

Criticism, Context and Community: Connections between Wittgenstein's *On Certainty* and Feminist Epistemology

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I explore the conceptual connections between Wittgenstein's *On Certainty* and the work of three contemporary feminist epistemologists: standpoint theorist Sandra Harding and feminist empiricists Helen Longino and Lynn Hankinson Nelson. My inquiry reveals both surprising similarities and important differences between Wittgensteinian and feminist epistemologies. Exploring these similarities and differences clarifies Wittgenstein's epistemology and reveals ways feminist epistemologists have developed themes from *On Certainty*.

On Certainty anticipates three important pillars of feminist epistemology: criticism, context, and community.

1. Criticism

One focus of feminist criticism is the alleged objectivity of science. According to tradition, science involves a method of justification that prevents our personal feelings and biases (such as greed and ambition) from distorting our understanding of the world.

Both Wittgenstein and feminist epistemologists reject the traditional notion of scientific objectivity. Wittgenstein maintains that rather than being coercive and external to us, our linguistic and epistemological rules are based on our human customs, practices and institutions--our "form of life". Feminists see science as situated in and influenced by a social, historical, and cultural context. They maintain that science is not autonomous because scientists have no method for eliminating shared social biases.

Having rejected the problematic traditional notion of objectivity, Longino and Harding offer non-traditional accounts of objectivity intended to fit feminism, avoid relativism, and explain how feminist criticism can enhance scientific objectivity. I shall maintain that while Wittgenstein's account of objectivity is closer to Longino's than to Harding's, he would nevertheless reject both not because he supports the traditional account, but because his own non-traditional account conflicts with theirs at certain crucial points.

Helen Longino argues that scientific knowledge is produced not by isolated individuals, but by an interactive dialogic community (Longino 1990). A scientific community is objective if it satisfies her four criteria for transformative criticism:

1. There are public avenues for criticism: journals, conferences, etc.
2. Critics can invoke shared public standards.
3. The scientific community is open to criticism and reevaluation.
4. Qualified scientists share equal intellectual authority (Longino 1993, 112-113).

The heart of Longino's account is the third criterion, which involves questioning the background beliefs in light of which states of affairs become evidence

(Longino 1990, 73). Like theories, background beliefs should be articulated and critically evaluated by the scientific community. They can then be defended, modified or abandoned in response to such criticism. As long as such criticism is possible, individual and communal biases can be checked (Longino 1990, 73-75).

The formal requirement of demonstrable evidential relevance constitutes a standard of rationality and acceptability independent of and external to any particular research program or scientific theory. The satisfaction of this standard by any program or theory secured, as has been argued, by *intersubjective criticism, is what constitutes its objectivity*" (Longino 1990, 75).

While Longino emphasizes intersubjective criticism, Wittgenstein characterizes the necessary foundation for such criticism. He writes, "All testing, all confirmation and disconfirmation of a hypothesis takes place within a system. And this system is . . . not so much the point of departure as the element in which arguments have their life" (OC 105). "I have a world picture. . . . it is the substratum of all my enquiring and asserting" (OC 162). "Whenever we test anything, we are already presupposing something that is not tested" (OC 163). [See also OC 110, 136, 141-42, 144, 151-52, 167, 204, 220, 212, 225, 232, 253, 308, 337, 341-344, 370, 401, 411, 414-15 & 475.]

Sandra Harding maintains that traditional objectivity is not strong enough to eliminate gender bias. She advocates a "strong objectivity" that extends "the notion of scientific research to include systematic examination of powerful background beliefs" (Harding 1991, 149). Scientists, their practices, and their background beliefs must become objects of scientific study. Longino supports examining background beliefs, but recognizes that there may be limits to the scope of such examinations. Some background beliefs "may not be subject to empirical confirmation or disconfirmation," and may "be infused with metaphysical or normative considerations" (Longino 1990, 75). Longino maintains that Harding is mistaken in identifying the objectivity of scientific methods with their empirical features *alone*.

Like Longino, Wittgenstein maintains that certain background beliefs cannot be empirically tested, but he explains this limitation differently. For Wittgenstein, the activities of science require that certain things go unquestioned or "stand fast" thus providing the general background context for inquiry and criticism. "One cannot make experiments if there are not some things that one does not doubt... If I make an experiment I do not doubt the existence of the apparatus before my eyes. I have plenty of doubts, but not *that*" (OC 337). "The *questions* that we raise and our *doubts* depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn. That is to say, it belongs to the logic of our scientific investigations that certain things are *in deed* not doubted" (OC 342). What "stands fast" is not subject to testing, criticism or confirmation.

2. Context

Wittgenstein and feminist epistemologists stress that human knowledge is *situated* in *contexts*. Their use of "context", however, varies. For Harding, the context of science is one of hierarchy and power differences. White males at the center of science see the world from a perspective of dominance; women and others on the margin see the world from the perspective of subordination—an epistemically superior position according to Harding (Harding 1991 & 1993).

Wittgenstein did not discuss class or gender based differences in power and epistemic perspective. He did insist that our beliefs be justified by public criteria that function only given certain contexts. He discusses two types of contexts with different epistemic roles. First, criteria function only given certain very general facts of nature (including facts about human behavior) and certain human customs or general practices. Wittgenstein calls this general background context "our inherited background", "our world picture", etc. (OC 167) and insists it is necessary for inquiry. Moore's propositions in "A Defense of Common Sense" belong to this world picture. At this level of generality, certainty is absolute. There is room for fluctuation, but not for doubt.

Second, criteria provide a reliable basis for justification only in the appropriate particular contexts, which include where, when, who, what happened before and after, etc. We assume that general circumstances obtain; we must determine what particular circumstances obtain in a given case. This determination is two-fold. First, we must determine whether the context is one appropriate for applying a particular criterion or standard. If it is, then, we must determine whether the circumstances are normal. Wittgenstein writes, "If however, one wanted to give something like a rule here, then it would contain the expression "in normal circumstances". And we recognize normal circumstances but cannot precisely describe them. At most, we can describe a range of abnormal ones" (OC 27). [See also OC 10, 27, 155, 250, 255, 334-35, 348, 423, 553, 554, & 622.] At this level, context may seem liable to the charge of relativism, for a proposition that is certain in one context may be uncertain in another. But certainty at the more general level neutralizes the apparent relativism at this level.

Longino's epistemology is "a form of contextualism that understands knowledge as the historical product of interactions between contextual factors such as social needs, values and traditions, and practices of inquiry such as observation, experiment, and reasoning" (Longino 1990, 176-177). Longino also has two types of contexts: one universal and one particular. First, she sees the context of scientific inquiry as the international scientific community: "What is called scientific knowledge, then, is produced by a community (ultimately the community of all scientific practitioners)" (Longino 1990, 69). Second, she emphasizes particular contexts, suggesting that we embrace multiple and, in some cases, incompatible theories that satisfy local standards (Longino 1993, 114). This need not plunge us into epistemological relativism because the standards of transformative criticism protect us from this fate.

3. Community

The most innovative aspect of feminist empiricism is its portrayal of knowledge as social or communal. Traditional epistemology is essentially individualistic and largely ignores the role(s) of social interactions and the

community in the production of knowledge. Alvin I. Goldman maintains that social epistemology "focuses on social paths or routes to knowledge... that feature interactions with other agents" (Goldman 1999, 4). Social epistemology thus encompasses both minimally interpersonal views of knowledge, in which the individual is the primary knower, and maximally communal views, like Nelson's, in which the community is the primary knower. Consequently, Nelson, Longino, and Wittgenstein all have social epistemologies.

Nelson uses feminist science criticism, Quine's holistic empiricism, and neurobiology to argue that knowledge is social, constructed by the community, and constrained by our experience (Nelson 1990, 40). What others say and do is vital to the child's cognitive development. Without interpersonal experience, an infant could never develop the neurological structures permitting language, concepts, and perceptions. Other people provide the child with a language and a conceptual scheme. The community also provides public standards of evidence for judging beliefs (Nelson 1990, 256). These standards constrain what we can know as well as our theorizing (Nelson 1990, 277). Hence, for Nelson, the agent of knowledge is "First and foremost the community, and then secondarily the individual" (Nelson 1990, 14). Her brand of "social epistemology" is quite robust and contains obvious parallels with Wittgenstein's remarks on language acquisition and communal practices.

Longino's contextual empiricism is significantly more "social" than traditional epistemologies, but noticeably weaker than Nelson's communal coherentism. Longino maintains, "scientific knowledge is constructed not by individuals applying a method of investigation to objects, but by individuals interacting with one another in ways that modify their observations, theories, hypotheses, and patterns of reasoning" (Longino 1990, 111). Longino focuses on individuals interacting to produce knowledge. Her view is, thus, more modest than Nelson's. Nelson focuses on the community; Longino focuses on the interaction between the members of the community. Although Longino's view is less communal and more interpersonal than Nelson's, they agree that epistemic agency is not solitary. Knowing and coming to know are social and interactive. They are things we do: our human actions and practices. Sentiments that seem compatible with Wittgenstein's rejecting the notions of a logically private language and a private mental life or world completely unavailable to others.

How strongly social is Wittgenstein's account of knowledge? Is it robustly communal like Nelson's or modestly interpersonal like Longino's? Longino believes "the later philosophy of Wittgenstein does challenge the individualist ideal" although "few commentators have developed the anti-individualist implications of his work" (Longino 1993, 119). I am attempting to do so for *On Certainty*. Wittgenstein writes, "We are quite sure of it" does not mean just that every single person is certain of it, but that we belong to a community which is bound together by science and education" (OC 298). How tightly do these cords of science and education bind us to each other? Does Wittgenstein believe with Nelson that the community is the primary knower? Do his remarks allow or perhaps even entail such a robustly communal view?

Stroll argues that Wittgenstein's notion of community involves three different levels:

1. The totality of humans and other animals, their activities, interactions, practices and institutions together with inorganic products such as buildings.

2. The set of human practices, customs, habits, and traditions.

3. Individual practices of asserting, inquiring, etc. (Stroll 1994, 170).

Stroll's third level can be divided into two sub-levels: the domain of the expert, and the domain of the novice (Williams 1999, 8).

Science is a specialized epistemic enterprise engaged in by experts. Experts train novices in the epistemic practices of science. First, however, novices must be trained in the more basic practices of language use, inquiry, etc. Through this more basic training, children unconsciously absorb--Wittgenstein intentionally does not say "learn" (OC 297)--the inherited background beliefs of their community. "When a child learns language it learns at the same time what is to be investigated and what not" (OC 472).

The training of novices by experts of science indicates that knowledge is social. Experts have mastered special scientific practices and gained special knowledge. Whether someone is such a master of science is determined by public criteria. The domain of the novice is not that of the master.

A pupil and a teacher. The pupil will not let anything be explained to him, for he continually interrupts with doubts, for instance as to the existence of things, the meaning of words, etc. The teacher says "Stop interrupting me and do as I tell you. So far, your doubts don't make sense at all. Or imagine that the boy questioned the truth of history (and everything that connects up with it)--and even whether the earth had existed at all a hundred years before. Here it strikes me as if this doubt were hollow (OC 310-312).

Scientific knowledge is the province of well-trained experts. Their knowledge is part of the community's system of knowledge. As libraries hold knowledge gained in the past, so today's experts are a living repository of scientific knowledge. The community possesses this knowledge and passes it on to future generations through them. Individual members of the community can generally gain access to the experts' knowledge through their testimony. Thus, Wittgenstein's epistemology, like Nelson's, is robustly communal.

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