producing community: increased rigor and creativity. Yet, as we have argued throughout this paper, a nominal application of this approach focusing on garnering short-term benefits for commonplace practitioners can trade on the exploitation of diverse practitioners, which undermines the benefits promised by increased diversity. An effective application of the epistemic approach focuses instead on garnering long-term benefits for the entire community, including both diverse and commonplace practitioners. These long-term benefits arise when diverse practitioners can pursue their diverse interests and influence their epistemic community's practices. This entails commonplace community members giving up some of their social comforts and privileges; working to create social and cultural conditions that mitigate the negative impact of credibility bias, stereotype threat, and the novelty tax on diverse

practitioners; and supporting a just distribution of professional rewards and benefits associated with community membership. Improving diversity involves examining the complicated relationship between epistemology and ethics, taking into consideration that epistemic benefits should not be, and cannot successfully be, pursued at the price of exploitation or marginalization.

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