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Epistemic Diversity and Epistemic Advantage: A Comparison of Two Causal Theories in Feminist Epistemology

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Abstract

Feminist epistemology aims to propose epistemic reasons for increasing the representation of women or socially subordinated people in science. This is typically done—albeit often only implicitly—by positing a causal mechanism through which the representation of sociodemographic minorities exerts a positive effect on scientific advancement. Two types of causal theories can be identified. The "epistemic diversity thesis" presents a causal path from sociodemographic diversity to scientific progress mediated by epistemic diversity. The "thesis of epistemic advantage" proposes a causal path from social subjugation to capacity for inquiry. The latter theory is defined with substantial ambiguity in the existing literature, and I present an explicit causal reformulation that disambiguates it. The epistemic diversity thesis focuses on the effect of group composition on collective epistemic performance and is largely silent about what kind of characteristics lead to individual epistemic excellence. On the other hand, the thesis of epistemic advantage seeks to identify sociodemographic background conditions that make certain epistemic agents strictly better knowers or inquirers than others and pays little attention to the synergistic effects of diverse group composition. Such a difference in the causal structure reflects the diverging political characteristics of the two theories.

Introduction

Feminism is, at its core, a political movement with political goals such as the liberation of women from social oppression and marginalization. Epistemology, on the other hand, aims to describe what knowledge is and is normative to the extent that it prescribes techniques for attaining knowledge. Feminist epistemology explores an overlap in the normative aims of these two projects by studying the ways in which increasing the representation of women in intellectual or scientific inquiry improves our knowledge of the world. As such, feminist epistemology pursues both the political goal of feminism and the epistemic goals of epistemology.

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But how does increasing the representation of women (or other sociodemographic minorities) lead to more successful inquiry? Two major types of arguments can be identified. One argues that sociodemographic diversity indicates epistemic diversity, and epistemic diversity leads to better science through in-group synergistic interactions. Within feminist philosophy, it was influentially proposed by "feminist empiricists" like Helen Longino in the 1990s, but similar arguments were made outside of feminist circles as a mechanism through which the diversity of group constituents enhances group performance (Thomas and Ely 1996; Hong and Page 2004). I will call it the "epistemic diversity thesis."

Another type of argument holds that sociopolitical subjugation improves one's capacity to know or confers an "epistemic advantage." With roots going back to Marxist-Lukacsian philosophy, this thesis was reformulated into its modern feminist variety by feminist standpoint theorists and is predominantly advocated by standpoint theorists. Following the established jargon, I will call this the "thesis of epistemic advantage." Labeling the former thesis with the word "diversity" to distinguish it from the thesis of epistemic advantage may at first appear objectionable considering the strong normative emphasis that standpoint theorists or the proponents of the thesis of epistemic advantage have put on diversity (Harding 2015; Intemann 2010). Yet the name reflects some of the central arguments of this paper about the essential content of each thesis.

The main goal of this paper is to compare the epistemic diversity thesis with the thesis of epistemic advantage in terms of their substantive content as well as their political underpinnings. Before making the comparison, I will first present each as a causal theory and present an explicit causal reformulation. The main content of the epistemic diversity thesis is a positive causal effect of sociodemographic diversity on group-level epistemic performance mediated by epistemic diversity, while the thesis of epistemic advantage proposes a positive effect of social marginalization on capacity for inquiry. The thesis of epistemic advantage, in particular, is expressed with considerable ambiguity in the existing literature and has never been explicitly formulated as a causal theory. A careful analysis reveals that, to stand as a distinct and nontrivial account of how increasing the representation of women improves science, the thesis of epistemic advantage must propose that social marginalization leads to a strict improvement in one's capacity for inquiry, at least in the topical domain under consideration and given the proper controls and enabling conditions.

One important contrast between the two causal theories is that the main outcome variable is collective epistemic performance for the epistemic diversity thesis but individual- or component-level epistemic advantage for the thesis of epistemic advantage. There is also a notable difference in what these theories do not focus on. The epistemic diversity thesis pays little attention to the epistemic performance of each epistemic agent, or what kind of epistemic agents tend to be superior knowers or inquirers than others. The thesis of epistemic advantage, on the other hand, offers little insight into "compositional effects" that concern how a diverse group composition produces synergistic effects for the whole that go beyond the capacity of each epistemic agent. Put differently, the former theory represents a strategy of improving science by making use of synergy among unranked elements with different strengths, while the latter aims to improve science by increasing the representation of elements who possess an "epistemic advantage" in virtue of their marginalized sociodemographic background.

I will briefly point out before the main discussion that the term "epistemic agent" just mentioned in the above paragraph does not *necessarily* refer to individual human beings. It could refer to any basic unit of causal analysis, which, if one wants

to "understand the knower as a knowledge community rather than as an individual" (Pohlhaus 2002, 420), could also be a "group," at whichever level of aggregation it is demarcated. The main causal logic of the two theories is not contingent on the unit of analysis or at which level of aggregation we define the basic epistemic agent.

The above-stated differences in the causal logic of the epistemic diversity thesis and the thesis of epistemic advantage relate to the moderate and radical progressive political characteristics of each theory. The epistemic diversity thesis is premised on an egalitarianism in which everyone, including both dominant and marginalized members, has something useful to offer to the community and may organize in mutual complementarity. Such political assumptions are consistent with the focus on compositional effects and a lack of attention to assessments or comparisons of epistemic competence conceived at the level of granular epistemic agents. On the other hand, the thesis of epistemic advantage, like its Marxist-Lukacsian intellectual predecessor, seeks the liberation of the oppressed by advocating an "inversion" of the traditional hierarchy such that the subaltern now claims strictly superior competence and knowledge. This approach leaves little room for explorations of the synergistic effects of diversity and is conducive to an ability- rather than diversity-based approach to improving collective performance. Aside from issues of theoretical plausibility, such political characteristics may make the thesis of epistemic advantage unpalatable to some in light of current trends in Western progressive politics.

The epistemic diversity thesis

The epistemic diversity thesis is a causal model that features a positive effect of sociodemographic diversity on group-level epistemic performance, mediated by epistemic diversity. In a scientific setting, the outcome variable could be rephrased as scientific advancement. With epistemic diversity acting as a mediator, the causal theory can be analyzed in two parts. The first part connects sociodemographic diversity to epistemic diversity, and the second part epistemic diversity to scientific advancement. Arguments belonging to the second step are frequently proposed outside of feminist circles, sometimes with no or cursory reference to the first step (Cheruvelil et al. 2014; Grim et al. 2019; O'Connor and Bruner 2019), but the first step is required for the feminist project of arguing for an increased representation of women and other sociodemographic minorities in science.

The second stage of the causal path deserves a focused analysis since it is not intuitively clear how having a group of people who think and reason differently could benefit the collective epistemic performance of the group. The precise mechanisms that constitute this step vary by the proposal, but one could identify two broad types. First, there are mechanisms that involve diversifying sources of bias so that none has the power to create a scientific consensus. A common assumption in feminist empiricism, and empiricist philosophy of science in general, is that there is a set of rules that are constitutive of proper science, and a deviation from those constitutive rules deters successful scientific inquiry. How such constitutive rules are (and should be) grounded and maintained is a point of debate—feminist philosophers have been particularly critical of the idea of a non-social grounding of such rules and have even proposed specific changes or additions to the rules that currently prevail in mainstream science (Longino 1990; Antony 2003; Nelson [1990] 2003). Yet feminist epistemologists of an empiricist bent typically acknowledge the need for non-subjective criteria for science to exist as a collective enterprise (Longino 1990, 62-63, 76-80; Nelson [1990] 2003). Given that there are non-subjective criteria that constitute proper scientific inquiry, it can be reasoned that a *sharing* among scientists of any particular deviation from those criteria poses a threat to successful scientific inquiry, for it increases the likelihood of an unjustified convergence.

In principle, the logic just described should be compatible with just about any factor that can be seen as external to such criteria or rules. In practice, it is most often applied to factors that conduce to error. It is largely uncontroversial that truth is an important goal of science, and many of the canonical rules of science are aimed at conducing to the truth and avoiding error. Traits that conduce to error, sometimes broadly referred to as "biases," therefore represent an important type of deviation from most conceptions of the constitutive rules of science. While it is difficult to give a complete description of "biases," "non-empirical decision vectors" (Solomon 2001, 2006) such as political, financial, personal, or religious inclinations or wishful thinking are commonly considered types of biases that hinder the truth-conduciveness of scientific research. Yet, seen this way, biases appear to be unavoidable, as no individual or group can claim to be free from all such non-empirical motivations that shape our scientific practice.

The reasoning goes, if the biases of constituent members of a scientific community cannot be eliminated, it is better to have them diversified than compounded. This point has been made especially forcefully in the context of justification: Tucker (2004, 30) argued that, given a scientific consensus, a heterogeneity of biases such as "power relations, or political interests, or ideological convictions, or gender bias, or cultural contexts" increases the likelihood that a consensus was achieved through shared knowledge. Similarly, Miller's (2013) account of the epistemic benefit of social diversity is based on its role of preventing a sharing of "non-cognitive" determinants of beliefs like financial incentives and sexist or racist prejudice that could potentially produce non-knowledge-based consensus. Solomon (2001) argues that adherence to competing theories should be proportional to their empirical success for a normatively appropriate dissent but notes that non-empirical decision vectors may sometimes disproportionately support one theory over another, producing an unjustified consensus (121-29). Longino (1990), despite forcefully objecting to the "positivist" view that science is free from "contextual values," that is, "personal, social or cultural values" (4), states that objectivity consists in limiting "the intrusion of individual subjective preferences into scientific knowledge" (76), and that "the greater the number of different points of view included in a given community, the more likely it is that its scientific practice will be objective, that is, that it will result in descriptions and explanations of natural processes that are more reliable in the sense of less characterized by idiosyncratic subjective preferences of community members than would otherwise be the case" (80). Overall, the argument is that epistemic diversity among members in a scientific community promotes scientific advancement by preventing the alignment of factors that must not align to make a consensus, whether they be "biases," "non-empirical decision vectors," or "subjective preferences." For brevity, I will call this the "dispersion of biases" mechanism of the epistemic diversity thesis.

The second type of mechanism that transmits a positive causal effect from epistemic diversity to scientific advancement involves an increase in the scope of beneficial cognitive resources or "tools" possessed by the research collective (Page 2019, 15–17). It can be reasoned that the total scope of resources possessed by a group is an aggregate of those owned by each constituent. Given that an epistemic agent possesses resources that are currently not or scarcely available to the group, the inclusion of that epistemic agent into the group would lead to a broadening of the resources it possesses. And provided that there is open and effective intellectual exchange (which would not be possible

when, for example, some members of the community are unjustifiably silenced, ignored, or excluded by those who hold power), the group would be able to put together the cognitive resources possessed by its members and use them to improve its collective epistemic performance (Longino 1990, 76–78; 1996; Fehr 2011; Medina 2013, 50).¹

A particularly important cognitive resource proposed in the feminist epistemological literature is background assumptions seen. All scientific theories stand on numerous assumptions or auxiliary hypotheses, but these assumptions are not always visible to researchers, especially when they are taken for granted. The ability to see certain background assumptions is an epistemically beneficial resource since it renders them available for examination and criticism. Researchers with different epistemic profiles, and in particular those who employ different assumptions, are able to *see* different assumptions, and their cooperation would increase the scope of assumptions that are known to the collective. According to Longino (1990, 80),

Some assumptions are not perceived as such by any members of the community. When, for instance, background assumptions are shared by all members of a community, they acquire an invisibility that renders them unavailable for criticism. They do not become visible until individuals who do not share the community's assumptions can provide alternative explanations of the phenomena without those assumptions.

The same logic can be extended to empirical data/information. Groups often differ in the kind of empirical data that they can readily access or collect. For example, it has been argued that the Argentine economist Raul Prebisch was able to identify and eventually explain unexplained phenomena in Euro-American mainstream economics because of his ability to collect (and interest in collecting) empirical data on Argentina (Go 2016). When two communities differ in the kind of data that they can readily perceive and collect with regard to a particular topic or question, the research group composed of members of both groups would command a larger scope of empirical material to work with than those composed of just either of them, and a consensus that arises from the diverse group would have been tested against a larger scope of empirical data. I will call this the "scope of resources" mechanism of the epistemic diversity thesis (Figure 1).

The above-presented mechanisms do not claim to provide a complete picture of how epistemic diversity could contribute to scientific advancement. Additional mediators may potentially be proposed—for example, in the context of discovery, epistemic diversity might lead to a more variegated range of questions asked, and

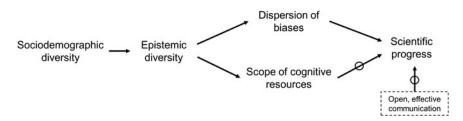


Figure 1. The epistemic diversity thesis. Note: Circles indicate causal interaction.

asking more questions may be argued to contribute to scientific progress. However, I suggest that most if not all arguments could be categorized into at least one of these two broad types. Epistemic diversity benefits science by dispersing values or decision vectors that must not align and/or by broadening the scope of cognitive resources. Since the alignment/dispersion of biases can be expected to cause the scope of assumptions and empirical data seen by the community (e.g., a community of historians sharing the same nationalist motivation may overlook historical relics or fail to notice background assumptions that go against national pride), an arrow from the former to the latter may be added to Figure 1, although it is presently omitted for simplicity.

A key feature of the causal structure of the epistemic diversity thesis is that the main explanandum of interest is strictly an aggregate-level variable. It is a theory of aggregate or collective epistemic performance that does not rely on its individual-level counterpart, i.e., individual epistemic competence. It does not need to measure, compare, rank, or explain individual epistemic competence for its causal logic, nor does it attempt to improve collective performance by recruiting the best-performing individuals. Given the (rather tautological) assumption that the diversity of a group can be increased by increasing the proportion of hitherto un- or underrepresented elements, the epistemic diversity thesis merely requires that the inclusion of the minority or newcomer broadens the scope of empirical data/background assumptions commanded by the collective and/or adds an unpopular bias that diversifies its current distribution of non-empirical or idiosyncratic determinants of belief.

The causal effect of epistemic diversity on scientific advancement, by itself, does not say anything about sociodemographic characteristics, which is the primary interest of feminism and social justice movements. A popular way of integrating sociodemographic diversity to the causal argument is to use the general principle that one's sociodemographic profile causes one's epistemic profile (Page 2007, chapter 7; Page 2019, 143); that is, one's position and experience in the society shapes the mental traits that determine one's knowledge- or belief-formation process, such as values, assumptions, prior beliefs, intuition pumps, wishes, and skills. Empirical studies in the sociology of knowledge and feminist science strongly indicate that this is a causal relationship that has a wide and general application (Bleier 1984; Farley and Geison 1974; Forman 1971; Longino 1990; MacKenzie 1978; Nisbett and Ross 1980; Shapin 1975; Shapin and Schaffer 1985). If we can accept as a general principle that one's sociodemographic background shapes one's epistemic profile at the individual level, we could also extend this reasoning to the community level to establish a causal relation between sociodemographic diversity and epistemic diversity.

Appending social diversity to the causal path that goes from epistemic diversity to scientific advancement is essential for the thesis to exist as a variety of *feminist* epistemology, but it is not the case that the commitment to feminist or other progressive political goals is the only motivation to do so. Although the effect of sociodemographic diversity on scientific advancement goes through epistemic diversity according to the epistemic diversity thesis, it is not the case that sociodemographic diversity can be ignored by directly targeting epistemic diversity. Contrary to some kinds of epistemic traits such as disciplinary training and methodological expertise that can be readily diversified within a group regardless of the sociodemographic characteristics of its constituent members, others, such as gender-specific assumptions, are accessible only through sociodemographic characteristics. Increasing sociodemographic diversity, therefore, plays an indispensable role in any practical effort to maximize epistemic diversity (Miller 2013). Incorporating sociodemographic diversity into the causal

model of the epistemic diversity thesis has a logical appeal that goes beyond the pursuit of a distinctively *feminist* epistemological project.

Before concluding the theoretical review of the epistemic diversity thesis, it needs to be mentioned that there is another, less discussed account that proposes a causal effect of sociodemographic diversity on group (epistemic) performance that is not mediated by epistemic diversity (Philips 2019; Steel et al. 2021). According to the "information elaboration" account, sociodemographic diversity may improve group performance by promoting effective and productive communication among individual members. The main idea is that demographic homogeneity may induce members of an epistemic community to communicate complacently (or to use the more detailed terminology of Steel and colleagues, "communicate," "integrate," and "iterate" complacently), discouraging criticism and healthy scientific skepticism (Steel et al. 2021).²

Like the epistemic diversity thesis, the information elaboration account also takes sociodemographic diversity and group (epistemic) performance as its terminal causal relata and can therefore be readily represented alongside the general causal schema of the epistemic diversity thesis. The integrated causal model, which I will refer to as the "integrated diversity thesis", is graphically represented in Figure 2. As in Figure 1, the main causal chain of the epistemic diversity thesis features a group-level (L2) cause, outcome, and mediators: it is about group composition, group resource/bias, and group performance. The information elaboration account, on the other hand, is best represented as a "2-1-2" mediation model, or a mediation model in which an individual-level (L1) variable mediates the causal effect from one group-level variable to another (see also Steel et al. 2021, 1295). Structurally, the first step is a "contextual effect" (also called "compositional effect") that expresses how "the context of a group ... affect[s] the actions and attitudes of the individuals who belong to the group" (Iversen 1991, 2), and the second step is a "bottom-up" effect that expresses how individuals affect the characteristics of the groups to which they belong (Preacher et al. 2010, 212-13).³

The general causal schema of the epistemic diversity thesis shown in Figure 1 has "open and effective communication" as an enabling condition of the effect of "scope of cognitive resources", that is, as another cause of scientific advancement that causally interacts with the scope of cognitive resources. This follows the commonsensical reasoning that cognitive resources dispersed among members in a network cannot be effectively used to improve group performance if they are not effectively communicated and shared. The information elaboration account endogenizes this variable by arguing

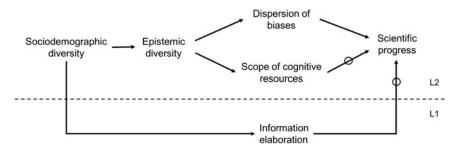


Figure 2. The "integrated" diversity thesis. Note: Circles indicate causal interaction.

that it is caused by sociodemographic diversity. Note that the only substantive deviation of Figure 2 from Figure 1 is the arrow from sociodemographic diversity to open and effective communication, the latter of which is now replaced with the term "information elaboration" for consistency with the terminology used in the relevant empirical and theoretical literature (Homan et al. 2007; Kooji-de Bode et al. 2008; Steel et al. 2021).

The information elaboration account has not received direct coverage in feminist epistemology, and the existing theoretical landscape in this field consists almost entirely of the epistemic diversity thesis and thesis of epistemic advantage. This paper will therefore use the "pure" version of the epistemic diversity thesis represented in Figure 1 as an object of theoretical comparison. Still, none of the arguments of this paper is invalidated upon the acknowledgment that there may be a direct causal path (i.e., unmediated by epistemic diversity) from sociodemographic diversity to scientific advancement as per the mechanisms postulated by the information elaboration account.

The thesis of epistemic advantage

The thesis of epistemic advantage—sometimes referred to as the "inversion thesis" (Wylie 2003; Tanesini 2019)—is an invention of feminist standpoint theory, at least in its modern form. Although not unanimously supported by all proponents of standpoint theory, it is popularly considered a key constituent of standpoint theory along with the "situated knowledge hypothesis" (Ashton 2020; Intemann 2010; Wylie 2003). The situated knowledge hypothesis is the idea that "social location systematically shapes and limits what we know, including tacit, experiential knowledge as well as explicit understanding, what we take knowledge to be as well as specific epistemic content" (Wylie 2003, 31). Except that "social location" is understood with particular attention to power (Wylie 2003, 31), the situated knowledge hypothesis expresses the same idea as the general principle that one's social profile causes one's epistemic profile, which, as discussed above, grounds the causal connection between social and epistemic diversity in the general causal schema of the epistemic diversity thesis.⁴

On the contrary, the thesis of epistemic advantage expresses an idea that is foreign to the epistemic (or integrated) diversity thesis widely used outside of standpoint theory. As a particularly well-known and controversial thesis, it has been defined or described in various ways. D1–D5 is a non-exhaustive list of proposed definitions or descriptions. They all express a similar idea but come with subtle yet noteworthy variations.

- D1. "The Thesis of Epistemic Advantage: Some standpoints, specifically the standpoints of marginalized or oppressed groups, are epistemically advantaged (at least in some contexts)" (Internann 2010, 783).
- D2. "(Epistemic Advantage Thesis) The social oppression that socially disadvantaged groups experience can bring them epistemic benefits" (Ashton 2020, 331).
- D3. "Those who are economically dispossessed, politically oppressed, socially marginalized and are therefore likely to be discredited as epistemic agents—e.g., as uneducated, uninformed, unreliable—may actually have a capacity, by virtue of their standpoint, to know things that those occupying privileged positions typically do not know, or are invested in not knowing (or, indeed, are invested in systematically ignoring and denying)" (Wylie 2003, 32).
- D4. "Hartsock (1983) here articulates a claim of epistemic privilege that I refer to, in what follows, as an 'inversion thesis': the thesis that certain kinds of

epistemic advantage accrue to those who are otherwise (socially, materially) disadvantaged" (Wylie 2012, 57).

D5. "[*T*]he inversion thesis... claims that the perspectives(s) of the socially subordinated are epistemically privileged compared with those of dominant groups" (Tanesini 2019, 335 [emphasis original]).

I propose that the thesis of epistemic advantage, like the diversity thesis, is best understood as a type of causal theory, despite none of the definitions above using an explicitly causal language and some (e.g., D1 and D5) even merely describing a cross-sectional correlation. The causal antecedent of interest is social subjugation, and the outcome of interest is the capacity for inquiry.

At least two variables mediate the causal path from the former to the latter. First, merely being socially marginalized will not bring epistemic benefits—it needs to lead to the development of a critical awareness of one's social position, i.e., a subjugated "standpoint" (Harding 2004). This is not done automatically (Fricker 1999; Internan 2010; Wylie 2003), but only in the presence of conditions that help a subjugated individual develop a critical awareness of her social position rather than be swamped by the dominant worldview. It is common in the standpoint literature to present these conditions with an emphasis on their social nature: The "achievement" (Crasnow 2013) of critical group consciousness or a proper subjugated standpoint occurs through mutual activist enlightenment, realizing the collective nature of social oppression (Harding 2004, 32; Rolin 2009, 224), and acts of "struggling with" (Pohlhaus 2002) among the oppressed people, and not by each oppressed person thinking and acting in isolation. Figure 3 summarizes these conditions under the label "activist enlightenment and struggle" and presents it as an enabling condition of "subjugated standpoint" (i.e., as another cause of "subjugated standpoint" that causally interacts with the main causal variable "social oppression"). Second, once a proper subjugated "standpoint" has been achieved, it then causes the scope of cognitive resources, which then causes one's capacity to know or conduct inquiry. The type of cognitive resources that are involved in the causal path varies by different varieties of the thesis as will be reviewed in detail shortly.

One important qualification needs to be added for a proper definition of the thesis. As just described, the thesis of epistemic advantage is interested in how having a socially

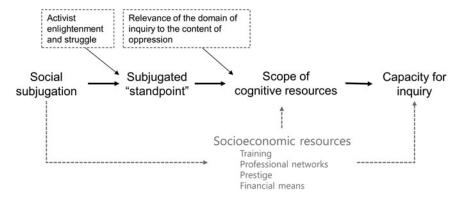


Figure 3. The thesis of epistemic advantage.

subjugated status (and therefore a subjugated standpoint) positively affects one's capacity to know or conduct inquiry. But there is an obvious way in which social marginality negatively affects the scope of cognitive resources and the capacity to know or conduct inquiry. Socioeconomic subordination, almost by definition, leads to a reduction of various kinds of socioeconomic resources such as money, training, professional networks, and prestige that are helpful for knowledge acquisition (Medina 2013, 39; Wylie 2003). For example, poverty and residence in an underdeveloped country may prevent school enrollment, which would then deter the acquisition of basic thinking tools such as writing and arithmetic and thereby make one a worse epistemic agent even in mundane situations. Analogous examples can easily be conceived in a more professional or scientific setting: A student from a low-income family may not be able to attend a wealthy and prestigious engineering university because of high tuition fees, which would then bar access to generous research funding, expensive equipment, and perhaps even a highly academically stimulating environment. Such cognitive disadvantages that accrue due to inferior socioeconomic resources are certainly not the kind of effect that is captured by the thesis of epistemic advantage. It would be apt to say that the thesis concerns the causal effect of social subjugation on the capacity for inquiry that is not mediated by socioeconomic resources.

The thesis of epistemic advantage can be further classified into a strong/genuine and a weak/trivial version. The strong version is just what has been described above. It states that social subjugation exerts a positive effect on the capacity for inquiry upon blocking the path that goes through socioeconomic resources. Put differently, holding fixed socioeconomic resources, coming from a socially marginal background rather than from a socially dominant background leads to an improvement in one's capacity for inquiry (or it confers an "epistemic advantage"). The bold arrows in Figure 2 express the general causal schema of the strong version. It is sometimes presented as if it is a theory with a global application (e.g., Harding 1986, 26; Hartsock 1989, 27-28), but it could also be confined to a narrower domain. The latter option typically involves adding the relevance of the domain of inquiry to the content of oppression as an enabling condition (Harding 1991; Internann 2010; Wylie 2003).⁵ The strong version has practical implications, those that could be used in support of the political project of feminism. For example, when a university department hires a new faculty member, the strong version of the thesis could provide a rationale for giving extra points to applicants from marginalized social backgrounds, provided that they will not be discriminated against in their access to financial and institutional resources upon employment.

By contrast, the weak version does not claim a positive causal effect even after holding fixed socioeconomic resources but merely argues that social oppression improves at least *some* beneficial cognitive resources in the domain of interest without taking it to the stronger claim of a genuine "epistemic advantage" in that domain. Roughly put, the weak version expresses the mild idea that being oppressed allows one to see or do *some* things that would not be visible or feasible when being dominant. For example, consider the field of development studies, which is a field of inquiry that is highly relevant to gender oppression as well as many other forms of oppression including nationality-, class-, or race-based ones. It may be argued that having the background of a low-caste Indian woman (as opposed to not having that background) offers a range of beneficial abilities and resources for understanding the troubles that low-caste women in India have in trying to receive public relief in a natural disaster, such as the ability to effectively communicate with the locals and possession of intricate background knowledge of their social situation. However, this way, the notion of advantage is trivialized, since it at

best pertains to a narrow topic and function within development studies that our marginalized researcher is particularly well-equipped to tackle by virtue of her social background. To make an analogy, having majored in a certain research methodology—say, statistics—would make one particularly well-equipped to fulfill certain kinds of roles in research and allow one to do some things that non-majors would struggle at, but this is far from saying that being a statistics major confers the researcher an "epistemic advantage" in development studies. Unable to claim a strict domain-wide improvement in the marginalized researcher's capacity for inquiry, the "weak" version of the thesis of epistemic advantage would no longer count as an independent theory for how increasing the representation of socially subordinate researchers can improve science in that domain, and the political project of feminist epistemology would have to proceed within the framework of the epistemic diversity thesis.⁶

Existing definitions of the thesis of epistemic advantage come with subtle yet noteworthy variations, which contribute to the lack of clarity that surrounds it. The strong and weak versions are rarely distinguished. For example, D3 does not go beyond the weak/trivial formulation, D5 arguably carries the tone of the strong version, and D1, D2, and D4 seem undecided or ambiguous. Given the vagueness of the definitions and considering that many definitions such as D1 and D5 express the thesis in a completely non-causal language simply by a cross-sectional comparison between subjugated and dominant people, the thesis of epistemic advantage is prone to the convenient rebuttal from skeptics that many socially oppressed people are dull, and some socially dominant people are highly successful inquirers. Supporters of the thesis of epistemic advantage have introduced various devices to deal with such rebuttals. Some (e.g. D1, D2, D3) add modal operators "can," "may," or analogous expressions like "at least in some contexts"; Wylie (2003) and Internann (2010) set up and reject a strawman theory called the "the automatic privilege thesis," which states that "those who occupy particular standpoints (usually subdominant, oppressed, marginal automatically know more, or know better, by virtue of their social, political position" (Wylie 2003, 28); Wylie (2003) also wrote that "arguments have been given for ascribing contingent epistemic advantage to (some) subordinate standpoints [emphasis and parentheses original]" (28). While these devices do defend the thesis of epistemic advantage from such simple criticisms, they are coarse modal quantifications that ambiguate as much as they disambiguate. Are they referring to the need to condition on social resources such as training and money, or to the importance of enabling conditions such as political consciousness and domain relevance, or are these merely a general disclaimer that some individuals, because of idiosyncratic factors not captured by the causal theory, may not experience the postulated type of effect? Or are they perhaps alluding to a distinction between the strong and weak versions? These questions are rarely asked and answered with precision in the existing literature, and I propose that the explicit causal formulation presented above brings more clarity to this widely discussed but coarsely specified thesis.

The discussion up to this point proposed the general causal schema of the thesis of epistemic advantage—it remains to be explained how a socially subjugated "standpoint" leads to an improvement in what I broadly called "cognitive resources." Several mechanisms have been proposed in the feminist literature. There are explicitly Marxist-Lukacsian arguments—popular in the early decades of feminist standpoint theory—that lean on an analogy between the standpoint of the proletariat and the standpoint of women (Hartsock 1983; Jaggar 1983). There are also virtue-based mechanisms, systematically advocated by Medina (2013), which state that a higher degree of

social oppression leads to better epistemic virtues such as epistemic humility, curiosity, and open-mindedness. However, the "double vision" arguments appear to be the most influential, at least in recent decades. In the rest of this paper, I will by default assume the "double vision" formulation of the thesis of epistemic advantage and mention others when appropriate.

The "double vision" mechanism starts from the theoretical postulation that members of subordinated groups are socialized by the power structure of the society to learn the ways in which the dominant groups think and see. Provided that a member of a subordinated group is able to retain her own vision or "standpoint" of the world, she has achieved "double vision." How does possessing double vision lead to epistemic advantage? Two types of arguments can be identified. The first, which I refer to as "synthesis," holds that having "double vision" is epistemic diversity advantageous to having only one, for reasons that are similar to why epistemic diversity was argued to benefit the group of epistemic agents in the epistemic diversity thesis. An epistemic agent who has an extra vision (compared to not having that extra vision) would be able to perceive and collect a wider range of empirical data, see a wider range of assumptions/auxiliary hypotheses, and in general put together the beneficial cognitive resources that each "vision" has to offer.

The following quote about a fictional example of a black domestic servant named Blanche (from the novel *Blanche on the Lam* by Barbara Neely) presented in Wylie (2003, 39) directly expresses this idea:

When it comes to solving the complex puzzle solved in *Blanche on the Lam*, Blanche is a better knower than (most) members of the family she serves, the elite white community of which they are a part, and the authorities who investigate the murder, because she is in a position, by virtue of her social location and her insider-outsider standpoint, to get more and better evidence, to discern motivations more accurately, to make connections between causal factors more quickly, and to test and cross-test a wider range of explanatory hypotheses than virtually anyone else in Neely's story. Blanche's knowledge deserves to be treated as authoritative, with respect to the epistemic project she engages, because she maximizes empirical adequacy (of the localized-depth variety)...

Although this fictional example takes place in a household rather than a scientific setting, it offers (and is intended as) a direct analogy of the "double vision" or "synthesis" formulation of the thesis of epistemic advantage. The "complex puzzle" constitutes the topical domain of interest in which double vision and epistemic advantage are argued to accrue; Blanche's subordinate position as a black servant working for a white family gave her the knowledge possessed by the white family as well as the things that are visible to her qua a black servant, allowing her to possess "more and better evidence" and "test and cross-test a wider range of explanatory hypotheses."

"Synthesis" presents a clear mechanism through which social subordination exerts a positive effect on cognitive resources and ultimately on one's capacity for inquiry. It needs to be mentioned, though, that this logic rests on the assumption that socially subordinate epistemic agents who find themselves squeezed between two or more conflicting worlds can perform a complete synthesis. The plausibility of this assumption has been questioned; for example, Narayan [1989] (2004) alluded to a colonial subject who, despite being made to learn the language of the colonizer in addition to their indigenous language, is rarely able to acquire mastery in both languages (221–22).

Technically, it should be possible to keep a notion of "advantage" or a positive causal effect while accepting that being compelled to inhabit two different worlds as a result of social subjugation does not lead to a strict expansion of the horizon. One could, for example, demarcate the domain in which the epistemic advantage accrues by the property of "being those topics that the subjugated standpoint is particularly good at investigating." But this is trivial, for the same reason that saying that person A has an advantage over person B in knowing those things that only A is well-positioned to know is trivial. To count as an interesting theory, the thesis of epistemic advantage should apply to domains that are demarcated by meaningful disciplinary or topical criteria such as development studies, sociobiology, the study of poverty, or the topic of whether and how much longer sentences deter sexual crime.

Another popular elaboration of the "double vision" mechanism is what I refer to as the "detection" mechanism. The "detection" mechanism focuses on a very specific type of cognitive resource: the detection of things concealed by power. It argues that social oppression leads to a superior capacity for inquiry since being oppressed (plus enabling conditions) leads to the development of double vision, and double vision allows one to more readily see the things that have been concealed by the power structure of the society (Rolin 2009). How does double vision increase the scope of detection of things concealed by power? Almost all proposals involve the process of juxtaposing background assumptions and/or empirical evidence in the dominant "vision" to those from other "visions" to look for clues of distortion or concealment. Seen this way, the "detection" mechanism is better seen as a further development of the "synthesis" mechanism rather than an alternative. Having more evidence and seeing a wider range of background assumptions coming from different "visions" exerts a positive effect on one's capacity for inquiry at least partly by helping detect distortions and uncover concealed truths.

The two theses compared

The above causal reformulation of the epistemic diversity thesis and the thesis of epistemic advantage reveals important contrasts in their substantive content. As theories in feminist epistemology, both theses provide mechanisms through which increasing the representation of women or other socially marginalized persons in a community of inquirers or scientists exerts a positive effect on its collective epistemic performance. Yet, in the epistemic diversity thesis, this causal effect arises by increasing sociodemographic and therefore epistemic diversity (this assumes and is valid only so long as women or other target groups are underrepresented in the group), whereas in the thesis of epistemic advantage, the causal effect arises in virtue of increasing the proportion of inquirers who possess a wider range of cognitive resources and thereby an "epistemic advantage."

This is a basic contrast between the two theories that is often misunderstood: For example, Internann (2010, 791) argues that standpoint theory differs from feminist empiricism in holding that "it is *diversity of social position* (as opposed to diversity of values and interests) that is epistemically beneficial" (emphasis original). The proper contrast, however, is between diversity and oppression, and not between sociodemographic and epistemic diversity. This was not so different in the early works of feminist standpoint theorists (e.g., Hartsock 1983), but in recent years it has been increasingly presented as if it is a theory about the epistemic benefits of diversity (Harding 2015; Internann 2010). The above review of the literature reveals that, even according to

relatively recent definitions, the main causal variable in the thesis of epistemic advantage is social subordination or oppression, not diversity.

Such differences in the substantive content of the two causal theories can be seen as a consequence of the diverging political positions that gave rise to and typically underlie each theory. The epistemic diversity thesis is grounded on a broad egalitarianism that encompasses all members of society. It is a basic assumption of its causal logic that people, whatever their sociodemographic background, come with different strengths (as well as blindspots, biases, and other weaknesses) and therefore have at least something to contribute to the collective. Diversity is beneficial so long as the elements of the society do not claim unparalleled competence over others as to make others useless or redundant. Given such an assumption about the distribution of skills and abilities, the epistemic diversity thesis prescribes mutual complementarity rather than identifying and recruiting the best performers as a means to boost collective performance. Politically, it represents a conciliatory approach to ending oppression as it envisages equality and coexistence as an alternative to existing structures of domination and hierarchy.

On the other hand, the thesis of epistemic advantage posits that a certain portion of the population, i.e., the "oppressed," possesses a wider range of cognitive resources and possesses an "epistemic advantage." The thesis of epistemic advantage, just like its Marxist-Lukacsian intellectual predecessor, seeks to fight domination and exploitation by proposing an "inversion" of the existing hierarchy. It is a theory of "turning the tables" on the oppressors (Wylie 2003, 32). As such, the thesis not only lacks focus on the synergistic compositional effects of diversity but even contains an element of contradiction to it, as a strict hierarchy of epistemic competence that varies by the level of social oppression defeats the assumption of mutual complementarity among heterogeneous elements. Despite the widespread incorporation of diversity-based arguments in the recent feminist standpoint literature, the thesis of epistemic advantage essentially represents a strategy of maximizing group performance by recruiting the most capable constituents.

In the debate about whether diversity trumps ability that commonly arises in relation to public recruitment policies, the epistemic diversity thesis in feminist epistemology provides arguments for the "diversity" side, while the thesis of epistemic advantage exemplifies an "ability" type of argument. At least in the recent American and more broadly Western political landscape, the "ability" side is commonly associated with more conservative or right-wing political leanings that seek to maintain the existing power structure by denying special accommodation for social minorities. This coincidence of property by no means invalidates the thesis of epistemic advantage as an emancipatory theory, but it poses a feature that might make it politically unpalatable for progressives. This is not only because of the potential discomfort of sharing an important property with a typically conservative position; it also has adverse practical implications for the political project of feminism. For example, using the thesis of epistemic advantage in a debate about race- or gender-based affirmative action in researcher recruitment would involve arguing that an applicant with a minority background should be given priority because she can be expected to be epistemically advantaged. Such an argument for affirmative action, however, may be countered by calls to devise a fairer and more reliable way to measure applicants' epistemic competence and pursue a strictly merit-based recruitment policy. The epistemic diversity argument, on the other hand, cannot be countered in such a way, and it would be able to support the recruitment of a socially marginalized applicant even upon the acknowledgment that the applicant might not be the most capable.

What has been said about the thesis of epistemic advantage so far carries over to other lesser-known accounts of the thesis such as Medina's (2013) virtue-based account. In the virtue-based account, the "cognitive resources" that mediate the causal effect of social subjugation to the capacity for inquiry are epistemic virtues rather than double vision. Specifically, three epistemic virtues—humility as opposed to arrogance, curiosity as opposed to laziness, and open-mindedness as opposed to close-mindedness—are presented, and all three are argued to be positively affected by social subjugation. Like "double vision," this is indicative of the strong notion of the thesis of epistemic advantage since an improvement in epistemic virtue indicates an unequivocal domainwide improvement in the capacity of an epistemic agent. In fact, the virtue account does not even seem to require domain constraints, as superior epistemic virtue improves knowledge-seeking activity regardless of the topic or discipline. The virtue mechanism, too, seeks to improve the performance of the whole by identifying the elements that possess superior characteristics (i.e., epistemic virtue). Finally, as a version of the thesis of epistemic advantage, it is radically progressive. The traditional patriarchal conception of the trustworthy "gentlemen" and unreliable women or commoners that grounded the experimental method in Victorian science is completely turned on its head, such that the latter now claim unrivaled virtue and the former are relegated to the crowd of arrogant, denying, and lazy minds.

Potential objections

Some of my arguments about the thesis of epistemic advantage may appear unconventional. My stance is that this is the most natural and logical way to understand it as a distinct feminist epistemological theory, especially when it is screened off from the dense political and activist language that typically surrounds it. I will consider two objections. The first objection would be that my theoretical formulation and interpretation of the thesis of epistemic advantage is unduly individualist and ignores its emphasis on the social aspects of knowledge acquisition stressed by feminist standpoint theory. Perhaps the part of my argument that most strongly invokes this criticism is the claim that the thesis of epistemic advantage is a theory of individual (or constituent) performance in contrast to the epistemic diversity thesis, which is primarily concerned with collective performance and uninterested in measuring or ranking individual performance.

More specifically, I am aware of two types of criticisms that go in this direction. One invokes the loosely connected set of arguments in the standpoint literature that stresses aspects of the thesis of epistemic advantage that can be described by the adjective "social." They include the claim that all knowledge is situated (Tanesini 2019; Wylie 2003); knowledge is inherently social; "standpoints" are achieved by mutual enlightenment and struggle among those that are oppressed (Crasnow 2014; Harding 2004, 32; Pohlhaus 2002); and realizing the group- or identity-based nature of social oppression is an important step in this process of achievement (Harding 2004, 32; Rolin 2009, 224). Another type of criticism refers to proposals in the feminist standpoint literature to "understand the knower as a knowledge community rather than as an individual" (Pohlhaus 2002, 420; see also Crasnow 2013; Harding 2004; Jameson 1988). The implicit assumption in this second type of criticism is that my analytical reformulation of the thesis of epistemic advantage or the proposed contrast with the epistemic diversity thesis falters once we primitively define the "knower" at some supra-individual level.

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Regarding the former point, none of my arguments denies that the thesis of epistemic advantage has to do with things "social." Many discussions of the "social" in the standpoint literature concern the activist process involved in turning a mere subjugated perspective into a subjugated "standpoint" characterized by a critical awareness of one's social location and the power relationships in the society. This point is directly acknowledged and incorporated in the general causal schema of the thesis of epistemic advantage visualized in Figure 3 (the first part of the causal chain) and the corresponding text. The idea that the achievement of a proper "standpoint" involves social activity is not especially controversial or objectionable, and the real issue for the thesis of epistemic advantage concerns the causal pathway that comes after it, that is, how having achieved a subjugated standpoint confers an "epistemic advantage." If we define the basic unit of causal analysis as individual human beings, then this becomes a theory of how having achieved a subjugated standpoint from a mere perspective (to repeat, not in isolation but through intense social interaction) makes those individuals better knowers and inquirers. The answer provided by the thesis of epistemic advantage is that subjugated standpoint grants individuals a wider scope of cognitive resources, which could be understood broadly as "vision" or more specifically as the "ability to detect things concealed by power" or even "epistemic virtue" depending on the version of the thesis.

One possible rebuttal at this point would be to point to proposals in the standpoint literature that we must treat the most granular "knower" not as individuals but "groups" that possess a distinct "group consciousness" (Harding 2004, 32). Even so, the proposed logical contrast with the epistemic diversity thesis still stands. The central question for the thesis of epistemic advantage then would be to offer an account of how having a subjugated standpoint (compared to not having it) confers certain "groups" an epistemic advantage. And just as this question was not immediately clear for individuals, it is not immediately clear for groups either. Put differently, the connection between "subjugated standpoint" and "capacity for inquiry" in Figure 3 must still be accounted for. Here, almost any existing proposal falls under the mechanisms covered in this paper, whether it be "double vision," or "virtue," if not some older, explicitly Marxist-Lukacian varieties. And the previously noted characteristics of these mechanisms, including a focus on identifying superior members rather than a belief in mutual complementary and synergy among diverse yet unranked constituents, still remain.

Although the causal reformulations and political commentary of this paper can accommodate the proposal to treat the basic "knower" as groups, it needs to be pointed out that the standpoint literature as a whole has not been so consistent in attributing epistemic agency exclusively to groups. The case of a female HIV researcher from Africa presented in Intemann (2010) and the black female domestic servant *Blanche* presented in Wylie (2003) exemplify hypothetical situations in which an individual from a marginalized group possesses an epistemic advantage over individuals from non-oppressed groups in virtue of commanding a wider scope of cognitive resources. And in many practical situations, such as the case of affirmative action in researcher recruitment, the basic unit of causal reasoning will more naturally be individuals rather than entire groups or group consciousnesses. It is both impractical and theoretically untenable to hold that the thesis of epistemic advantage does not draw from the logic of the superiority of certain types of individuals. Note that this *can* be said for the epistemic diversity thesis, which is not compatible with the logic of epistemic advantage at a theoretical level.

The second potential criticism of this paper may point to the well-known fact that feminist standpoint theorists, especially in the past several decades, openly recognized the multiplicity and intersectionality of oppression and incorporated an ever-greater emphasis on diversity, moving beyond the focus on traditional white middle-class women and expanding their claims to black people, indigenous people, LGBTs, the disabled, the colonized, as well as various intersections of them. This, however, has little to do with the content of the thesis of epistemic advantage. Such arguments for broader inclusion and diversity must ultimately resort to the causal mechanisms of the epistemic (or integrated) diversity thesis. The thesis of epistemic advantage may potentially be used to justify the exclusion of dominant groups (however they are demarcated), but the celebration of diversity within the subaltern classes requires a logic that is external to the thesis of epistemic advantage unless one opts for the slippery slope of proposing an epistemic hierarchy among the oppressed classes according to the degree or layer of oppression suffered. The increase in the emphasis on diversity and diversity-based arguments in the recent standpoint literature indicates the increasing adaptation of the epistemic diversity thesis and does not mean that it is conceptually part of the thesis of epistemic advantage.

The increasing adaptation of the logic of the epistemic diversity thesis in the recent standpoint literature would not have required such a confrontational interpretation if we tone it down to the "weak" version, which merely holds that being oppressed allows one to excel in doing *some* useful things without taking it to a claim of a genuine "epistemic advantage." To be clear, it would be an understatement to describe "some useful things" here simply as better knowledge and understanding of the lives of marginalized people. It is a basic premise of standpoint theory that power imbalances create distorted representations of social reality, and the epistemic benefits of a subjugated standpoint crucially include an exceptional readiness to detect such distortions. Despite the salience of such an epistemic benefit, the weak version of the thesis of epistemic advantage does not stand as an independent theory (cf. Harding 1986; Intemann 2010) of how increasing the representation of socially oppressed groups improves collective epistemic performance. Rather, it serves to add substantive content to the causal logic of the epistemic diversity thesis by theorizing what kinds of epistemic benefits or "tools" we can generally expect from the portion of diversity contributed by socially marginalized groups.

Toning down the thesis of epistemic advantage to the "weak" version and subsuming it under the general causal schema of the epistemic diversity thesis does not demand a compromise of all or even most of the important theoretical contributions of standpoint theory. The thesis of epistemic advantage would still retain the insight that power can impair or distort our vision of the world. It would still offer the maxim of the downward rigidity of knowledge, or the tendency for knowledge to trickle down the power hierarchy from above but rarely the inverse. It would still show that having a "lowly" background is not necessarily a disadvantage for understanding the social world, not least for its sensitivity to power-induced distortions in prevalent theories and representations. And it would continue to support the feminist goal of increasing the representation of members of socially subjugated groups in science. However, some elements of the "strong" version will need to be modified or compromised. Importantly, the key theoretical terms of the thesis including "epistemic advantage," "epistemic privilege," and "inversion" (which are all vestiges of older Lukacsian Standpoint Theory) appear to be misnomers under the weak version. Certain mechanisms of the thesis including "synthesis" (and likely epistemic virtue, too) would not be fully compatible. The thesis of epistemic advantage would no longer aim to replace or supersede the epistemic diversity thesis as a rival theory but rather enrich it by becoming part of its substantive content.

Conclusion

I identified two causal theories in feminist epistemology that explain how the inclusion of women or social minorities in science exerts a positive effect on scientific advancement. The "epistemic diversity thesis" posits a causal connection between sociodemographic diversity and scientific advancement, mediated by epistemic diversity. The positive effect of epistemic diversity on scientific advancement may be exerted through two broad types of mechanisms—on the one hand, it may do so by increasing the scope of beneficial traits or resources that contribute to successful scientific inquiry such as empirical information and background assumptions seen; on the other hand, it may do so by dispersing biases of which alignment could induce the collective endorsement of unjustified theories. The main causal model of the epistemic diversity thesis necessarily describes relations between aggregate-level variables with aggregate-level mediators, and the thesis lacks interest in whether and how a certain epistemic or social profile makes some individuals better inquirers than others.

By contrast, the thesis of epistemic advantage argues for the benefit of increasing the representation of women or minorities in science by proposing a positive causal path from social oppression to capacity for inquiry. The thesis of epistemic advantage primarily is a theory of the epistemic competence of the granular epistemic agents (most intuitively understood as individual human beings but also possibly as a certain aggregation of them) and offers little substantive insight into compositional effects, perhaps except for the implicit rule that increasing the proportion of the most capable members will improve the performance of the collective. The causal path is articulated through different mechanisms including "double vision," epistemic virtue, and Marxist-Lukacsian theory, among which "double vision" has been especially popular in recent decades. In its strong and genuine form, the thesis of epistemic advantage can be seen as individualizing the "scope of recourses" type of mechanism in the epistemic diversity thesis.

Such differences in the casual logic of the two theories can be understood in relation to their underlying political positions. The lack of interest in measuring, ranking, or comparing individual-level epistemic performance and the focus on mutual complementarity reflects a moderately progressive political ideal that seeks to end oppression through equality and coexistence between all members of the community regardless of their location in the traditional hierarchy. On the other hand, the focus on "epistemic advantage" and lack of attention to compositional effects in the thesis of epistemic advantage reflects its radically progressive political stance that aims to fight oppression by turning the tables on the oppressors and inverting the existing hierarchy. The latter theory's implied strategy of improving collective performance by recruiting the best-performing members coincides with a typically conservative stance in contemporary Western politics, which poses theoretical and practical problems for the political project of feminism.

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Notes

1 Longino's (1990, 76–78) four criteria of "recognized avenues for criticism," "shared standards," "community response," and "equality of intellectual authority" are perhaps the best-known. Medina (2013), despite being closer to standpoint theory, also provides as "principles that will facilitate our analyses of cognitive forces and their interplay" the conditions "principle of acknowledgement and engagement" and "the principle of epistemic equilibrium" which roughly correspond to Longino's calls for community response and equality of intellectual authority, respectively (50).

- 2 Note that it is also possible to think of negative causal effects of sociodemographic diversity to information elaboration (Steel et al. 2021, 1301), and there are experimental studies that report worse information elaboration in ethnically diverse groups (Kooji-de Bode et al. 2008). I only focus on the positive effects here as it is not the main goal of this paper to explore in what ways the positive causal effects proposed by theories in feminist epistemology may be offset.
- 3 Here, I included information elaboration as an individual-level variable since it can be conceived and possibly measured at the individual level. The handful of the relevant empirical (experimental) literature measures information elaboration only at the group level (Homan et al. 2007; Kooji-de Bode 2008), but this is most likely because of the practical difficulty/cost of measuring it for each participant and not because it is a concept that is only defined at the group level.
- 4 Some readers may feel that I am reducing the situated-knowledge hypothesis to a relatively self-evident idea. Internann (2010) states that "standpoint theorists have denied they are merely claiming that people who have different experiences will know about different things" (784). Wylie's (2003) definition just cited does not seem to reveal any noteworthy substantive content over the general idea that one's social profile causes one's epistemic profile, but nothing prevents standpoint theorists from adding additional content to it. For example, Internann (2010) adds the concept of "standpoint" to the situated knowledge hypothesis and stresses that proper knowledge is achieved by having a standpoint. I acknowledge that there are more complicated formulations of the situated knowledge hypothesis than the definition I cited. But this paper focuses on the thesis of epistemic advantage among the theoretical components of standpoint theory, and none of its main arguments hinge on drawing the contours of the situated knowledge hypothesis.
- 5 Historically, domain relevance was invoked by standpoint theorists as a defence against skeptics who bring up examples like theoretical physics. Adding domain relevance as an enabling condition may make the thesis more defensible but comes at the cost of reducing its applicability. As mentioned later in the paper, some varieties of the thesis, such as Medina's (2013) virtue-based account, may be unaffected by domain constraints.
- 6 It may be pointed out that the weak version does not count as the thesis of epistemic advantage. I agree that only the strong version counts as a non-trivial formulation of the thesis. I present the weak version in light of existing discussions of the thesis of epistemic advantage that hesitate to push the argument beyond the weak version, which is much milder and less prone to disagreement or criticism than the strong one.
- 7 Medina (2013) does not explicitly identify his theory as a case of feminist standpoint theory or the thesis of epistemic advantage. Yet his argument does concern a causal link from social oppression to epistemic virtue, and from epistemic virtue to the capacity for scientific inquiry, albeit not expressed in an explicitly causal language. Ashton (2020) treats it as a version of the thesis of epistemic advantage.
- 8 In practice, there could be more than one layer of oppression, and the logic has the potential to be extended to "triple" or "multiple" visions. This type of theoretical extension has hardly been explored in earnest, most likely because of the immediate challenge of finding a workable balance between infinite regress and arbitrary cut-off, although Harding (1991, 179–80) once appears to have opted for the former route by suggesting that epistemic privilege monotonically increases with the degree or layer of oppression.

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