

## Situating Feminist Epistemology

Natalie Alana Ashton  
Universität Wien  
Institut für Philosophie  
Universitätsstrasse 7 (NIG)  
Vienna 1010  
Austria  
[natalie.ashton@univie.ac.at](mailto:natalie.ashton@univie.ac.at)

Robin McKenna  
Universität Wien  
Institut für Philosophie  
Universitätsstrasse 7 (NIG)  
Vienna 1010  
Austria  
[rbnmckenna@gmail.com](mailto:rbnmckenna@gmail.com)

**Abstract** Feminist epistemologies hold that differences in the social locations of inquirers make for epistemic differences, for instance, in the sorts of things that inquirers are justified in believing. In this paper we situate this core idea in feminist epistemologies with respect to debates about social constructivism. We address three questions. First, are feminist epistemologies committed to a form of social constructivism about knowledge? Second, to what extent are they incompatible with traditional epistemological thinking? Third, do the answers to these questions raise serious problems for feminist epistemologies? We argue that some versions of two of the main strands in feminist epistemology – feminist standpoint theory and feminist empiricism – are committed to a form of social constructivism, which requires certain departures from traditional epistemological thinking. But we argue that these departures are less problematic than one might think. Thus, (some) feminist epistemologies provide a plausible way of understanding how (some) knowledge might be socially constructed.

### 1. Introduction

In his book *Fear of Knowledge* Paul Boghossian (Boghossian 2006) mounts a passionate defence of the ‘classical conception’ of knowledge. The classical conception is that assumed by most contemporary, mainstream epistemologists – the picture of knowledge we read about in epistemology textbooks. It has three components:

*Objectivism about facts:* The world is (largely) independent of us and our beliefs about it.

*Objectivism about justification:* Whether some item of information E justifies belief B does not depend on the contingent needs, interests or social values of any community.

*Objectivism about rational explanation:* Our exposure to the evidence can (often) suffice to explain why we believe what we believe (2006: 23).

Boghossian’s opponent is the ‘social constructivist’ about knowledge. He considers three different types of social constructivism about knowledge, each of which corresponds to the denial of one of the components of the classical conception:

*Social constructivism about facts:* The world is not what it is independently of us; rather, all facts are socially constructed in a way that reflects our contingent needs, interests and social

values.

*Social constructivism about justification:* Whether some item of information E justifies belief B depends on our contingent needs, interests and social values.

*Social constructivism about rational explanation:* It is never possible to explain why we believe what we believe solely on the basis of our exposure to the (relevant) evidence. Our contingent needs and interests must also be invoked (2006: 23–24).

For each variety of social constructivism, Boghossian focuses on one or two prominent defenders. His discussion of social constructivism about facts focuses on Nelson Goodman (1978) and Richard Rorty (1981), his discussion of social constructivism about justification on Rorty (1981) and his discussion of social constructivism about rational explanation on David Bloor (1976) and Thomas Kuhn (1962). But, earlier in the book, he indicates that feminist epistemology is also one of his targets. He quotes the feminist epistemologist Kathleen Lennon as representative of those who deny the classical conception:

Feminist epistemologists, in common with many other strands of contemporary epistemology, no longer regard knowledge as a neutral transparent reflection of an independently existing reality, with truth and falsity established by transcendent procedures of rational assessment. Rather, most accept that all knowledge is situated knowledge, reflecting the position of the knowledge producer at a certain historical moment in a given material and cultural context (Lennon 1997: 37).

Lennon seems to be defending social constructivism about facts here (“Feminist epistemologists ... no longer regard knowledge as a neutral transparent reflection of an independently existing reality”). But we want to focus on her remark that “all knowledge is situated knowledge”.<sup>1</sup> Put roughly, knowledge is situated if differences in the social situation of inquirers make for epistemic differences (e.g. in the kinds of things that inquirers are justified in believing).<sup>2</sup> The situated knowledge thesis concerns justification, rather than facts, and whilst constructivism

---

<sup>1</sup> As is common in the feminist epistemology literature, we will go back and forth between talking about ‘knowledge’ and ‘justification’. Assuming that knowledge requires justification, social constructivism about justification entails social constructivism about knowledge.

<sup>2</sup> Differences in social situation might include: the relative prestige of the inquirer and their field of research; the political and economic conditions in which the inquirer conducts their inquiry; the social setting in which the inquirer interacts with the subjects of their inquiry; the inquirer’s ideological commitments and social values; the inquirer’s status as oppressed or privileged; the inquirer’s ascribed social identity; the inquirer’s social roles and relationships (occupation, family status, etc.). For simplicity, we will often lump these kinds of factors together as ‘social factors’, and talk about ‘differences in social factors making for epistemic differences’. Intemann (2010: 790) argues that there is a crucial distinction between feminist epistemologies which appeal to social values and feminist epistemologies which appeal to social identities. Feminist empiricists tend to favour the former; feminist standpoint theorists tend to favour the latter. We return to this point in §5.

about justification might often be found alongside constructivism about facts, the two can come apart. And in fact, much – perhaps most – of feminist epistemology is best understood as concerned with justification. So Boghossian’s engagement with feminist epistemologies overlooks an important chunk of the literature. Our aim in this paper is to address the literature which Boghossian did not, and explore the extent to which feminist epistemologies deviate from his classical conception of knowledge. We’re going to do this by posing, and then answering, three questions:

1. Are feminist epistemologies committed to social constructivism about justification?
2. If so, to what extent are they (in)compatible with the classical conception of knowledge?
3. To what extent is this a problem for feminist epistemologies?

We’re going to argue that the answers to the first two questions are more nuanced and surprising than Boghossian’s treatment of feminist epistemologies would suggest, and that the third question is much more difficult to answer as a result.

We will make our case as follows. In §2 we will explain Boghossian’s classical conception in more detail. In particular, we’ll highlight a distinction he makes between what we’ll call ‘constitutive’ and ‘causal’ dependence. Justification constitutively depends on social factors if social factors determine what our evidence is, and so what it can (and can’t) justify. Knowledge causally depends on social factors if social factors merely cause us to pay attention to certain pieces of evidence (and ignore others), and so impact on what we know. Constitutive dependence clashes with the classical conception; causal dependence doesn’t. This distinction enables us to make a connection between the first two questions: whether feminist epistemologies are compatible with the classical conception turns on whether they posit constitutive or causal dependence.

In §3-4 we will introduce two schools of thought in feminist epistemology, feminist standpoint theory and feminist empiricism. Put roughly, feminist standpoint theorists combine the situatedness of knowledge with a claim about epistemic advantage attaching to certain perspectives, while feminist empiricism is a naturalised epistemology which incorporates the situatedness of knowledge. We will argue that some (but not all) standpoint theorists and feminist empiricists hold that justification is dependent on social factors in both the causal and the constitutive sense. Thus, some (but not all) versions of standpoint theory and feminist empiricism are committed to a form of social constructivism, and so conflict with the classical conception.

Our aim is not so much to defend these feminist epistemologies – although we think they can be defended – but rather to urge that those who defend the classical conception of knowledge have focused on the wrong target. The kind of social constructivism present in (some) feminist epistemologies is much more modest and plausible than the radical social constructivist view Boghossian considers and rejects as incoherent. Accordingly, we will finish in §5 by showing that the two central criticisms levelled against social constructivism don’t apply, or haven’t yet been shown to apply, to feminist epistemologies.

## 2. Boghossian and the Classical Conception of Knowledge

In this section, we look in more detail at Boghossian's 'classical conception' of knowledge. He starts by telling us that the classical conception does not deny that knowledge has a social dimension:

No one should deny, for example, that knowledge is often produced collaboratively, by members of a social group, and that contingent facts about that group may explain why it shows an interest in certain questions over others ... [T]he classical picture does not deny that the members of a knowledge-seeking group may have certain political and social values and that those values *may* influence how they conduct their work—what observations they make and how well they appraise the evidence that they encounter. It forms no part of the classical conception of knowledge to deny that inquirers may be *biased* by their background values into believing claims for which there is no evidence (2006: 21).

Boghossian clarifies this point with reference to an example. Our belief in the existence of dinosaurs is justified by evidence like certain fossil records. There is a partially social story to tell about how we came to be justified in having beliefs about dinosaurs, but this story is limited to describing how various social factors *caused* us to pay attention to the fossil record. The interests and biases that we, as a group, have led us to discover the fossil record and so to *have access to* the relevant evidence. Boghossian thinks that this much is obvious, and says that the classical conception is intended to capture this. What the classical conception rules out is that social factors can determine what *counts as evidence*:

[A]ccording to the classical picture, what *is* independent of our social make-up is the fact that the fossil record we have discovered constitutes *evidence* for the existence of dinosaurs—contributes to making it rational, in other words, to believe in their existence. That we should have discovered the evidence for the dinosaurs may not be independent of our social context; but *that it is evidence* for that hypothesis is (2006: 21–22).

We therefore need to distinguish between two ways in which justification might depend on social factors. The first way is by determining what evidence we have access to, and so what we can be justified in believing. The second way is by determining what counts as evidence in the first place. We will call the first sort of dependence 'causal' and the second sort 'constitutive'.<sup>3</sup> So

---

<sup>3</sup> While we work with Boghossian's distinction between causal and constitutive dependence throughout, we are inclined to think that things are a little more complex than Boghossian's discussion suggests. His point is that there is nothing unorthodox about holding that our social values cause us to attend (or not attend) to certain pieces of evidence. But what if one thought that social values cause inquirers to count (or not count) things as evidence? This is a sort of dependence that seems causal but is arguably more unorthodox. While a fuller account of the distinction would need to deal with these sorts of issues, we work with Boghossian's framing of the issue because it allows us to make the points we want to make in what follows. We would like to thank an anonymous reviewer for urging us to address this issue.

whether feminist epistemologies amount to social constructivism will depend on which sense of dependence they make claims about.<sup>4</sup> We will explore this issue in the next two sections.

Before moving on we want to make two clarifications about Boghossian's way of framing these issues. First, there is an evidentialist bias in Boghossian's presentation of objectivism. Evidentialism is, roughly, the view that whether a belief is justified depends on whether there is sufficient evidence supporting it.<sup>5</sup> One of the main competitors to evidentialism is reliabilism, which is, equally roughly, the view that whether a belief is justified depends on whether it was produced by a reliable belief-forming process.<sup>6</sup> Clearly, Boghossian's formulation of objectivism about justification favours evidentialism over reliabilism. We propose adopting a broader formulation of objectivism that is compatible with both evidentialism and reliabilism:

Objectivism (about justification)\*: Whether our beliefs are justified does not (constitutively) depend on the contingent needs, interests or social values of any community.

The corresponding formulation of social constructivism is:

Social constructivism\*: Whether our beliefs are justified (constitutively) depends on our contingent needs, interests and social values.

Second, Boghossian understands evidence in a way which would be very controversial for philosophers of science. The idea that observations are – or directly produce – evidence without any recognition of the complicated nature of perception, representation and interpretation would be seen as over-simplistic.<sup>7</sup> For the most part, this issue will not have consequences for what we say – we can grant Boghossian this framing and our arguments will still go through. But this understanding of evidence will be briefly criticised in §3.

---

<sup>4</sup> Longino (1990) distinguishes between values that determine what constitutes acceptable scientific method ('constitutive values') and social and political values ('contextual values'). While Longino's aim is to argue that both sorts of values can play a legitimate role in theory-choice in science, the distinction itself takes no stand on the role that contextual values play in scientific inquiry. Thus her distinction is importantly different from our distinction between causal and constitutive dependence. For more on Longino see §4. We would like to thank 2 anonymous reviewers for urging us to clarify this issue.

<sup>5</sup> For influential defences of evidentialism see Clifford (1876), Hume (2007) and Feldman and Conee (1985).

<sup>6</sup> For influential defences of reliabilism see Armstrong (1973), Dretske (1971) and Goldman (1976).

<sup>7</sup> For the classic discussions of the idea that observation is 'theory-laden' see Feyerabend (1958), Hanson (1958) and Kuhn (1962). For more recent discussions see Bogen and Woodward (1988), Daston and Galison (2010, 11–16) and Franklin (2015).

### 3. Feminist Standpoint Theory

We will start by introducing feminist standpoint theory as a view which combines the situatedness of knowledge with a claim about some perspectives providing an epistemic advantage (§3.1). We will then distinguish two ways in which justification is dependent on social factors on this view; one on which it is causally dependent, via access to evidence (§3.2), and one on which it is constitutively dependent, via conceptions of evidence (§3.3).

#### 3.1. What is Feminist Standpoint Theory?

Feminist standpoint theory combines the idea of situated knowledge (from above) with claims about systems of social oppression. On this view, subjects have different ‘social locations’ – meaning different statuses as socially oppressed or socially privileged – and these different social locations come with different experiences, which have the potential to enable different epistemic perspectives.

This idea has its roots in Marxist historical materialism. On Lukács’ (1971) interpretation, Marx argued that the different social locations of the bourgeoisie and of the proletariat lead them to have different perspectives on economic exchange and the social relations that hold between the two groups. From the perspective of the proletariat, the oppressive nature of these social relations is, or can be made, visible, whilst from the perspective of the bourgeoisie the oppressive nature of these social relations is obscured.

Feminist standpoint theorists have taken the central idea behind this and applied it to gender oppression, and to multiple intersecting dimensions of oppression (e.g. oppression based on both race and gender). This central idea is that subjects who are socially oppressed have distinct experiences, and after critically reflecting upon these experiences they can turn their perspective into a ‘standpoint’ - an epistemically privileged perspective from which the nature of relevant social relations is visible. Subjects who are not oppressed don’t have these experiences, and as a result are less likely to achieve a standpoint, and more likely to continue to have a distorted understanding of social relations. This amounts to the socially oppressed group having what is often called an epistemic advantage:

*Epistemic Advantage.* The social oppression that socially disadvantaged groups experience can bring them epistemic benefits.

Different authors cash this idea out in different (though related) ways. We’ll discuss some specific proposals in the next two subsections, but before doing so it’s worth emphasising several caveats that feminist standpoint theorists frequently make about the thesis of epistemic advantage. The thesis is often misunderstood by those who don’t acknowledge these caveats, and who then think the thesis is obviously implausible, or objectionable on feminist grounds.

First, the epistemic advantage is *not supposed to depend on essential categories*. There needn’t be any properties which are essential to membership of the groups which have the epistemic advantage

(Hartsock 1997; Smith 1997; Wylie 2003). As Fricker puts it, standpoints don't depend on oppressed people (or even particular subsets of oppressed people, such as Latina women or gay men) being the *same*. It only requires that their experiences are *similar* in certain ways (Fricker 1999: 201).

Second, this point is true of the property of possessing epistemic advantage, too. Possessing epistemic advantage is *neither a necessary nor a sufficient condition on membership of a particular group*. Where it is present in oppressed people it is dependent on the fact that they live in a world containing oppression, and it is also possible that it can be achieved by non-oppressed people (Medina 2012).

Third, this is because epistemic advantage is *not automatic*, but must be achieved through critical reflection. And this achievement is collaborative; it is not the work of an individual (Fricker 1999: 202–3; Medina 2012; Wylie 2003).

Fourth, it *needn't be an advantage with regards to all objects of knowledge*. Standpoint theorists are usually clear that the argument for advantage will need to be made on a domain-by-domain basis, and that it is easiest to find in domains of knowledge which involve social relations (e.g. Harding 1991: 46; Wylie 2003: 37).<sup>8</sup> Fricker suggests that knowledge of “the social world” should be “fragmented” even further into knowledge of “*relevant areas of the social world*” (Fricker 1999: 203).

With these caveats in place, we'll spend the remainder of this section discussing some specific standpoint theory proposals, and evaluating whether they render justification dependent on social factors in a constitutive sense, or just in a causal one.

### **3.2. Access to Evidence**

First, let's look at an account which only renders justification as dependent on social factors in the causal sense, and so is compatible with the classical conception of knowledge.

Nancy Hartsock (1983) focussed on the “sexual division of labour” as the source of epistemic advantage. Her paper on this is a classic, which sparked off the rest of the literature on standpoint theory in philosophy. Her aim was to adapt the Marxist framework of economic oppression to explain the epistemic benefits that can come along with gender oppression. Marx argued, or is sometimes interpreted as arguing, that proletarian workers are better positioned to understand the social relations underpinning society and economics than their economic

---

<sup>8</sup> For example Harding says that conducting research as her version of standpoint theory recommends will generate better accounts of “men's lives and of the whole social order” (1993: 56). Also cf. Hartsock (1985: 151). Whilst these claims appear to be more wide reaching than claims simply about the oppression of women, they are still based on the idea that a feminist standpoint gives one an advantage with regard to knowledge of social relations. Thank you to an anonymous reviewer for pushing us to clarify this point.

superiors are, because they are more in touch with ‘material necessity’ – the concrete, physical resources that are required for human safety and survival.

Hartsock argued, similarly, that women’s roles as wives and mothers make them responsible for, and so particularly familiar with, lots of things which are essential to the functioning of society – such as cooking, cleaning, and child rearing. But she added that, for women, this connection with material necessity is even more pronounced than that of male workers. Women aren’t just expected to produce and maintain objects (like chairs and boots), but also people – which is a more repetitive, extended and involved process. And their roles as producers encompass more of their lives than those of male workers – at the end of the day the male worker goes home and leaves behind his role, to some extent, but wives and mothers don’t have this opportunity. This amounts to women having much more evidence, or many more justified beliefs, about what is required to satisfy our needs than men (who are not typically responsible for these things) usually have.

As well as affecting the evidence that they have access to, Hartsock argues that women’s experiences can also affect the way they weight the importance of different questions and activities. One example Hartsock provides, from Marilyn French’s novel *The Women’s Room*, makes this point especially vividly:

Washing the toilet used by three males, and the floor and walls around it, is, Mira thought, coming face to face with necessity. And that is why women were saner than men, did not come up with the mad, absurd schemes men developed; they were in touch with necessity, they had to wash the toilet bowl and floor (French 1978: 214).

The idea being captured here is that the roles women play in society affect the weight they give to different concerns and questions. There are some questions and topics that they don’t have the luxury of spending time and effort on (and others that they are vividly aware of the material importance of) because they have to clean up piss on a regular basis.

This is the kind of feminist point that classical epistemologists often seem to be most resistant to – the idea that women’s subjective experiences as caregivers can affect what they know is seen as somewhat radical. But interestingly, this point is completely compatible with the classical conception. Remember that the classical conception allows that social factors can affect justification in the causal sense, by leading subjects to have access to different evidence, or to weight the importance of various questions differently. So Hartsock’s points about women’s social roles affecting justification via the evidence they have access to and the weightings they attribute to different questions is, perhaps surprisingly, compatible with the classical understanding of objectivity about justification.<sup>9</sup>

---

<sup>9</sup> This does not mean that every point Hartsock makes is compatible with the classical conception – in some passages (e.g. Hartsock 198: 151) she makes points which are arguably



### 3.3. Conceptions of Evidence

Other aspects of standpoint theory can, we think, be seen to understand justification as dependent on social factors in the constitutive sense, as well as the causal one. The other hugely influential, classic paper that sparked off a lot of standpoint theory is Patricia Hill Collins' paper 'Learning from the Outsider Within' (Collins 1986). Collins is a sociologist, and in this paper she produced a detailed case study of the epistemic advantages of black women with regard to the discipline of sociology.

She identifies a number of different epistemic advantages that black women may develop. One in particular is of interest to us here: she argues that black women – because of the interlocking nature of the oppression that they face – are in a better position to compare and evaluate the epistemic resources that the discipline relies on than those who don't face oppression, or who face oppression only along one dimension.<sup>10</sup>

In essence, to become sociological insiders, Black Women must assimilate a standpoint that is quite different than their own. White males have long been the dominant group in sociology, and the sociological worldview understandably reflects the concerns of this group of practitioners. [...]

Like everyone else, Black women may see sociological "thinking as usual" as partially organised, partially clear, and contradictory, and may question these existing recipes. However, for them, this questioning process may be more acute [...] it may also be more difficult for Afro-American women to experience conversion and begin totally to think in and act according to a sociological worldview (1986: s26–27).

Collins' claim is that there are assumptions in the sociological standpoint which black women stand in a unique relation to – sexist and racist assumptions which are harmful to black women – which they are therefore less likely to accept and more likely to criticise. This is a claim about the effect of social factors on the component parts of a justificatory framework, and so seems to assume constitutive dependence.

This point about constitutive dependence has since been made more explicit by Sandra Harding (1991, 1995), in her work on values in science. Harding defends a standpoint theory on which epistemic advantage lies in the ability to identify a particular set of values that play a role in

---

constitutive. Thanks to an anonymous reviewer for pushing us to clarify this point, and for providing the reference.

<sup>10</sup> The other elements look to be clear cases of causal dependence: that black women have more, or different, evidence (or justified beliefs) than other sociologists have, e.g. about the experiences and histories of groups that they are a member of; and that they are likely to have different priorities and concerns than sociologists with different backgrounds, and so might be motivated to focus on different, and neglected, research questions and concepts than these other sociologists.

knowledge production (or, more specifically, in science). Tellingly, she refers to this set of values as *constitutive values*.<sup>11</sup> She argues that as women and other groups who are socially oppressed have typically been left out of science in the past, they are better able to identify *constitutive values* that have an effect on science from within (such as culture-wide assumptions about race and gender), whilst those from groups who have traditionally made up scientific research teams can only identify *overt values* (such as the interests that particular businesses might have in funding research into the products that they sell) that affect science from outside (Harding 1995: 335). This is because, as Collins argued, those who have been excluded from a discipline due to oppression are less committed, and more resistant, to the oppressive assumptions embedded within that discipline's justificatory resources.

A real-life illustration of this claim can be found in the field of behavioural endocrinology. Researchers interested in the impact of hormones on sexual behaviour discovered that the sexual behaviour of rhesus monkeys peaks at the time when the females are ovulating, and wanted to determine how the male monkeys 'knew' when to initiate sex at this optimal (in terms of procreation) time. It's now accepted that the peak in sexual activity during ovulation is explained by female rhesus monkeys initiating sex, but for a long time the research carried out overlooked this fact and instead focused on the behaviours and capacities of the male monkeys.

Kim Wallen (1990, 2000)<sup>12</sup>, a behavioural endocrinologist specialising in female sexuality, tracks how this situation eventually changed. He says that the crucial turning point was in 1976 – over 30 years after examples of female initiation were first recorded – when one of the “patriarchs” who had “dominated” the field published a paper distinguishing *proceptivity* (the active solicitation of sexual activity) from the more passive *receptivity*. According to Wallen this reflected a cultural shift due to “the rise of the women's movement, or to the dramatic increase in female graduate students in endocrinology, or to both” (2000: 296).

This seems, then, to be an example of epistemic advantage uncovering constitutive sexist values. An influx of female, or feminist, researchers led to greater scrutiny of the dominant perspective and its justificatory resources, and enabled sexist assumptions about male sexual proactivity and female passivity to be uncovered. And, importantly, this is not an example of justification (or evidence) being dependent on social factors in the causal sense. The male researchers who initially failed to explain the timing of the rhesus monkeys sexual contact had access to the same bodies of evidence as later researchers did – the behaviour that would later be treated as evidence of proceptivity in female rhesus monkeys (their slapping the ground in front of males) had been observed and published on over thirty years before the term 'proceptivity' was coined.<sup>13</sup> Something more complicated was going on here.

---

<sup>11</sup> Note that Harding's use of the term 'constitutive values' is somewhat different to Longino's (see fn. 4).

<sup>12</sup> For a lay discussion of this, see Roach (2009).

<sup>13</sup> Other behaviours which are now recognised as evidence include females approaching and touching males. Presumably these behaviours were observed at the time as well.

At this point, Boghossian's simplified understanding of evidence begins to cause confusion. If we think that access to observations and data is equivalent to evidence and justified belief, then it's hard to explain why the early researchers went wrong. But if we recognise that there's an additional step required to turn observation into evidence, and that this step involves value-laden processes like interpretation, then it becomes much easier to explain what happened. The researchers had access to the relevant observations, but didn't conceptualise them, or what they represented, *as evidence* because of social factors (such as the sexist assumptions about female passivity). In offering this account – as standpoint theorists following Harding would do – the classical conception of knowledge is rejected in favour of a form of social constructivism (as we have defined it).

In this section, we have explored which sense of dependence feminist standpoint theorists think is relevant when it comes to the relation between social factors and justification. We saw that, in some cases, the dependence described is causal, and so doesn't contradict the classical conception of knowledge. However, some accounts involve a more controversial constitutive dependence, which does contradict the classical conception. These accounts are forms of social constructivism.

#### **4. Feminist Empiricism**

We will start by introducing feminist empiricism as a version of naturalised epistemology (§4.1). We will then argue that, as with standpoint theory, some versions of feminist empiricism hold that justification depends on social factors in both constitutive and causal senses, whereas others may be better interpreted as holding that justification only depends on social factors in the causal sense (§4.2).

##### **4.1. What is Feminist Empiricism?**

Feminist empiricism combines the empiricist view that experience and observation provide the least defeasible evidence we have about how the world is with the idea that feminist social values can play a legitimate role in the process of inquiry. This combination fits naturally within the framework of *social naturalised epistemology*. Here's Elizabeth Anderson:

Naturalized epistemologists consider knowledge production as an activity in which inquirers are subject to the same causal forces that affect their objects of study (Quine 1969). They ask of science that it provide an account of its own activity ... Social epistemology is the branch of naturalized epistemology that investigates the influence of specifically social factors on knowledge production ... Feminist epistemology can be regarded as the branch of social epistemology that investigates the influence of *socially constructed conceptions and norms of gender and gender-specific interests and experiences* on the production of knowledge. It asks how the historical exclusion of women from theoretical inquiry has affected the direction and content of research in fields such as anthropology, philosophy and psychology (1995a: 54).

Like Quine (1969), feminist empiricists look at the causal forces that shape what we know and how we know it. But, where Quine imagined studying the reactions of experimental subjects to stimuli in controlled laboratory settings, feminist empiricists study the process of knowledge production in concrete social contexts, with a focus on how conceptions and norms of gender impact on that process. For instance, Anderson cites studies which show that the results of social science survey research depend on the perceived gender or race of the interviewer and that the data produced in anthropological fieldwork depends on the gender of the anthropologist (1995a: 60–61). The conclusion she draws is that, the more diverse a social scientific or anthropological research team is, the more likely they are to obtain accurate results from surveys and fieldwork. The upshot is that diversity is desirable from the scientific point of view as well as the moral point of view. There is an ‘internal’ scientific rationale for favouring diversity, as well as an ‘external’ moral rationale.

The more fundamental difference between feminist empiricism and Quinean naturalised epistemology is that, where Quine accepted a basic distinction between facts and values, feminist empiricists question this distinction. Here’s Anderson again:

Feminist empiricists consider how feminist values can legitimately inform empirical inquiry, and how scientific methods can be improved in light of feminist demonstrations of sex bias in currently accepted methods. Their version of naturalized epistemology therefore does not follow Quine in reducing epistemology to nonnormative psychological investigations, but rather upholds the roles of value judgments in rigorous empirical inquiry (2017).

Anderson is making two points here. Her first point is that, if we can demonstrate that there are gender biases in currently accepted scientific methods, then it is legitimate to modify those methods. We don’t consider this to be much of a departure from Quinean naturalised epistemology. While Quine talks about epistemology as a ‘branch’ of psychology, he still thinks it can serve an ameliorative purpose. The whole point of studying the actual process of knowledge production is to improve it (see Quine 1986; Roth 1999).

Anderson’s second point is that values, specifically feminist values, can legitimately inform the actual conduct of inquiry. This is clearly a departure from Quinean naturalised epistemology. For Quine, our values set the goals of inquiry, but they play no role in its actual conduct; for feminist empiricists, our values both set the goals and play a role in the conduct of inquiry. But what is this role? We will now turn to this question.

## **4.2. Feminist Social Values**

We will start with an answer to this question that has been proposed by Helen Longino (see Longino 1990, 1994, 1997, 2002). Once we have looked at her answer, we will argue that it is tantamount to rejecting objectivism about justification, and accepting a form of social constructivism. We will finish by commenting on a dispute within feminist empiricism about what legitimises the feminist empiricist appeal to feminist values in theory choice in science. As

we will see, this debate has consequences for whether feminist empiricism is committed to a form of social constructivism.

Anderson summarises Longino's account of the role of feminist values as follows:

[T]heories do not merely state facts but organise them into systems that tell us what their significance is. Theories logically go beyond the facts; they are 'underdetermined' by all the empirical evidence that is or ever could be adduced in their favour ... The evidential link between an observed fact and a theoretical hypothesis can only be secured by background auxiliary hypotheses. This leaves open the logical possibility that ideological judgments may not be implications of an independently supported theory but figure in the justification of the theory itself, by supplying evidential links between empirical observations and hypotheses (1995a: 77).

Here is our reconstruction of Longino's argument:

1. There is a 'logical gap' between empirical data and theory in the sense that the data only provide evidential support for a given theory in conjunction with certain background assumptions.
2. In the philosophy of science literature, the standard way to bridge this logical gap is by appealing to the theoretical virtues (consistency, simplicity, explanatory power, fruitfulness). It is these virtues that secure the evidential link between data and theory.
3. Appealing to feminist social values to bridge the gap is as legitimate a way (or maybe even a more legitimate way) of securing the evidential link between data and theory as appealing to the standard theoretical virtues.
4. Therefore, feminist social values can legitimately secure the evidential link between data and theory, and so figure in the justification for accepting scientific theories.<sup>14</sup>

The first premise articulates a familiar idea in the philosophy of science: the available empirical data always underdetermines theory choice in the sense that two observers can always disagree about what theory the data supports by making different background assumptions (see Duhem 1954; Quine 1951). Some took the failure to observe the stellar parallax in the 17th century as evidence that the earth did not revolve round the sun because they assumed that the stars are not far away. Others took it as evidence that the stars are far away because they assumed that the earth revolved round the sun (see Anderson 1995b: 28). As this example might suggest, it is sometimes possible to resolve these disputes by examining the background assumptions themselves. But this is not always possible. The second premise states the standard response to this problem in the philosophy of science literature: the theoretical virtues can be invoked to argue that one theory is preferable to the alternatives because of its consistency with other theories, its simplicity, its explanatory power or its fruitfulness (see Kuhn 1977).

---

<sup>14</sup> We would like to thank an anonymous reviewer for helping us get clearer about the structure of this argument.

The third premise is the crucial premise in the argument. It states that it is as (if not more) legitimate to appeal to feminist social values to bridge the gap between observation and theory as it is to appeal to the standard theoretical virtues. For instance, it can be as legitimate to appeal to the relative *complexity* of a theory as a reason to prefer it over a simpler theory as it is to appeal to the relative simplicity of a theory as a reason to prefer it over a more complex theory. Whether the appeal is legitimate will depend on the case at hand. The conclusion follows from these premises: if feminist social values secure the evidential link between observation and theory, they are part of what justifies accepting the theory. They determine what ‘counts as’ evidence for the theory.

While the first two premises raise interesting questions in the philosophy of science, we lack the space to deal with them here. Accordingly, we will focus on the third premise. We will start by looking at Longino’s defence of this premise. We will then show that, if her argument is successful, it gives us good reasons to reject objectivism about justification, and accept social constructivism.

Here is Longino’s proposed list of feminist social values (see Longino 1997: 21–23):

- Empirical adequacy.
- Novelty of explanatory framework. (Contrast: consistency).
- Ontological heterogeneity. (Contrast: simplicity).
- Explanatory complexity or mutuality of interaction. (Contrast: explanatory power or generality).
- Applicability to human needs and potential to decentralise power.<sup>15</sup>

This list includes the familiar value (or virtue) of empirical adequacy: it is never legitimate to accept a theory that conflicts with observation. The final value (applicability to human needs) can be seen as a slightly different take on the traditional virtue of fruitfulness. But the other three values contrast with traditional virtues. In what follows we will focus on these contrasting values.

Let’s look at each virtue in turn (what follows is based on Longino 1997: 23–27). First, take consistency. The thought behind appeals to consistency is that it is a mark in favour of a theory if it is consistent with our other theories. But the problem with this is familiar from discussions of coherentism in epistemology: bodies of beliefs can be internally consistent yet entirely false. Thus, the legitimacy of appeals to consistency depends on the status of our other theories. Second, take simplicity. While theories shouldn’t posit entities for no reason, this hardly means that we should in general prefer theories that posit fewer entities to theories that posit more. We have no reason to think that the universe is particularly simple, and plenty of reason to think it is

---

<sup>15</sup> What makes these values ‘feminist’? Longino’s answer is that they are feminist in the sense that an inquiry guided by them is more likely to reveal the impact of gender on inquiry, and so more likely to serve feminist goals (see 1997: 26–27). This makes their status as feminist contingent, in the sense that, if it turned out that other values better served feminist goals, then these values would take precedence (see 1994: 482–83).

enormously complex. Thus, we need to evaluate, on a case-by-case basis, whether there is a sound rationale for the entities posited by particular theories. Finally, take explanatory power. Longino follows Cartwright (1980) in arguing that explanatory power and generality usually comes at the cost of literal truth: powerful and general sets of scientific laws are usually false, and true scientific laws are usually full of *ceteris paribus* clauses that rob them of any generality. This is not to say that it is never legitimate to appeal to explanatory power. But it does show that the legitimacy of appeals to explanatory power depends on the specifics of the case.

Longino takes this to show that whether an appeal to feminist social values or an appeal to the standard theoretical virtues is legitimate is going to depend on the specifics of the case at hand. But in what sort of case would it really be more legitimate to appeal to feminist social values? Here, Longino cites cases where scientific advances have resulted from – or would have resulted from – a preference for theories that are novel, heterogeneous or explanatory complex. Take, for instance, Barbara McClintock’s ground-breaking work on genetic transposition, which involved looking at the differences between individual cobs of corn (see Anderson 1995a: 60; Longino 1994: 477). Longino argues that McClintock’s work reflected a preference for complex explanations that only work for very specific phenomena over unifying explanations that cover a diverse range of phenomena. From the fact that scientific advances have resulted from a preference for theories satisfying her feminist values rather than the traditional theoretical virtues, she concludes that, at least in these cases, it was more legitimate to appeal to these feminist values than it would have been to appeal to the standard theoretical virtues.

While more could be said about Longino’s argument, we will now turn to its implications for objectivism and social constructivism about justification. An initial difficulty here is that, where Boghossian talks about *beliefs*, Longino talks about *scientific theories*. This reflects a sub-disciplinary divide; Boghossian is using the standard terminology in epistemology, whereas Longino is using the standard terminology in philosophy of science. We are going to bridge this divide by assuming that, while scientific theories don’t simply consist in sets of beliefs, sets of beliefs are an important component of scientific theories, and that, while there is more to justifying a scientific theory than justifying the component beliefs, justifying a scientific theory requires justifying its component beliefs. Thus, if we can show that the justification for accepting a scientific theory (constitutively) depends on social factors, then we have ipso facto shown that the justification for accepting the various beliefs that are part of that theory depend on social factors.

On Longino’s view, the available observational data will always logically underdetermine theory-choice. In order to bridge this gap, we need to appeal to a set of virtues or values. But here Longino thinks it is as (if not more) legitimate to appeal to feminist values to bridge the gap as it is to appeal to the traditional theoretical virtues. So feminist values bridge the gap between observation and theory, and so secure the evidential link between observation and theory. They determine whether the observation counts as evidence for a particular theory in the first place. Values therefore play a crucial role in the process of justifying scientific theories. But the idea is not that our values merely lead us to pay attention to particular bits of evidence, and therefore cause us to accept one theory rather than another. Rather, the idea is that they partly constitute

our justification for accepting one theory rather than another. Thus, on Longino's view, feminist social values can partly constitute our justification for accepting scientific theories, and therefore a form of social constructivism is true.

We have now shown that Longino assigns a role to feminist social values on which they partly constitute our justification for accepting scientific theories. We want to end this section by considering a debate within feminist empiricism about the status of feminist values.<sup>16</sup> Maya Goldenberg (2015) distinguishes between two 'streams' in feminist empiricism. The 'community-based social knowledge' stream (of which Longino is representative) and the 'values as evidence' stream (of which Anderson is representative).<sup>17</sup> Both streams agree that values (feminist values included) play a legitimate role in inquiry. But they disagree about what legitimises their use. Put very roughly, for Longino, values are legitimised by community criticism. An appeal to values is legitimate if it withstands a public process of critical scrutiny, where the process satisfies certain conditions:

- There must be publicly recognised forms for criticism (e.g. peer-reviewed journals).
- There must be uptake of criticism (e.g. engagement with comments from peer review).
- There must be public standards for evaluation of criticism (e.g. discipline-wide norms, like a requirement of replicability).
- There must be tempered equality of intellectual authority (see Longino 2002: 128–35).

In contrast, for Anderson values are legitimate insofar as they are evidence-based. Anderson (2004) considers two different ways in which someone researching the effects of divorce could frame things. One option would be to frame divorce as the traumatic breakup of a family. Another option, taken in some feminist work on divorce, would be to frame divorce as a transformation of the family unit that presents an opportunity for personal growth for the divorcee. Both framings are value-laden in the sense that they involve taking an evaluative stance towards divorce. But we can assess which framing is more fruitful and illuminating without putting them both through a public process of critical scrutiny. Anderson argues that the assumption that divorce involves traumatic breakup is problematic because it is difficult (to say the least) to isolate harms caused by the divorce from harms caused by the relationship prior to the divorce. If this is right, then the feminist way of framing divorce is legitimate because it is more fruitful and illuminating than the alternative.

---

<sup>16</sup> We would like to thank an anonymous reviewer for suggesting we address this dispute within feminist empiricism.

<sup>17</sup> We focus on Anderson and Longino in order to make our discussion manageable but there are other representatives of both streams. Lynn Hankinson Nelson (1990) is another representative of the community-based social knowledge scheme, whereas Sharyn Clough (1998, 2003, 2015) is another representative of the values as evidence stream (Clough actually goes a little beyond Anderson and treats values *as* evidence).



One might wonder whether this difference between Longino and Anderson is reflected in a difference with respect to their views about social constructivism: views like Longino's are committed to a form of social constructivism, whereas views like Anderson's are not. If this is right, there is a similar divide within feminist empiricism to the divide within feminist standpoint theory: for Longino feminist values determine what counts as evidence for or against a given theory, whereas for Anderson feminist values don't 'stand outside' of evidential relations. Goldenberg appears to endorse this interpretation:

The feminist empiricist invocation of a community court of value arbitrators suggests [the] view that values are not amenable to the same empirical modes of inquiry as are factual statements. Here, we see the product of a rigid ontological separation of 'facts' and 'values' that seems to be unnecessary. Values, according to Anderson, are only science-free (i.e. unaccountable to empirical claims) if they are held dogmatically, that is, when they are held with 'stubbornness in the face of any conceivable evidence' (2015: 11).

If values are amenable to the same empirical modes of inquiry as factual statements then it must be possible to offer evidence for and against them, and if it is possible to offer evidence for and against them then they can't determine what counts as evidence in the first place. This suggests that, while some feminist empiricists (e.g. Longino) endorse a form of social constructivism, and so reject the classical conception, others (e.g. Anderson) aim to fit feminist empiricism into the classical conception of knowledge.

## 5. Feminist Epistemologies and the Classical Conception

We set out to answer three questions about feminist epistemology and social constructivism:

1. Are feminist epistemologies committed to social constructivism about justification?
2. If so, to what extent do they contradict the classical conception of knowledge?
3. To what extent is this a problem for feminist epistemologies?

So far, we've argued that the answers to the first two questions are connected, and that they both turn on the kind of dependence that holds between justification and social factors. We've also shown that both versions of feminist epistemology have at least some elements which involve the more controversial kind of dependence. This means that both contradict the classical conception, and so both are committed to some form of social constructivism. So much for the first two questions. In this final section, we will consider the third question. We won't offer a definitive answer, but will show that the kind of social constructivism at issue in feminist epistemologies is different to, and much less problematic than, the kind of social constructivism that someone like Boghossian finds so dangerous. We take this to show that Boghossian dismisses both social constructivism and feminist epistemology far too quickly.

There are two central reasons why social constructivism is thought to be problematic. The first is that it is often associated with the radical, global thesis that there are no absolute facts about justification whatsoever. Boghossian makes this association, characterising the social

constructivist as holding that there are no absolute facts about what information justifies which beliefs because justification is relative to an epistemic ‘system’ or ‘grid’. For instance, in the infamous dispute between Galileo and Cardinal Bellarmine over whether Galileo’s observations through his telescope established Copernicanism, there are no absolute facts about whether observations justify belief in Copernicanism. Rather, relative to Galileo’s proto-scientific ‘epistemic system’ the observations justify, whereas relative to Cardinal Bellarmine’s religious system the observations do not justify.<sup>18</sup> But it is still an open question whether feminist epistemologies of the kind we’ve been exploring are best understood as endorsing a radical, global thesis like this. They may only be committed to more modest, restricted form of constructivism about our justification for certain kinds of beliefs. Feminist standpoint theorists only argue that social factors affect our justification for beliefs about relevant areas of the social world (Fricker 1999: 202–3), whilst feminist empiricists discuss specific claims from the natural and social sciences.<sup>19</sup> So this criticism is too quick.

It’s possible that these theses will, upon further investigation, turn out to apply to a much wider set of claims (e.g. about the ‘hard’ sciences, and beyond science, in the case of feminist empiricism) or that this set of claims will turn out to be larger than we might initially think (perhaps nearly all beliefs are about, or closely related to, the social world, greatly expanding the remit of standpoint theory), and if so this might amount to a global, or near-global thesis. But this conclusion needs further argumentation. Until that argumentation is offered, and until anti-constructivists engage with that argumentation, there is no reason to think that the kind of social constructivism we’ve identified in feminist epistemology is problematic, even if it is global.

The second reason social constructivism might be thought to be problematic is because it is sometimes associated with the idea that social factors can trump truth, and so tell us what it would be ‘nice’ to believe, rather than what we should, epistemically speaking, believe. In the case of feminist epistemology this would amount to dogmatically claiming that we are justified in beliefs which advance, or cohere with, feminist aims rather than beliefs which are likely to be true.

We can show that this worry doesn’t apply to the feminist epistemologies that we have discussed, as long as we bear one thing in mind. Whilst feminist epistemologists don’t usually talk about truth, this is a function of them (often) being philosophers of science, rather than them being social constructivists. Philosophers of science standardly focus on epistemic goods like empirical adequacy, rather than truth, but this doesn’t undermine their commitment to identifying what it is epistemically proper to believe.

---

<sup>18</sup> Boghossian (2006: chap. 5) attributes this view to Rorty (1981), but this attribution is (to say the least) controversial. For feminist interpretations of Rorty (including his epistemology) see the essays in Janack (2010).

<sup>19</sup> Anderson (2017) explicitly says that ‘simple propositional knowledge’ (e.g. ‘2=2=4’) is excluded from the feminist analysis.

With this in mind, we can see why this criticism doesn't apply to the kinds of feminist epistemology that we have discussed. Feminist empiricists like Longino explicitly emphasise empirical adequacy, and so they require that the theories – or belief-sets – that they recommend fit the available empirical data. Social constructivist standpoint theorists identify different conceptions of evidence, and choosing between these would mean making decisions based on social factors before the standards for empirical adequacy have been set. But the suggestions standpoint theorists make aren't as controversial as this might initially seem to suggest. There are two points to pay attention to here: first, many of the cases that they use to illustrate the benefits of the feminist conception of evidence are cases where mainstream science has since come to accept the new conception of evidence (for example the conception on which the rhesus monkey hand slap counts as evidence is now orthodoxy in endocrinology, because it explains other data better than conceptions which don't include this evidence). This means that the extent to which feminist epistemologists allow social factors to affect conceptions of evidence is one that scientists themselves can be persuaded of.

Second, standpoint theorists don't, and can't, recommend that we choose between different conceptions of evidence. At times they merely argue that acknowledging, and drawing on, multiple perspectives (and so their related conceptions of evidence) is a beneficial strategy for scientists to take on.<sup>20</sup> At other times they do claim that some perspectives and conceptions are superior (this is how the epistemic advantage thesis is usually interpreted) but this claim needs to be understood as dependent on a standpoint too.<sup>21</sup> This claim is therefore less radical than standpoint theory's critics have worried.

So, it's not accurate to say that feminist epistemologists allow social factors to trump truth. They don't dogmatically assert that justification lines up with beliefs which complement feminist aims, but instead show that certain of these feminism-complementing beliefs fit with the evidence as well as, or better than, other beliefs, and that these have other (epistemic) benefits to boot.

## 6. Conclusion

Our aim in this paper has been to address whether the recognition that knowledge is situated leads to a form of social constructivism. We have argued that whether it does depends on how one conceives of the dependence of justification on social factors. If one conceives of this dependence in causal terms, one can reconcile the situatedness of knowledge with the classical conception of knowledge. If one conceives of this dependence in constitutive terms, one cannot

---

<sup>20</sup> We see this strategy when Harding calls for an "intellectual participatory democracy" in which multiple perspectives have an influence (see 1991: 151) and when Medina talks about the importance of finding 'equilibrium' between the influence of different perspectives (see 2012: 50).

<sup>21</sup> Standpoint theorists themselves have not acknowledged this fact, but it follows from the idea of situated knowledge. If epistemic judgements are dependent on perspectives, then so too are epistemic judgements about the relative merits of conceptions of evidence or of perspectives. See Ashton (ms.) for a defence of this claim.

reconcile situatedness with the classical conception, and one is forced to adopt a form of social constructivism. As we have seen, some feminist empiricists and feminist standpoint theorists take the latter option and endorse a form of social constructivism. While we haven't argued for either feminist empiricism or feminist standpoint theory, we have indicated why we think, to the extent that these views entail a form of social constructivism, that form is more plausible than the form attacked by Boghossian. We conclude that those who want to defend the classical conception have ignored an important target, and those who want to explore the prospects for social constructivism are well advised to focus on the rich body of work in feminist epistemology.

### Acknowledgements

We would like to thank two anonymous reviewers for this journal, Liam Kofi Bright, Lydia Patton, Alessandra Tanesini and audiences at the Dubrovnik IUC Relativism Summer School and in Vienna. Research on this paper was assisted by funding from the ERC Advanced Grant Project "The Emergence of Relativism" (Grant No. 339382).

### References

- Anderson, E. 1995a. "Feminist Epistemology: An Interpretation and a Defense." *Hypatia*, 10 (3): 50–84.
- . 1995b. "Knowledge, Human Interests, and Objectivity in Feminist Epistemology." *Philosophical Topics*, 23 (2): 27–58.
- . 2004. "Uses of Value Judgments in Science: A General Argument, with Lessons from a Case Study of Feminist Research on Divorce." *Hypatia*, 19 (1): 1–24.
- . 2017. "Feminist Epistemology and Philosophy of Science." In E. Zalta (ed), *The Stanford Encyclopedia of Philosophy (Spring 2017 Edition)*.  
<https://plato.stanford.edu/archives/spr2017/entries/feminism-epistemology/>.
- Armstrong, D. M. 1973. *Belief, Truth and Knowledge*. Cambridge: Cambridge University Press.
- Ashton, N. (ms.). "Relativising Epistemic Advantage."
- Bloor, D. 1976. *Knowledge and Social Imagery*. Chicago: University of Chicago Press.
- Bogen, J. and Woodward, J. 1988. "Saving the Phenomena." *Philosophical Review*, 97 (3): 303–52.
- Boghossian, P. 2006. *Fear of Knowledge: Against Relativism and Constructivism*. Oxford: Oxford University Press.
- Cartwright, N. 1980. "The Truth Doesn't Explain Much." *American Philosophical Quarterly*, 17: 159-63.

- Clifford, W. K. 1876. "The Ethics of Belief." *Contemporary Review*, 29: 289–309.
- Clough, S. 1998. "A Hasty Retreat from Evidence: The Recalcitrance of Relativism in Feminist Epistemology." *Hypatia*, 13 (4): 88–111.
- . 2003. *Beyond Epistemology: A Pragmatist Approach to Feminist Science Studies*. Lanham, MD: Rowman & Littlefield Publishers.
- . 2015. "Fact/Value Holism, Feminist Philosophy, and Nazi Cancer Research." *Feminist Philosophy Quarterly* 1 (1).
- Collins, P. H. 1986. "Learning From the Outsider Within: The Sociological Significance of Black Feminist Thought." *Social Problems*, 33 (6): S14–32.
- Daston, L. and Galison, P. 2010. *Objectivity*. New York: Zone Books.
- Dretske, F. 1971. "Conclusive Reasons." *Australasian Journal of Philosophy*, 49 (1): 1–22.
- Duhem, P. 1954. *The Aim and Structure of Physical Theory*. Princeton, NJ: Princeton University Press.
- Feldman, R. and Conee, E. 1985. "Evidentialism." *Philosophical Studies*, 48 (1): 15–34.
- Feyerabend, P. 1958. "An Attempt at a Realistic Interpretation of Experience." *Proceedings of the Aristotelian Society*, 58: 143–70.
- Franklin, A. 2015. "The Theory-Ladenness of Experiment." *Journal for General Philosophy of Science*, 46 (1): 155–66.
- French, M. 1978. *The Women's Room*. New York: Jove.
- Fricker, M. 1999. "Epistemic Oppression and Epistemic Privilege." *Canadian Journal of Philosophy*, 29: 191–210.
- Goldenberg, M. J. 2015. "How Can Feminist Theories of Evidence Assist Clinical Reasoning and Decision-Making?" *Social Epistemology*, 29 (1): 3–30.
- Goldman, A. 1976. "Discrimination and Perceptual Knowledge." *Journal of Philosophy*, 73: 771–91.
- Goodman, N. 1978. *Ways of Worldmaking*. Brighton, UK: Harvester Press.
- Hanson, N. R. 1958. *Patterns of Discovery: An Inquiry into the Conceptual Foundations of Science*. Cambridge: Cambridge University Press.

- Harding, S. 1991. *Whose Science? Whose Knowledge? Thinking from Women's Lives*. Ithaca, NY: Cornell University.
- . 1993. "Rethinking Standpoint Epistemology: 'What Is Strong Objectivity?'" In L. Alcoff and E. Potter (eds), *Feminist Epistemologies*, pp. 49-82. New York: Routledge.
- . 1995. "'Strong Objectivity': A Response to the New Objectivity Question." *Synthese*, 104 (3): 331-49.
- Hartsock, N. 1983. "The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism." In S. Harding and M. Hintikka (eds), *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology, and the Philosophy of Science*, pp. 283-310. Dordrecht: Reidel.
- . 1985. *Money, Sex and Power: Toward a Feminist Historical Materialism*. New York: Longman.
- . 1997. "Comment on Hekman's 'Truth and Method: Feminist Standpoint Theory Revisited': 'Truth or Justice?'" *Signs: Journal of Women in Culture and Society*, 22 (2): 367-74.
- Hume, D. 2007 [1748]. *An Enquiry Concerning Human Understanding*. Edited by Peter Millican. Oxford: Oxford University Press.
- Intemann, K. 2010. "25 Years of Feminist Empiricism and Standpoint Theory: Where Are We Now?" *Hypatia*, 25 (4): 778-96.
- Janack, M. 2010. *Feminist Interpretations of Richard Rorty*. University City: Pennsylvania State University Press.
- Kuhn, T. S. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- . 1977. "Objectivity, Value Judgment, and Theory Choice." In T. S. Kuhn, *The Essential Tension: Selected Studies in Scientific Tradition and Change*, pp. 320-39. Chicago: University of Chicago Press.
- Lennon, K. 1997. "Feminist Epistemology as Local Epistemology." *Aristotelian Society Supplementary Volume*, 71 (1): 37-54.
- Longino, H. 1990. *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry*. Princeton, NJ: Princeton University Press.
- . 1994. "In Search Of Feminist Epistemology." *The Monist*, 77 (4): 472-85.
- . 1997. "Feminist Epistemology as a Local Epistemology." *Aristotelian Society Supplementary Volume*, 71 (1): 19-36.

- . 2002. *The Fate of Knowledge*. Princeton, NJ: Princeton University Press.
- Lukács, G. 1971. *History and Class Consciousness: Studies in Marxist Dialectics*. Cambridge, MA: MIT Press.
- Medina, J. 2012. *The Epistemology of Resistance: Gender and Racial Oppression, Epistemic Injustice, and Resistant Imaginations*. Oxford: Oxford University Press.
- Nelson, L. H. 1990. *Who Knows: From Quine to a Feminist Empiricism*. Philadelphia: Temple University Press.
- Quine, W. V. O. 1951. "Two Dogmas of Empiricism." *Philosophical Review*, 60 (1): 20-43.
- . 1969. "Epistemology Naturalized." In W. V. O. Quine, *Ontological Relativity and Other Essays*, pp. 69–90. New York: Columbia University Press.
- . 1986. "Reply to Morton White." In L. Hahn and P. Schilpp (eds), *The Philosophy of W. V. Quine*, pp. 663–5. La Salle: Open Court.
- Roach, M. 2009. *Bonk: The Curious Coupling of Science and Sex*. New York: W. W. Norton & Company.
- Rorty, R. 1981. *Philosophy and the Mirror of Nature*. Princeton, NJ: Princeton University Press.
- Roth, P. 1999. "The Epistemology of 'Epistemology Naturalized.'" *Dialectica*, 53 (2): 87–110.
- Smith, D. E. 1997. "Comment on Hekman's 'Truth and Method: Feminist Standpoint Theory Revisited.'" *Signs: Journal of Women in Culture and Society*, 22 (2): 392–98.
- Wallen, K. 1990. "Desire and Ability: Hormones and the Regulation of Female Sexual Behavior." *Neuroscience & Biobehavioral Reviews*, 14 (2): 233–41.
- . 2000. "Risky Business: Social Context and Hormonal Modulation of Primate Sexual Desire." In K. Wallen and J. Schneider (eds), *Reproduction in Context*, pp. 289–323. Cambridge, MA: MIT Press.
- Wylie, A. 2003. "Why Standpoint Matters." In R. Figueroa and S. Harding (eds), *Science and Other Cultures: Issues in Philosophies of Science and Technology*, pp. 26–48. New York: Routledge.