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Feminism As Method: What Scientists Get That Philosophers Don't[1]

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1. INTRODUCTION

It is widely believed that any relevance that feminism might have to philosophy will lie within investigations of specific philosophical *topics* that are also of central political importance to feminists, such as bodily autonomy and reproduction, equality, and justice. On this view, it is acknowledged that feminist thought may have a legitimate place within particular *fields* of inquiry: social, political, and moral philosophy. In contrast, I investigate a rather different picture—one that challenges the a priori *exemption* of other fields of philosophy, especially metaphysics and epistemology, from the relevance of feminist thought. The importance of feminism to philosophy goes far beyond any inclusion within certain topics for philosophical consideration; feminism is also an issue of *method*.

Within contemporary Anglo-American philosophy, it is common practice to characterize certain topics and questions as part of the "central" or "core" investigations in metaphysics and epistemology (henceforth, "M&E"). Examples of "core" issues and concerns would include: the nature

of knowledge and justification; the nature of truth, causation, identity, and existence; whether things have essences; whether there are universals; how and whether we know meanings; and the natures of a priori knowledge and of induction. In this context, feminist thought might appear, to both sympathetic and unsympathetic philosophers, to concern different, unrelated issues, such as justice, equality, or fairness. If this is true, then feminist philosophical participation is naturally limited to the fields of social, political, and moral philosophy, at most.

Now suppose that we take the following as granted: The Anglo-American philosophical profession has a relatively standardized set of views about which topics and questions, and which approaches to those topics (approaches that may be incompatible with one another), are "central"; this standardized set includes the view, at least when pressed, that feminist investigations concern topics and methods *outside* of "central" M & E; finally, this relative outsideness of feminist research does not prevent feminist philosophers from pursuing and developing feminist analyses.

One may ask, at this point: So what is the problem? Many people concerned with the core issues in M & E remain sympathetic to feminist political goals, such as equal pay for equal work, and, further, declare their open-mindedness about the potential relevance of feminist analyses—a relevance which, to their minds, has yet to be shown. *What do feminist philosophers want?*

I propose an answer to this question here. First, I will argue that feminist philosophers in M & E should be understood as endorsing an approach to "core" philosophical questions rather than as urging simply the importance of a subject matter or field.[2] As such, feminists display the importance of expanding the philosopher's set of tools or methods of analysis and understanding; the relevant claim is that philosophical practice itself will be improved or advanced. I will develop an analogy between feminist contributions to the sciences and to philosophy, and will contrast the success of feminist approaches within the sciences to the sustained resistance feminist philosophers have experienced within M & E. Finally, I will argue that typical grounds underlying the a priori dismissal of feminist analyses in mainstream M & E are instances of one of the most damaging temptations within philosophical inquiry, namely, dogmatism.

2. FEMINISM AND PHILOSOPHICAL METHODS

The *Oxford Universal English Dictionary* defines *method* as a "procedure for attaining an object" or, more permissively, "a way of doing anything."[3] In contemporary Anglo-American philosophical practice, specific methods of

approaching philosophical problems—that is, *tools* that philosophers bring to the doing of philosophy—are frequently chosen ad libitum and are combined or adapted. Even within particular fields of inquiry, there is no hegemony of a single "philosophical" method, no unique *procedure* which is endorsed for all problems. I must emphasize that the lack of hegemony of a single philosophical method does *not* imply that there are no restrictions on acceptable methods, either within philosophical schools or more generally. *Methods* may be understood, then, as ways of approaching philosophical tasks, some of which are favored within any particular style or school of philosophy. For instance, methods of conceptual analysis are preferred within Analytic philosophical projects, while hermeneutics may be preferred within an Existential approach.

To illustrate: A familiar recent example of philosophical method goes under the name "ordinary language philosophy." Note that, unlike "philosophy of language," "ordinary language philosophy" does not define a specific *topic* or issue common to its various inquiries; it is, rather, a way of approaching problems, a philosopher's toolbox to bring on site to particular philosophical problems and quarrels. Claims made on behalf of "approaches," "methods," or sets of tools typically come in the form: These tools will help us *gain insight* into the philosophical problem, increase our *understanding* of it, and perhaps help us *diagnose* what goes wrong in typical philosophical debates about a particular issue or topic. In many applications of the methods of ordinary language philosophy, the conclusion of these site visits—to the problem of induction, to certain ontological problems—is that these problems are "pseudo-problems" and not genuine philosophical mysteries at all.

Part of *what feminist philosophers want*, then, must be interpreted within the context of philosophical *method*. The basic goods are analytic and interpretive tools that have been developed through investigations of the nature and influence of sex and gender differences, investigations called "feminism."[4] As Morwenna Griffiths and Margaret Whitford point out, the transfer of methods from feminism to philosophy is smoother and more natural than one might expect; this is because "part of the practice of feminism is concerned with the essentially philosophical activities of redrawing concepts . . . [and] redefining what counts as significant or important."[5] The claim on which I focus in this paper is that such tools—which I call "feminist methods"—as well as being indispensable to philosophical examination of particular topics that address social, political, and moral issues, also recommend themselves as valuable additions to the tool kits of philosophers investigating issues in M & E.

Once we consider the basics of philosophical methodology as consisting of a set of tools with which philosophers approach philosophical questions or controversies, the question facing philosophers is whether feminists

are offering useful tools for their projects. In this case, the distinctive set of feminist tools involves methods of detecting and analyzing influences of sex and/or gender in philosophical discussions.

One may object that feminist methods are patently unsuitable for application across a range of topics—extending beyond explicitly feminist ones—precisely because they were developed through work on particular topics, namely, the nature and influence of sex and gender differences. This won't do, because *all* philosophical methods were developed through addressing particular topics, whether they be the nature of mathematical proof, the mind's processing of sensory input, or the fundamental character of evil. The relevant question is whether feminist methods can contribute to philosophical investigations on a range of issues and problems in metaphysics and epistemology.

Feminist methods provide various ways to be attentive to

1. False assumptions about sex and gender that might play a role in philosophical argument:

   (*a*) Outright falsehoods (false generalizations, stereotypical mistakes) made in a theory or its justification: The theory makes claims to the effect that women are less rational or submissive, men more rational and dominant.

   (*b*) Outright sexism: The theory itself makes sexist claims, e.g., conceptions of the self under which women are not full-fledged selves or that men or "natural" men's roles are more worthy.

   (*c*) Sexist applications of theory: The theory defines rationality in a way that seems universal but then denies it to women.

2. Problems of hypervaluation and devaluation:

   (*a*) Uses of gender symbolism or of gender coding: What difference does it make that certain theories, practices, and objects of inquiry are standardly labeled "masculine" or "feminine"?[6]

   (*b*) Androcentrism: What difference does it make when males are implicitly taken as the norm? See, e.g., the feminist work regarding notions of the self, of autonomy, and of the subject of knowledge.[7]

3. How seemingly "neutral" principles may have profoundly sexist consequences when applied: e.g., investigations of the concept of "objectivity."[8]

Take the notion of *intuition* as an illustration: It cuts across philosophical topics and fields—the nature of intuitive knowledge is an issue, for

instance, in both metaethics and general epistemology. "Intuition" is also a good example of a gender-coded capacity or ability, which has also been devalued.[9] The fact that "intuition" is gender coded is well documented, as well as obvious: We have "women's intuition" in idiomatic English, but there is no parallel construction for that kind of knowledge or thinking among men. That intuition is generally devalued is also clear; even if the role of intuition in, for example, scientific-hypothesis formation is acknowledged, scientific intuition is placed in the realm of murky, messy, psychological mysteries that are not the proper province of philosophers. Some feminist philosophers, such as Lorraine Code and Susan Bordo, have made investigating intuitive and practical knowledge a priority in their epistemological and historical research.[10]

It seems, then, that analyses and distinctions developed through feminist concerns are at least as promising as those tools already in place within mainstream M & E; particularly promising, I think, are feminist examinations of the conditions on knowledge and on the requirements of rationality and objectivity, as well as investigations of the metaphysical questions involving atomism, the nature of causality, holism, and theories of the self. Nevertheless, the overwhelming majority of philosophers working on these and other "core" issues manifest no awareness of the availability and applicability of feminist thought. I would like to contrast this situation in philosophy with the reception of feminist contributions in the sciences (which I sketch in part 4).

3. FEMINIST CONTRIBUTIONS TO THE SCIENCES

3.1 FEMINIST SUCCESS IN THE SCIENCES

Over the past quarter century, feminists have had a substantial impact across a range of disciplines within the sciences. Interventions by feminist scientists and philosophers of science into particular scientific research programs and explanations have, by now, been accepted by many contemporary scientists as a necessary evil, and by some as a positive development. Why have feminist views had such influence in the sciences? One plausible explanation runs as follows: To the extent that scientists in particular areas of scientific research have relied on unexamined and incorrect sex-and-gender–related assumptions about the nature of either their methods or their subject matter, such scientists have opened themselves up to the sorts of attacks and corrections offered by feminist participants. There were weaknesses in their science, and these weaknesses were exposed by feminists, who, in virtue of their stance as political and social analysts, had an advantage in spotting the empirical and/or explanatory damage being done by

undefended and indefensible, though (usually) unconscious, presuppositions held by the scientists in question.[11]

Feminist contributions to the sciences have taken numerous forms: Among the most influential are the presentation of under-explored approaches to established and recognized problems; fresh challenges to standard solutions or conclusions; and the indication of phenomena and problems that are potentially significant but have nonetheless been neglected. A brief summary of two pivotal feminist contributions to science will have to suffice.[12]

Primatology

The changes wrought in scientific understanding of primate behavior through feminist contributions would be difficult to overstate.[13] I focus here on a single article written by statistician and primatologist Jeanne Altmann and published in 1974. In "Observational Study of Behavior: Sampling Methods," Altmann surveyed sampling methods that could be used by researchers in the field who typically have little or no control over the movements or conditions of the animals they are studying.[14] For decades, primate studies had relied heavily on sampling ad libitum, which tended to result in reports of rare or dramatic events or in emphases on events of particular interest to the observer; such observational results could not, Altmann pointed out, provide the evidence necessary to answer a host of crucial questions, including those involving differences in behavior patterns among individuals and across subgroups, such as male and female, adult and adolescent. Altmann also provided a devastating methodological criticism of a widely used and supposedly sophisticated sampling method in which the occurrence (or non-occurrence) of a particular type of event was recorded; one consequence of her statistical critique was an immediate and irrevocable reduction in the scientific import of the work of some of the field's leading researchers.

But Altmann's primary contribution was positive: She articulated the procedures and advantages of a method that she dubbed "focal animal sampling," in which a focal animal or group of animals is followed for a pre-set time period and all occurrences of a specified action or interaction are recorded. As Donna Haraway points out, "The embarrassing truth was that many of the regularly cited field studies . . . both gathered and analyzed data in a way that did not justify the conclusions reached."[15] In essence, Altmann raised the standards of evidence accepted within the entire community of field primatologists, and her paper became one of the most cited in the entire modern literature on animal behavior.

Nothing in the foregoing reveals the fact that Altmann herself was acutely dissatisfied with the skewed visions of primate social structure that arose out of pervasive biases towards focusing on male animals and on dominance interactions, and that her active participation in the modern American feminist

movement contributed to her awareness of the significant theoretical implications of these biases. Nevertheless, her revision of sampling practices cleared the way for pursuing a central problem in available theories of primate evolution; specifically, Altmann thought that differential reproductive success—the "motor" of natural selection—was much more significant among females (and much less so among males) than had ever been acknowledged. As leading primatologist Sarah Blaffer Hrdy described the situation twelve years later: "[C]hanges in methodology (e.g., focal animal sampling of all individuals in a group) and the emergence of long-term studies played critical roles in revising male-centered models of primate social organization."[16]

Medical Sciences

The women's health movement—a major component of modern American feminism—has had profound and sweeping effects on the scientific and medical understandings of women and women's biology. Feminist activism, which started with demands for clinical research and access to information, has led ultimately to changes in medical practices surrounding everything from cardiac care to psychiatric diagnoses to obstetric and gynecological practice:[17] Feminist psychologists have successfully challenged the formerly pervasive identification of the mentally healthy "person" with the adult masculine role, and medical models which routinely treated normal biological changes in women's bodies (such as menstruation, pregnancy, and menopause) as disease-states are being replaced. After decades of academic criticism, political pressure, and grant writing, research on women's health and illnesses is now under the wing of the National Institutes of Health, through the Women's Health Initiative (passed in the U.S. Congress under the guidance of Representative Patricia Schroeder) and the Office of Research on Women's Health (formed in 1991 at the NIH under the directorship of Dr. Bernadine Healy).

Let me focus on just one research area—cardiovascular disease, the number one cause of death for American men and women—as a demonstration of just how problematic male-biased biomedical research can be. One widely disseminated recent research finding documented that taking one aspirin per day could significantly reduce the risk of heart disease and stroke. When this result hit the front pages of every major newspaper and newsweekly in the country, one little detail was missing; it turned out that the very large, well-designed (and very expensive) longitudinal study documenting the effect was done *exclusively on men*. In fact, because of differences in metabolism and hormonal balances, it was unknown whether the available scientific evidence would justify any extrapolation of the effect to women. There were, of course, standard reasons for the initial decision to exclude women from this study, namely, that differences in metabolism and changes in hormone balances

might produce confounding effects. It is precisely this sort of "standard research practice" that has led to the dearth of even basic clinical research on women's health and disease, and it is through public awareness of and dissatisfaction with this inequity that congressional action was taken.[18]

3.2 TAKE-HOME POSSIBILITIES

I have sketched two of the ways that feminist scientists have influenced the content of primatology and medical sciences. The illustrated contributions are very different: One involves the basic methods of data collection and its statistical analysis, while the other revolves around an area in which feminist scientists have emphasized that male and female bodies may be relevantly different in certain medical contexts.[19] Note also that feminist arguments in these fields—within which there is little or no disagreement regarding the gravity and impact of feminist contributions—do not fall along the lines that some might expect. Altmann's methods enforce—by any account—an *increase* in objectivity and precision, and she makes no mention of her beliefs regarding the sexism in the prevailing sampling methods she so effectively replaced. Furthermore, the medical arguments emphasize not the *lack* of differences between the sexes but rather their presence and their potential importance. These cases illustrate that feminist contributions cannot be identified as feminist by their content; rather, feminist scientists have changed these fields in which they have participated through active engagement with particular experimental, analytical, and theoretical problems.

In concluding this part of the paper, I would like to suggest that feminist successes in the sciences are *relevant to philosophy* and particularly to M & E: Some feminist contributions to science concern fundamental scientific methodology and are, therefore, components of philosophy of science and epistemology of science (whether they are contributions made by scientists or epistemologists). Consequently, we may learn something that is transferable to philosophy by examining reactions by scientists to principled claims about the development and nature of scientific knowledge made by feminist contributors. After all, M & E and the sciences share numerous aims and goals—such as developing knowledge, grasping truth—as well as specific approaches and methods, such as critical and objective inquiry.

4. STANDARD OBJECTIONS TO FEMINIST CONTRIBUTIONS TO SCIENCE

Over the course of the three decades of the most recent wave of feminist science discussions, several important lessons have emerged regarding the standards of scientific knowledge and inquiry.[20] In this part of the paper, I

illustrate several widespread reactions or objections to the possibility of feminist contributions in the sciences. I begin, in section 4.1, by presenting samples of the objections; because some are ambiguous or pursue more than one point, I analyze the concerns into three areas. I discuss each of these objections in turn, presenting my rebuttals to them, in sections 4.2–4.4.

4.1 THE USUAL REACTIONS

Margarita Levin: "The real threat to feminist ideology, it turns out, is *the scientific method itself*, with its promise of objectivity no matter who the scientist is." Levin describes one of the "fundamental errors that form the basis of the feminist account of science," which is that feminists commit the genetic fallacy; i.e., they "confuse something with its origin and reject it on that basis." She then outlines another feminist "error, which is [the] failure to take seriously the fact that so-called masculine science *works*. Science makes predictions that can be and are verified every day."[21] What feminists just don't understand, she claims, is that "the *self-correcting character of the scientific method*, with its emphasis on observation, the replication of experiments, and open discussion, insures that [deviations from the ideal of objectivity] will eventually be seen as such."[22] Against feminist views of science, Levin explains that masculinist metaphors that might have helped formulate scientific theories are "completely irrelevant to the verifiability and accuracy of scientific theories inspired by those metaphors."[23]

Clifford Geertz: "The worry is . . . that the autonomy of science, its freedom, vigor, authority, and effectiveness, will be undermined by the subjection of it to a moral and political program—the social empowerment of women—external to its purposes."[24] In considering the long-range prospects for feminist science, Geertz concludes that its development "depends most critically on how the *tension* gets resolved between the *moral impulses of feminism*, the determination to correct gender-based injustice and secure for women the direction of their lives, and the *knowledge-seeking ones of science*, the no-less-impassioned effort to understand the world as it, free of wishing, 'really is.' "[25]

Paul Gross and Norman Levitt: "Recent feminist theorizing about the sciences . . . contains heavy doses of dogma," and, like "other dogmatisms," it is "beyond the reach of rational argument."[26] These feminist dogmas include "open hostility toward the *actual content* of scientific knowledge and toward the assumption, which one might have supposed universal among educated people, that scientific knowledge is reasonably reliable and rests on a sound methodology."[27] "It is a commonplace among relativists of all kinds [including feminists] to ignore or dismiss the self-correction process by which good science survives and bad science—*that which is not verifiable by others of different tastes and tendencies*—vanishes in due course."[28]

One persistent theme elaborated by critics of feminist contributions to science, such as those sampled above, is that feminists pursue ideology instead of truth; their activities are, therefore, in conflict with the aims of science. In other words, because feminists use nonscientific methods and standards, they can't contribute to science. There are two readily available interpretations of this claim: Feminists formulate and evaluate specific scientific claims by having their ideological commitments *override* standard scientific goals of discovering truth. That is, feminists use *ideological* criteria *in place of scientific* criteria (see section 4.2). A more radical interpretation is: Feminist ideology itself involves a *wholesale rejection* of scientific standards such as objectivity, scientific methods, and scientific criteria of evaluation. On this view (discussed in section 4.3), feminists are *antiscience* and are wholly incapable of contributing to or furthering scientific goals or discovering truth.

Another, partly orthogonal, set of claims (considered in section 4.4) centers around the theme of science's *self-corrective* capacities and their role in the effectiveness and genuine objectivity of scientific inquiry. One version of this complaint is that feminists simply *don't understand* that scientific inquiry is self-correcting. A more damaging accusation is that feminists *reject or devalue* the scientific process of self-correction. Because their critics make essential links between the self-correction of science and its *objectivity*, feminists are seen as either *neglecting or violating* the very core of scientific inquiry—scientific objectivity.

4.2 PURSUING IDEOLOGY AND PURSUING TRUTH

Objection: Feminists formulate and evaluate specific scientific claims by having their ideological commitments *override* standard scientific goals of discovering truth. That is, feminists use *ideological* criteria *in place of scientific* criteria.

Feminism might be seen as an endorsement of a specific set of doctrines or dogmas. One fear is that feminists will give top priority to pursuing their political goals—and to protecting the truth of any dogmas that they deem necessary to those political goals—and will reject genuinely *open* inquiry into the scientific strengths and weaknesses of the dogmas themselves. If they do this, they separate themselves from the goals of *scientific* inquiry, which puts open investigation into the truth of any and all empirical claims as its top priority. Because feminists cling to specific dogmatic views—involving the eliminability of certain gender roles, the social aspects of the development of sex differences—they disqualify themselves as participants in open, scientific inquiry.

Let us consider a fairly widespread misconception of this situation within the scientific context. Feminists—the objection goes—challenge par-

ticular scientific results and research programs for being sexist, i.e., for incorporating certain unexamined or undefended beliefs about male and female, femininity and masculinity, into that science. Feminists would like to *replace* these (allegedly) sexist beliefs with their own beliefs about male and female, masculinity and femininity; their aim is to *substitute* one set of dogmas for another. Even if it turns out to be true that certain parts of the sciences are affected by unsubstantiated beliefs about sex and gender, it would be at least as damaging, scientifically, to substitute the "politically correct" (i.e., dogmatic) beliefs of feminists. Hence, feminist contributions to the sciences unwittingly employ a double standard regarding the "dangers" of dogmatism: It's bad unless it's feminist dogma.

The above portrayal of feminists as dogmatic is closely related to a pervasive slander of feminist analyses in the sciences. Gross and Levitt's recent assault on feminist influence in the academy contains a vivid instance of this scurrility. They examine Helen Longino's analysis of the interpenetration of "contextual values" (i.e., norms and values of the social and cultural context) and "constitutive values"' (i.e., norms and values internal to the sciences) within the scientific investigations of hormonal influences in sex differences.[29] Having quoted Longino's claim that the studies in question "are vulnerable to criticism of their data and their observation methodologies," they launch the following complaints:

> [N]owhere in the body of Longino's work do we find identified specific, recognizable flaws in the data and the methodologies. . . . Indeed, the criticisms are not directed toward those at all. Instead, they are either banal (e.g., the argument that data from rodents should not be used to infer processes in people), or indictments of the investigators for making value judgments about departures from sex-stereotypical behaviors. . . . Led to expect serious criticism of data or methodologies, we find, not cooked data, uncontrolled experiments, or statistical gaffes, but implicit attitudes claimed to have been detected—by a hypersensitive anti-essentialist.[30]

At this point, Gross and Levitt deliver their verdict: "By and large, the logic here is that, since the conclusions are unacceptable by feminist lights, the science must be flawed."[31]

Gross and Levitt accuse Longino of rejecting specific scientific results *because* "[w]hat Longino is really after is a way of doing science that will negate *any* possibility of biological determination,"[32] i.e., because her overriding commitment is to a specific scientific conclusion for ideological reasons. Gross and Levitt's conclusion—that "science as-it-is becomes, for such critics, an intolerable constraint, a terrible danger"[33]—provides the real leverage used to discredit feminist scientific criticisms *as scientific*. The accusation is so common that it has a standard form:[34]

(1) feminists *reject* particular scientific findings and explanations *exclusively because of their political content or implications*;

(2) this is an absurd (wrongheaded) basis on which to *evaluate* scientific claims;

(3) its use demonstrates that the feminists are *not being scientific*—i.e., are not using scientific standards—either because they don't know how or because they are motivated to "twist the facts" or "reject the truth" in order to attain their political ends (which is precisely what they criticize others for doing).

(4) Therefore, because the feminist contributors are not being scientific, no scientific *evaluation of or response to* their claims is warranted or merited.

A brief diversion into Gross and Levitt's claims, above, will lead us to the primary point that is being so insistently buried here. They claim to have sought—in vain—for any substantive scientific content in Longino's analysis of studies on hormonal influences on human sex differences; therefore, they were (reluctantly) forced to conclude that the feminists were being unscientific. Under these circumstances, it becomes rather suspicious, if not deceptive, that they ignore Longino's repeated references to the detailed scientific critiques offered by the late Ruth Bleier, a neurobiologist at the University of Wisconsin, Madison, and by Anne Fausto-Sterling, a developmental geneticist at Brown University.[35]

Lo and behold, Bleier and Fausto-Sterling offer, among other things, detailed analyses of "the cooked data, uncontrolled experiments, or statistical gaffes" which Gross and Levitt claimed were nowhere to be found.[36] In fact, Gross and Levitt do cite Fausto-Sterling's relevant work once—calling it "her polemical book"—when they accuse her of firmly denying the existence of "significant biological differences between men and women."[37] Their mischaracterization of Fausto-Sterling's book—and their non-engagement with her detailed scientific objections—plays a pivotal role in the soundness of their entire analysis, as does the invisibility of neurobiologist Bleier's work.[38] Evidently, Gross and Levitt feel that they need this genuinely scientific work not to exist, and we can see why. In the presence of undeniably scientific *and feminist* contributions, their blanket dismissal—as I've outlined it in this section—of any *possible* relevance of feminist contributions will fail.

The use of the standard "purely-ideological-rejection-of-science" accusation is quite risky: Even the *appearance* of possible scientific contributions must be eliminated; otherwise, the authors would be expected *to engage their colleagues in ordinary scientific debate*. This brings us to my fundamental point: Feminists have everything to gain from being included in such

"ordinary" scientific debate. This has been, in fact, a primary feminist goal. And Gross and Levitt have—inadvertently—shown some awareness of the importance of this goal to feminists, in their determination to resist its satisfaction. Far from advocating *an abandonment* of the principles of open, critical inquiry, feminist scientists have consistently attempted *to enforce* them; far from being antiscientific, respected scientists have aimed to *improve* their sciences through demonstrating and insisting upon the highest standards of scientific evidence and justification.

In sum, and contrary to the caricature of dogmatism discussed above, feminist commitments to open-mindedness and to the value of fair and responsible scientific inquiry have served as the linchpins for feminist contributions to the sciences.

With the foregoing clarifications in hand, it becomes much easier to see that it is *not* a reasonable or adequate response to feminist contributors to science to point out that they are politically motivated. Playing fair—that is, according to standards of scientific conduct—a *scientific* alternative, challenge, criticism, or commentary must be evaluated and answered scientifically. There has been an enormous amount of confusion about this seemingly obvious point, but, for now, you don't have to be a radical philosopher of science to see this; it is sufficient to buy Sir John F. W. Herschel's distinction between the context of justification and the context of discovery.[39] Under this quite conservative view of science, the *source* of an alternative hypothesis or a criticism is seen as irrelevant to its scientific merit. This standard and ideal of scientific practice is important for two reasons. First, it highlights the fact that any refusal to consider and respond to feminist scientific contributions embodies a double standard: Chemists wondering about the structure of hydrocarbons did *not* dismiss Kekule's benzene-ring structure because it came to him in a dream of a snake swallowing its own tail;[40] indeed, tolerance of a wide variety of explicitly political ideologies (among male scientists, anyway) has been one of the hallmarks and points of pride of the international communities of twentieth-century scientists, and rightly so, because it fulfils a *standard of open-mindedness* essential to the practice of science itself.

Second—and this is a closely related point—those who must respond to feminist ideas in the sciences do not have to accept *any* feminist views regarding the sources of the issues, problems, or omissions being debated; that is, they don't have to believe any feminist doctrines whatsoever in order to *address* feminist scientists. Furthermore, they don't have to agree with feminist views to agree with some feminist scientific *claims and conclusions*; one would expect, in fact, to have many results of feminist scientists accepted *as* simply "good science."[41]

Although the above picture of scientific inquiry is far too simplified and too conservative for many feminist philosophers of science, because it

implies that sexist science is simply "bad" science, let us accept it for the sake of this discussion.[42] The conclusion here is that explicitly feminist thought *can* contribute—regardless of its ideological commitments—to higher-quality, more empirically adequate scientific practice, and a priori arguments against this possibility must fail.

4.3 FEMINISM AS ANTISCIENTIFIC

Objection: Feminist ideology itself involves a *wholesale rejection* of scientific standards such as objectivity, scientific methods, and scientific criteria of evaluation. Feminists are *antiscience* and are wholly incapable of contributing to or furthering scientific goals or discovering truth.

Gross and Levitt articulate this set of views: "Cultural constructivism—in its strong form—is one of the starting points and chief ideological mainstays of the feminist critique of science."[43] Strong cultural constructivists "view science as a wholly social product, a mere set of *conventions* generated by social practice."[44] On such an approach, "[s]cientific questions are decided and scientific controversies resolved in accord with the ideology that controls the society wherein the science is done. Social and political interests dictate scientific 'answers.' "[45] They conclude that feminists are among the "people whose doctrinal idiosyncrasies sustain the misreadings of science, its methods, and its conceptual foundations."[46]

I have already noted that Gross and Levitt's position has required them to neglect the plain scientific content in the feminist views they dismiss. A quick glance at Fausto-Sterling's aims and methods makes it abundantly clear that she is *not* recommending that "political interests dictate scientific answers," either in the science she criticizes or in that which she promotes. In presenting her analyses of scientific claims regarding human sex differences, Fausto-Sterling advises her readers to apply perfectly ordinary scientific standards: "[L]ook at the data, think about the logic of the argument, figure out how the starting questions were framed, and consider alternate interpretations of the data."[47] Fausto-Sterling is signaling precisely that she is interested in enforcing adherence to usual standards of "good science": In her criticisms of specific scientific claims regarding sex differences, she objects to their "gross procedural errors," their "striking errors in logic—such as experiments done only on males from which the investigators draw conclusions about females," and their "inaccurate understanding of biology's role in human development."[48] Similarly, Bleier, in the one book of hers that Gross and Levitt do include in their bibliography, argues that otherwise good scientists "have shown serious suspensions of critical judgement in interpretations of their own and others' data," that they have ignored the known "complexity and malleability of human development," and that they have made "unsubstantiated conjectures," not one of which "is known to be descriptive of scientifically verifiable reality as we know it today."[49]

Before it can be taken seriously, any characterization of feminist contributors to science which postulates some deeply antiscientific agenda—one which is accompanied by rejection of the most basic scientific standards—will have to reckon with the scientific competence and scientific attitudes displayed by those feminists.

4.4 SCIENCE AS SELF-CORRECTING AND OBJECTIVE

Objection: Feminists simply *don't understand* that scientific inquiry is self-correcting, or feminists *reject or devalue* the scientific process of self-correction.

Feminist contributions to and critiques of the sciences have long concerned themselves with the structure and dynamics of the self-corrective processes of producing scientific knowledge: The now-standard feminist argument has been that it makes for *better science* to encourage the participation of researchers with a variety of background experiences, preconceptions, and viewpoints, precisely because such inclusion will yield a wider variety of working hypotheses, as well as more thorough challenge and testing of any given scientific hypothesis or theory that is under consideration.[50] Longino, for example, has argued that "scientific method involves equally centrally the subjection of hypotheses and background assumptions to *varieties* of conceptual criticism and the subjection of data to *varieties* of evidential criticism."[51] In her explication and endorsement of standards internal to the community of science that lead to its objectivity, Longino writes: "Effective criticism produces change, and a community's practice of inquiry is *objective* to the extent that it facilitates such transformative criticism."[52] She emphasizes the mechanics of self-correction in her descriptions of how individual variation in scientific opinion "is dampened through critical interactions whose aim is to eliminate the idiosyncratic and transform individual opinion and belief into reliable knowledge."[53] Longino lists four key features necessary to the knowledge-productive capacity of scientific communities: "avenues for the expression and dissemination of criticism; uptake of, or response to, criticism; public standards by reference to which theories, etc. are assessed; and equality of intellectual authority" among qualified practitioners.[54] On this analysis, the objective and self-correcting nature of scientific inquiry, which is counted among its most profound strengths, is actively *reinforced* by feminist participation. In a bizarre twist in the plot, however, this very dynamic of self-correction has been used *to dismiss* the significance of feminist participation in the sciences; the issues raised deserve scrutiny.

One claim is that feminist scientists just don't comprehend that the processes and methods of scientific inquiry make it self-correcting. This accusation is uninteresting because it is patently false, although some might find it amusing that Gross and Levitt, in their untouchable faith that feminists are enemies of science, apparently believe themselves to have trapped in a

contradiction a group of feminist scientists who, in order to improve biological science, appeal to the importance of "controlling for [gender] bias."[55] Gross and Levitt gleefully lecture: "[T]o 'control for bias' is an ancient house rule of empirical science; it is one of the hallmarks of the 'good science' that the postmodernist critics of science [among whom Gross and Levitt include even those feminists who claim to be empiricists] disparage."[56]

But we could imagine a more substantive claim along the following lines: Feminists wish to have a free rein to scrutinize the sciences, but they wish themselves to be exempted from the critical scrutiny which enables science's self-correction. In fact, Gross and Levitt make precisely this charge when they complain that feminist theorizing has "an unprecedented immunity to the scrutiny and skepticism that are standard for other fields of inquiry."[57] As I have shown in the previous section, it was Gross and Levitt who *refused to scrutinize* the feminist contributions to science; this is precisely the opposite result the feminist scientists in question hoped for and deserve.

A much more interesting dynamic is at work when feminist contributions to the sciences which *are* compelling and accepted (sooner or later) are written off as "good science at work" and as having nothing whatsoever to do with feminism.[58] In fact, opponents of feminist approaches to the sciences rely heavily on this appeal to the invisible hand of the marketplace of scientific ideas, because it is necessary for their comprehensive strategy: When feminist scientific thought cannot plausibly be dismissed as "unscientific," or when the authors cannot be discredited as operating outside the sciences, feminist work must be characterized as an inevitable product of science at work. There is something of value in this appeal to the properly functioning scientific community, even though it does not do the work assigned to it by opponents of feminist scientists. It is important to investigate and clarify the basis of this appeal and to make explicit why it fails to render the feminist origins of accepted scientific contributions irrelevant.

It might be thought—especially in light of the discussion in section 4.2 concerning scientific standards of evaluation and their divorce from the origins of any candidate scientific contribution—that feminist scientists must abandon any claims regarding their own ideological commitments.[59] This may be true with regard to the ultimate evaluation and acceptance of any particular feminist scientific claim; that is, feminist scientists have not been in the business of demanding that their scientific claims be accepted or rejected on purely ideological bases. Quite the contrary, as I reviewed above.

One crucial point is easily lost, though, in the context of feminist insistence on applying rigorous scientific standards, and that is the *vital role* of the *participation* of feminist thinkers in the celebrated self-corrective processes of science. As Fausto-Sterling argues, in her discussion of feminist

corrective contributions to medical and behavioral sciences: "These ideas, although they may represent good science, arose in the context of a vast and multiply branched political-cultural movement, that of modern Western feminism. [To apply a purely] good versus bad science analysis is to ignore the important role feminism has played in *forcing* the re-evaluation of inadequate and often oppressive models of women's health and behavior."[60] Fausto-Sterling then elaborates on the crucial role feminism has *in fact* played in the dynamics of supporting corrective scientific challenges: "In the past, legions of highly trained doctors and scientists have failed to see and criticize what is wrong with the biomedical and behavioral models of female behavior. Why? Because . . . they had no alternate framework within which to develop new sight. Feminism provided that new vision, allowing many scientists—even those who do not consider themselves political feminists—to move in a new direction."[61]

Gross and Levitt get tripped up by this sort of analysis, which might explain why they pretend it doesn't exist. We watch them help themselves to the following conclusions: "At times, baseless paradigms in medicine and the behavioral sciences have been pretexts for subordinating women. Pseudoscientific doctrines of innate inferiority and moral frailty have been used to discount female capacity for achievement and to confine women to subservient roles. All this is beyond dispute and generally recognized in intellectual circles."[62] We may expect a modest capitulation to the uses of feminist thought—at least in helping to unmask the baselessness of these paradigms and the "pseudo" nature of these scientific doctrines—but no. Even though Gross and Levitt accept "that in scientific debate and in the process by which a preference for one paradigm over another emerges, attitudes of mind come into play that are in some measure dictated by social, political, ideological, and religious preconceptions," they maintain that it is the self-correcting dynamic of scientific method that does the real work: "Our reading of the history of science suggests . . . that theories leaning *heavily* on such props tend to be fragile and ephemeral [their emphasis], and that part of the increasing *power of scientific methodology* derives from always-increasing *awareness* [my emphasis] of the danger that reasoning can be corrupted in this way if one is not careful."[63] And finally, "We are *not* trying to deny that social interests and nonscientific belief systems often enter into the very human business of doing creative science," but "in the long run logic, empirical evidence, and explanatory parsimony are the masters . . . in the house of science."[64] This echoes Levin's claim that "the self-correcting character of the scientific method, with its emphasis on observation, the replication of experiments, and open discussion, insures that [deviations from the ideal of objectivity] will eventually be seen as such."[65]

The only gesture towards explaining how this process of self-correction

actually functions lies in the claim that "[i]f [scientific results] survive, they do so because they work, for a large number of people of hugely varied backgrounds and interests."[66] Gross and Levitt, and Levin are unequipped to reckon with the details of *how* that self-correction—among people with "varied backgrounds and interests"—*works*: Who offered the corrections and "increased the awareness," and why did they do so? How could such inadequate science have had such a long and influential run in the hands of the top scientists at the time?

In order for Gross and Levitt's blanket dismissal of feminist contributions to the sciences to go through, they must launch and defend a rather demanding counterfactual: Even if feminist scientists had not been the "correcting" force confronting this science, someone, sooner or later, would have provided such correction. In some cases, this is probably true; there is much common ground between feminist and other scientists' critiques of certain programs and explanations anyway (e.g., antireductionism, favoring models with higher complexity of interactions). But what is the significance of the claim that—even without the feminist contributions—the rest of the scientists would have eventually realized that something was wrong? I would emphasize that their portrayal of the dynamics of self-correcting and objective sciences bears a remarkable resemblance to the views articulated and advocated earlier by Longino, Fausto-Sterling, Harding, and other feminists. The only point of contention, it seems, lies in the counterfactual life of Gross and Levitt, who appear to be making the petulant claim that even if feminists hadn't been there as participants in science's self-correction, everyone would have gotten along fine without them. Whether or not this is so is completely irrelevant. Unless Gross and Levitt can provide *reasons*—other than those that failed, above—that feminists *can't* contribute to the usual processes of scientific inquiry, then their attempts to exclude feminists from the sciences amount to unvarnished dogmatism.

In sum, the objections considered in sections 4.1–4.4—in all their dogmatism and sleight of hand—can serve as useful reminders of the *absolute reliance* of *feminist* contributors to science on the standards of evidence, open-mindedness, responsibility to a variety of views, and objectivity that are the foundations of scientific inquiry.

5. COMMONALITIES BETWEEN THE SCIENCES AND M & E

There is much common ground between scientific research and understanding and philosophical research into central metaphysical and epistemological issues. While the commonalities are not surprising, given the shared intellec-

tual ancestry of western philosophy and the sciences, I have suggested that these similarities might be useful in our examination of the relevance of feminism to philosophic endeavors. In this part of the paper, I focus on two loci where analogies between M & E and the sciences seem to be strong; specifically, the fundamental *concepts*—particularly "truth" and "objectivity"—and the basic standards and mechanisms of critical inquiry within the communities seeking knowledge of reality. For each of these, I suggest that both feminist scientific contributions and the standard objections to them can illuminate the situation in M & E.

5.1 FUNDAMENTAL CONCEPTS: TRUTH AND OBJECTIVITY

Inasmuch as both philosophy and the sciences are searching for truth—whether concerning the evolution of life on earth or the best concept of truth itself—the general conceptions of truth and of the conditions under which it might be known come into play. Feminist contributions to science frequently involve a strong lesson about scientific truth: Attaining truth sometimes requires insights gained through pursuing specific social and political aims which are not, themselves, oriented exclusively towards truth itself. Nevertheless, and perhaps counterintuitively, any objections to the ideological origins of such insights are seen as employing an inappropriate standard: It's the results that count. Ideally, under this view, feminist contributions to the sciences will be counted ultimately as simply "good science."

In philosophy, the ideological origins of ideas and analyses frequently seem to play more sustained roles, although it is not clear why this should be the case. Some feminist approaches to epistemology—for instance, approaches which challenge the notion that *more* detachment is always better for getting at truth—have nearly exact parallels to some feminist methodological contributions to the sciences. I would urge that the standard *objections* to feminist epistemologies—e.g., that they subordinate the goal of truth to the aims of politics—be rebutted through the same means as in the sciences. More specifically, unless mainstream epistemologists can effectively defend a claim that they've got all the angles on truth covered, then arguments and analyses regarding potential alternative or additional approaches to truth must be evaluated on their merits, not a priori on the basis of their ideological heritage.

5.2 SHARED STANDARDS AND METHODOLOGY

Appeals to the strengths of *objective methods* and to the centrality of *objectivity* in our searches for knowledge about reality play pivotal roles in both philosophical and scientific self-understanding. The accusation of dogmatism—with its lack of fidelity to genuinely open and objective inquiry—is used within the sciences to disqualify participants from full membership in

the scientific community. In exact parallel, feminist philosophers are suspected of lacking objectivity—on account of overriding commitments to specific political goals—and thereby have disqualified themselves from serious consideration within core philosophical areas that do not (explicitly) involve political concerns. Because the commonalities in philosophical and scientific standards for engagement in critical inquiry are extensive, I suggest that my rebuttals to typical scientific reactions to feminist participation can fruitfully be transferred to philosophical contexts.

Consider, for example, John Searle's claim that feminists have been "blocked" in analytic philosophy "by a solid and self-confident professorial establishment committed to traditional intellectual values," among which he names "objectivity, evidence, close attention to the facts, and above all, truth."[67] According to Searle, this blocking occurs because to feminists, these intellectual values "can sometimes seem an unnecessary and oppressive regime that stands in the way of achieving more important social objectives."[68] Searle's worries can be recast into a potentially effective a priori way of dismissing the relevance of feminist thought in philosophy, as follows:

> (1) Our philosophical project is, ideally, concerned with objective knowledge and objective reality; hence, by definition, it must involve objective inquiry.
>
> (2) Feminists are promoting specific ideologies or social values; this is what it *means* to be a feminist.
>
> (3) But being "objective" just means being *free* of values or biases, or commitments or ideologies.[69]
>
> Therefore, (4), the pursuit of objective philosophical inquiry is *incompatible* with simultaneously pursuing a specific ideology or any particular social values.

(In brief: The type of metaphysics and/or epistemology we are pursuing is objective. Ideology is not. Therefore it is impossible to pursue both at the same time; they're incompatible.)

Thinking about "objectivity" in either philosophy or science is very difficult due to the multiplicity of meanings of the term itself and of the contexts in which it is used. On my analysis of the concepts *objective* and *objectivity*, there are four basic meanings in wide current philosophical use.[70] When applied to knowers, 'objective' means *detached*, disinterested, unbiased, impersonal, or invested in no particular point of view; in such cases, objectivity is not a property of whatever is known through these methods. Other uses of 'objectivity' are more complicated, in that they involve relations between things: When 'objective' means *public*, publicly available, observable, or accessible (at least in principle), some relation between real-

ity and knowers is involved. Similarly, when 'objective' means *existing independently* or separately from us, it directs us towards some relation between us as knowers and the reality we're trying to gain knowledge of. Finally, there is a current meaning of 'objective' as really existing, "Really Real," or the way things really are. This last usage is supposed to apply no matter what the relations are between reality and knowers. Untangling the various meanings of 'objectivity' is necessary to sorting out the numerous claims involving feminism, objectivity, and knowledge.

Returning to the objections involving objectivity and feminism, the most important thing to notice about the standard argument I outlined above is that it utilizes only part of one of the meanings of 'objectivity' which has currency in philosophical discourse today. If any of the other meanings are substituted into the argument, it becomes invalid. Consider a plausible alternate premise: (3*) Being "objective" just means pursuing truths about things that exist completely independently from us.[71] *It simply doesn't follow* that "the pursuit of objective philosophical inquiry is *incompatible* with simultaneously pursuing a specific ideology or social values." In order to sustain this conclusion, additional arguments must be provided to show that pursuing truths about independently existing parts of the universe is logically, psychologically, or at least statistically incompatible with performing behaviors aimed at achieving a particular social organization or dynamic (i.e., acting as a feminist). One hurdle facing this additional claim—i.e., that only value-free inquiry promotes truth—is that it has already been vigorously rebutted by feminist philosophers.[72]

The point, briefly put, is that those philosophers who wish to exclude feminist analyses a priori, because of some apparent conflict between feminism and "objective" philosophical method, ought not to base their arguments on simplistic and misleading views about the nature of "objectivity."

In this part of the paper, we examined some commonalities—in key concepts, standards, and methodologies—which provide suggestive links and analogies between feminist approaches in the sciences and those in "core" investigations in philosophy, as well as ways of responding to parallel objections raised against feminist contributors. Still, we are faced with a puzzle: The empirical and theoretical sciences are generally taken by philosophers, especially in M & E, to incorporate the *most rigorous* set of intellectual and critical standards guarding the gateways of knowledge; nevertheless, the legitimacy and importance of various feminist analyses, projects, and methods have been *accepted*, scientifically, especially over the past two decades. If feminist analyses and contributions have been accepted, even under the standards of rigor, criticism, and robust peer review within the sciences, *why haven't they received as wide a reception in philosophy?* I consider some possible answers to this puzzle in part 6.

6. DISANALOGIES: A PRIORI EXCLUSIONS OF FEMINIST THOUGHT IN PHILOSOPHY

Since the shape of philosophical fields—which problems count as relevant, and what the standards of argument and analysis ought to be—is worked out by their practitioners, isn't it legitimate for these practitioners to just say: Feminist investigations *are not part of what we do*? What, if anything, is wrong with this move? I delineate below two basic strategies which are deployed to support such a priori exclusions of feminist thought from philosophical investigation. I shall address these exclusionary strategies in turn, indicating the weaknesses in each. I conclude that neither strategy for a priori *exclusion* provides reasonable or promising means to counter arguments for the relevance and value of feminist methods to discussions of "core" M & E issues.

6.1 ABSTRACTION

One possible response to the puzzle regarding the resistance of philosophy to feminist thought runs as follows: Philosophy actually has *more* rigorous standards than the sciences, particularly in comparison to those sciences that have accepted feminist contributions, which are among the least rigorous sciences, anyway. I take this point to be a special case of a more general strategy, one which insists that philosophy—especially M & E—considers questions at a *level of abstraction or generality* which makes feminist contributions irrelevant.

This strategy has promise, until we examine exactly what is going on in the philosophical discussions in question. At issue is research in "core" M & E, in which practitioners, having formulated their target problems at extremely high levels of abstraction, find themselves forced, in their philosophical investigations, to add certain social aspects of the situation under consideration back into the story. This is done very selectively, in such a way as to exclude sex and gender variables of the social context. This strategy has been used in a wide array of philosophical scenarios;[73] I shall offer a brief review of some cases that I have analyzed elsewhere.[74]

Abstraction and "Objectivity" in M & E

John McDowell, in his work on the nature of meaning and of moral knowledge, offers a carefully reworked definition of 'objectivity'. He rejects the requirement of *detachment* for objectivity and focuses on discussion of the *publicity*, not of the phenomena in question, but of the standards of judgment accepted and embodied in community practices.[75] McDowell abandons the requirement of detachment because he doesn't buy one of the standard theses involving objectivity; specifically, he *rejects* the claim that the inde-

pendent existence of the objects we want to know about justifies any method of detachment.

The alternative definition of objectivity offered—one which excludes the role of detachment in "objective method"—is best illuminated in McDowell's discussion of our "immersion" in forms of life and the role of human communities and standards of judgment in knowledge, truth, and meaning. Ultimately, McDowell defends what he identifies as a Wittgensteinian view, that we do not have to postulate a psychological mechanism (or rule) underlying behavior in order to *understand* someone doing something correctly. The question immediately arises as to the ground and nature of our "confident expectation" that someone will perform appropriately. Here, McDowell turns to Stanley Cavell's discussion about "the competent use of words" as a model:

> [W]e learn and teach words in certain contexts, and then we are expected, and expect others, to be able to project them into further contexts. . . . That on the whole we do [this] is a matter of our sharing routes of interest and feeling, modes of response, senses of humour and of significance and of fulfillment, of what is outrageous, of what is similar to what else, what a rebuke, what forgiveness, of when an utterance is an assertion, when an appeal, when an explanation—all the whirl of organism Wittgenstein calls "forms of life." Human speech and activity, sanity and community, rest upon nothing more, but nothing less, than this.[76]

McDowell takes from Cavell the lesson that "it is only because of our own involvement in our 'whirl of organism' that we can understand the words we produce as conferring that special compellingness on the judgment explained."[77] In fact, McDowell claims, even the paradigm cases of rationality all have "*dependence* on our partially shared 'whirl of organism.'"[78] In other words, we cannot recognize even the most "objective" reasoning *as objective* from *outside* the practices of a given community. McDowell's conclusion is quite radical; he rejects the idea that scientific method gives us a more external or more detached viewpoint. McDowell favors a very lean version of "objectivity" that amounts, essentially, to a willingness to submit one's practices to public, accepted community standards involving concepts and frameworks. In rejecting the legitimacy of a "neutral external standpoint," McDowell maintains that what is publicly shared is the "conceptual equipment which forms the framework" within which we conceive the world and that "objectivity" is properly conceived only *within* this conceptual framework.[79] We now turn to another very visible investigator into the nature of knowledge and its relation to objectivity.

Throughout his career, Thomas Nagel has been concerned with philosophical and scientific notions of "objectivity" and their limits. Among the various available meanings of objectivity I've surveyed, Nagel focuses on

objectivity as *detachment*. In setting up his analysis, Nagel takes as a starting point the problem that subjective things—like our conscious mental states and our experiences of color—must also have an objective aspect. He advocates a process of progressive detachment—of surgically removing parts of our experience that are peculiar to our own point of view—called the "ascent to an objective view."[80] Part of Nagel's defense of this recommendation is his reasoning that "there must be a notion of objectivity which applies to the self, to phenomenological qualities, and to other mental categories," because the idea of making a mistake about these things makes sense; i.e., "there is a distinction between appearance and reality in this domain."[81]

Like McDowell, Nagel concludes that we "make sense" of the appearance-reality distinction, even with the most subjective or "private" phenomena, *through community-wide practices or conventions that we acquire and are committed to*. Still, the "idea of objectivity always points *beyond* mere intersubjective agreement even though such agreement, criticism, and justification are essential methods of reaching an objective view."[82] So, in contrast to McDowell's approach, Nagel emphasizes the *independent existence* of the objects of inquiry, and he commits himself to the centrality of a method of *detachment* to any inquiry into reality.

Let us pause to reflect on this situation. Although McDowell and Nagel have conflicting evaluations of the importance and role of "objectivity"—understood as a form of *detachment*—in our knowledge, they share the view that, in addition to resistances by reality, aspects of the specific social context—including all sorts of values and interests—are necessarily involved in the development of knowledge and concept formation. One relevant set of interests is freely acknowledged: Part of why we are interested in the phenomena we are is because we are a specific kind of animal—this big, with these senses, needing these things, with these brains, living in these communities, with these aims, with this "whirl of organism," etc. But given that there is virtual unanimity among anthropologists that sex and gender roles lay the foundations of every human society's *other* social practices—including communication, lines of authority, distribution of physical, emotional, and intellectual goods, and the very general social structures of who decides what[83]—this type of investigation in M & E certainly lacks the resources to sustain *any* a priori elimination of feminist approaches. In fact, the burden of proof seems to rest squarely on those who, like Nagel and McDowell, want to *include* these more superficial social practices as vital to philosophical understandings of meaning, truth, language, and knowledge acquisition, while they *exclude* the bedrock social roles of male and female, masculine and feminine—upon which these other social practices are overlaid and constructed.[84] I conclude that *according to their own standards* these approaches to "core" M & E issues ought to allow sex and gender as potentially relevant

dimensions of the complex contexts that *they* see as necessary to understanding both objectivity and objective knowledge.

6.2 PHILOSOPHICAL EXCEPTIONALISM

Let us consider a different line of argument for the disanalogies between the sciences and M & E in their judgments of the relevance of feminist thought. Perhaps the differences in subject matter do provide the answer: In the sciences, we are dealing with people's *experiences* as fundamental and are thus required to investigate legitimate claims that different people have different kinds of experiences of the objects or systems being studied. Whatever the object of study, then, there remains a real possibility (however remote in some cases) that gender conditioning and/or sex differences could make a difference to an investigator's access to or experiences of that object, and scientists are forced—due to universal acknowledgment of this possibility—to reckon with claims of this type of occurrence.

The situation within M & E could be seen as significantly different; to the extent that philosophical subject matter is nonempirical, there is no prior acknowledgment of potential differences in its accessibility, except through the exercise of the rational powers themselves. Against an assumption that the subject matter of M & E is not affected by gender in any way, philosophers who use feminist analytical tools—which are designed to explore sex and gender contents—will necessarily come up empty-handed. Furthermore, if said philosophers claim to find content influenced by gender in the subject matter, this result itself suggests their failure to examine the target subject matter successfully. That is, *under the assumption* that the objects under investigation in M & E—truth, knowledge, universals, etc.—are completely sequestered from any gendered conceptual influences or aims, seeing these things in a gendered way is, itself, evidence that the researcher has failed to utilize the full powers of rationality. More specifically, he has failed to *detach* himself sufficiently from his particular, local, animal, gendered context as a knower and has failed to achieve the *objectivity* which is necessary to genuinely rational philosophical investigation.

We have finally arrived at a clear difference between the standards of philosophy and those of the sciences which might explain and justify the differences in their attitudes towards feminist contributions. On this view of philosophical inquiry, the virtue of objectivity takes the specific form of detachment or decontextualization. This is the origin of the opinion that feminists who criticize certain epistemological or metaphysical programs for being "disembodied" just don't get it; the internal and individual processes of progressive detachment from our human particulars (including sex and gender) are constitutive of rationality itself; this progressive detachment is the method of philosophy.

But look at what has happened here. Even though all four of the basic meanings of 'objective' are documentably used *throughout mainstream M & E*, only one of those meanings is given primacy in the above argument. Furthermore, the focus on a particular vision of proper detachment does *all the work* in the a priori elimination of any relevance of feminist thought. Most strikingly, this meaning of 'objectivity' *differs* from the one which bears most of the weight in the "objectivity" of the sciences; I consider the implications of this difference in part 7.

7. THE DANGERS OF DOGMATISM

I argued in part 4 that the standards of open-mindedness and critical discussion that are officially adopted by scientific communities demand that the contributions with scientific content offered by bona fide participants in the scientific context be evaluated scientifically, regardless of the ideological or personal motivations of their proponents. Moreover, taking feminist contributions seriously—by evaluating them scientifically—carries with it *no requirement whatsoever* that those evaluating and responding to these contributions have any sympathy with feminist political goals—e.g., sexual equality, equal opportunity, or reproductive control—while engaging in such evaluation and response. The same responsibilities and freedoms, I think, should apply to claims regarding the value of feminist approaches to particular philosophical problems.

Again, feminist commitments to open-mindedness and to the value of fair and open critical inquiry have served as the linchpins for feminist contributions to the sciences. Noting this is particularly important when examining the precise sources of resistance to feminist methods in philosophy. The reason is very basic. Part of being a scientist involves active participation in the community-wide self-regulation and self-correction which is essential to the sciences' success. In stark contrast, the pervasive appeal to a particular, unitary notion of "objectivity"—as detachment—within much of M & E, combined with a double standard regarding the inclusion of aspects of social context among authors who reject "detachment" and those who admire it, has facilitated philosophers' flight from a standard of responsive engagement and self-corrective inquiry parallel to that of the sciences. Hence, philosophers can appeal to their own conformity to the standards of "objective inquiry"—and bathe in the reflected glory of the significantly different *scientific* "objectivity"—while they *avoid the regulating and correcting dynamics* which are the correlates of "objectivity" in the sciences. Thus, ambiguities revolving around what "objectivity" means, in scientific and in

philosophical inquiry, are—paradoxically—effective at protecting philosophical investigators from accountability to their co-investigators. In such a system, the *restraints* placed on dogmatism through critical interactions with other investigators—seen earlier to be essential to the self-correction and long-term success of the sciences—are weakened or gone.

I considered, in part 6, two lines of argument that might be used to justify these differences in standards and methods of inquiry between the sciences and M & E. One approach involves an appeal to the very abstract nature of the objects of philosophical investigation; appropriate philosophical methods are similarly abstract—the argument goes—and necessarily discard all kinds of contextual elements, including those of sex and gender. I acknowledge that such an argument might be persuasive, if in fact its conditions were consistently applied; there is, however, a legitimate worry that they are not. I take as examples McDowell's and Nagel's contributions to mainstream M & E. Their work illustrates two important points. First, while their topics are extremely abstract—involving the nature and possibility of moral knowledge—they nevertheless end up making central use of social contexts in their analyses (and they are not exceptions in this regard).[85] Once specific aspects of language communities and social "practices" are deemed necessary to successful philosophical analysis, it is difficult to see how any a priori rejection of gender- and sex-related practices could be sustained. Second, McDowell and Nagel both scrutinize the notion of "objectivity" and its roles in philosophical inquiry; furthermore, they ultimately endorse very different revisions of the concept. The conflicting formulations of and debates about the notion of objectivity within M & E are of singular importance to feminist philosophers: Many key a priori arguments against overtly feminist contributions to M & E rely on identifying "objective inquiry" with detachment; but this particular, simplistic definition of "objectivity" is not itself an accepted standard *within M & E*; hence, using it to exclude feminist contributions is ad hoc and actively violates the standards already in place, as they are applied to nonfeminist philosophical contributions.

In summary, I hope to have made it clear that no appeal to special standards or a compromise of general requirements of "objectivity" is being sought by feminist contributors to M & E. Just as in the sciences, attempts to eliminate feminist inquiry from the map of legitimate topics through a priori means must rely on violations of the most fundamental values of inquiry. This analysis suggests that resistance to feminist philosophical methods within mainstream M & E, which has long outlasted such resistance in the sciences, has been achieved through dogma, rather than reason.

NOTES

1. I have benefited enormously from discussions about my ideas for this paper and comments on its many drafts, ever generously offered by David Hull, Helen Longino, Bojana Mladenovic, Ina Roy, Eric Schwitzgebel, Michael Selgelid, and David Smith. My deepest thanks go to Sally Haslanger, whose patience during this difficult year was exceeded only by her philosophical insight into what I was trying to say.
2. There is such a wide variety of feminist interests in and about philosophy that I would not claim to represent every one; I am advancing, rather, a picture of feminist philosophy intended to encompass a significant set of feminist contributions. While I mention a few illustrative essays and books, I must note that the relevant literature is large, and I cannot review or summarize it here.
3. *Oxford Universal English Dictionary*, 1937 ed., s.v. "method." More suggestively for our present context, perhaps is: "the regular systematic treatment proper for the cure of a given disease" (1716)!
4. I am not endorsing a separation of "investigation" from "activism," but the focus here is on ways of *understanding* things, events, and structures, as well as how to change them.
5. Morwenna Griffiths and Margaret Whitford, introduction to *Feminist Perspectives in Philosophy*, ed. Griffiths and Whitford (Bloomington: Indiana University Press, 1988), 1.
6. See, e.g., Genevieve Lloyd, *The Man of Reason: "Male" and "Female" in Western Philosophy* (London: Methuen, 1984); John Dupré, *The Disorder of Things* (Cambridge, Mass.: Harvard University Press, 1993).
7. Examples can be found in: *Feminist Perspectives in Philosophy*; Sandra Harding and Merrill B. Hintikka, eds., *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology, and Philosophy of Science* (Dordrecht: Reidel, 1983); Naomi Sheman, *Engenderings* (New York: Routledge, 1993).
8. See Sally Haslanger, "On Being Objective and Being Objectified," in Louise M. Antony and Charlotte Witt, eds., *A Mind of One's Own: Feminist Essays on Reason and Objectivity* (Boulder, Colo.: Westview Press, 1993), 85–125; see also Adèle Mercier, "A Perverse Case of the Contingent A Priori: On the Logic of Emasculating Language (A Reply to Dawkins and Dummett)," this journal, this issue.
9. This was not always true. "[I]ntuition used to be the favoured type of knowledge, and St Thomas Aquinas, for example, would never have allowed intuition to constitute a specifically feminine attribute, because it would have meant admitting that women were nearer God" (Griffiths and Whitford, op. cit., 7).
10. Susan Bordo, *The Flight to Objectivity: Essays on Cartesianism and Culture* (Albany, N.Y.: SUNY Press, 1987); Lorraine Code, *What Can She Know? Feminist Theory and the Construction of Knowledge* (Ithaca, N.Y.: Cornell University Press, 1991). I am not claiming that only feminist philosophers have investigated intuitive knowledge (see, e.g., Michael Polanyi, *Knowing and Being: Essays by Michael Polanyi*, ed. Marjorie Grene [Chicago: University of Chicago Press, 1969]); rather I am claiming that feminist analyses of the *connections* between being devalued and being gender coded as "feminine" have produced valuable insight, philosophically.
11. I would emphasize that this view involves no assumptions regarding the biological sex of either the feminists or the scientists in question. Men may be feminists, and female scientists may be sexist.
12. Among the volumes of original contributions and their analyses, I would mention especially: Ruth Bleier, *Science and Gender: A Critique of Biology and Its Theories on Women* (New York: Pergamon Press, 1984); Micaela di Leonardo, ed., *Gender at the Crossroads of Knowledge: Feminist Anthropology in the Postmodern Era* (Berkeley: University of California Press, 1991); Ruth Hubbard, Mary Sue Henifen, and Barbara Fried, eds., *Women Look at Biology Looking at Women* (Cambridge, Mass.: Schenkman, 1979); Ruth Hubbard, *The Politics of Women's Biology* (New Brunswick, N.J.: Rutgers University Press, 1990); Evelyn Fox Keller, *A Feeling for the Organism: The Life and Work of*

Barbara McClintock (San Francisco: W. H. Freeman, 1983); Keller, *Reflections on Gender and Science* (New Haven, Conn.: Yale University Press, 1985); Keller, *Secrets of Life, Secrets of Death: Essays on Language, Gender, and Science* (New York: Routledge, 1994); Sue V. Rosser, *Biology and Feminism: A Dynamic Interaction* (New York: Twayne/Macmillan, 1992); Janet Sayers, *Biological Politics: Feminist and Anti-Feminist Perspectives* (London: Tavistock, 1982); Susan Leigh Star, *Regions of the Mind: Brain Research and the Quest for Certainty* (Stanford, Calif.: Stanford University Press, 1989); and the bibliographic studies: Faye Chadwell, bibliographic essay for Rosser, op. cit., 175–185; Sue Searing, "Further Readings on Feminism and Science," in Ruth Bleier, ed., *Feminist Approaches to Science* (New York: Pergamon Press, 1986), 191–195; Alison Wylie et al., "Philosophical Feminism: A Bibliographic Guide to Critiques of Science," *RFR/DRF* 19 (1989): 2–36.

13. See Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989), for a comprehensive bibliography and analysis. I have borrowed from Haraway's discussion of Jeanne Altmann in presenting this case.
14. Jeanne Altmann, "Observational Study of Behavior: Sampling Methods," *Behaviour* 49 (1974): 227–267.
15. Haraway, op. cit., 307.
16. Sarah Blaffer Hrdy, "Empathy, Polyandry, and the Myth of the Coy Female," in *Feminist Approaches to Science*, 135–136; cf. Linda Fedigan, *Primate Paradigms* (Montreal: Eden Press, 1982); Shirley Strum, *Almost Human: A Journey into the World of Baboons* (New York: Random House, 1987).
17. Ludmilla Jordanova, *Sexual Visions: Images of Gender in Science and Medicine between the Eighteenth and Twentieth Centuries* (Madison: University of Wisconsin Press, 1990) and Rosser, op. cit., provide useful overviews.
18. See Bernadine Healy, "Women's Health, Public Welfare," *Journal of the American Medical Association* 264 (1991): 566–568; Jean A. Hamilton, "Avoiding Methodological and Policy-Making Biases in Gender-Related Health Research," in *Women's Health: Report of the Public Health Service Task Force on Women's Health Issues*, vol. 2 (Washington, D.C.: U.S. Department of Health and Human Services, 1985).
19. I would like to emphasize again that feminist contributions to the sciences vary enormously; in addition to their range as scientific thinkers, the contributors also have variously developed and implemented ways of *being* feminists.
20. For a previous period of nearly fifty years there was explicitly-feminist science criticism within American science. See, e.g., the *American Science Monthly* (which later became *Scientific American*) from the 1870s through the 1920s.
21. Margarita Levin, "Caring New World: Feminism and Science," *American Scholar* 57 (1988): 100 and 104; first emphasis mine.
22. Ibid., 102–103; my emphasis.
23. Ibid., 104.
24. Clifford Geertz, "A Lab of One's Own," *New York Review of Books* 37 (1990): 19.
25. Ibid., 23.
26. Paul Gross and Norman Levitt, *Higher Superstition: The Academic Left and Its Quarrels with Science* (Baltimore, Md.: Johns Hopkins University Press, 1994), 111.
27. Ibid., 2; their emphasis.
28. Ibid., 123; their emphasis.
29. Helen Longino, *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry* (Princeton, N.J.: Princeton University Press, 1990).
30. Gross and Levitt, op. cit., 145–146.
31. Ibid., 146.
32. Ibid., 147; their emphasis.
33. Ibid.

34. Other instances can be found in Levin, op. cit., and Michael Ruse, *Is Science Sexist? And Other Problems in the Biomedical Sciences* (Dordrecht: Reidel, 1981).
35. See Longino, op. cit., 119, 127, 131, 134.
36. See Bleier, *Science and Gender*; Anne Fausto-Sterling, *Myths of Gender: Biological Theories about Women and Men* (New York: Basic Books, 1985), 133–141.
37. Gross and Levitt, op. cit., 125. Since Fausto-Sterling acknowledges the existence of biological differences between males and females throughout her book, it remains mysterious how Gross and Levitt could defend this statement, unless they put all the weight for its truth on whatever they mean by "significant." See Elisabeth A. Lloyd, "Science and Anti-Science: Objectivity and Its Real Enemies," in Lynn Hankinson Nelson and Jack Nelson, eds., *A Dialogue Concerning Feminism, Science, and the Philosophy of Science* (Dordrecht: Kluwer, 1996), for a more complete analysis of Gross and Levitt and their fellow travelers.
38. In spite of her high scientific status as a research scientist at a major research institution in the specialty in question, Bleier's book, *Science and Gender*, in which her scientific objections to this research are summarized and defended, is not listed anywhere in Gross and Levitt's bibliography. Nor do they ever mention, in parallel to their treatment of Ruth Doell (Longino's earlier coauthor and a biologist) and Fausto-Sterling (a research biologist), that Bleier is even a scientist.
39. John F. W. Herschel, *A Preliminary Discourse on the Study of Natural Philosophy* (London: Longman, Rees, Orme, Brown, and Green, 1831). I must note that this distinction has come under sustained criticism within philosophy of science, and feminist philosophers of science have been especially concerned to challenge this dichotomy. My focus here, however, is on the most conservative views of science held by working scientists. The point is that even under these views, objections to the feminist *source* of specific scientific contributions violates the canons of scientific conduct.
40. See Friedrich A. Kekule, "Origin of the Benzene and Structural Theory," *Chemistry* 38 (1965): 9.
41. See the discussion in section 4.4 for elaboration.
42. For the most recent work on why sexist science is not properly characterized as "bad" science, see *Synthese* 104 (1995).
43. Gross and Levitt, op. cit., 47.
44. Ibid., 11; their emphasis.
45. Ibid., 46.
46. Ibid., 7.
47. Fausto-Sterling, op. cit., 10.
48. Ibid., 8, 60.
49. Ruth Bleier, "Sex Differences Research: Science or Belief?" in *Feminist Approaches to Science*, 149.
50. See esp. Helen Longino, "Essential Tensions—Phase Two: Feminist, Philosophical, and Social Studies of Science," in *A Mind of One's Own*, 257–272; Longino, *Science as Social Knowledge*; Sandra Harding, *Whose Science? Whose Knowledge?* (Ithaca, N.Y.: Cornell University Press, 1991); Harding, "Rethinking Standpoint Epistemology: What Is Strong Objectivity?" in Linda Alcoff and Elizabeth Potter, eds., *Feminist Epistemologies* (New York: Routledge, 1993), 49–82; Harding, "'Strong Objectivity': A Response to the New Objectivity Question," *Synthese* 104 (1995): 331–349; Longino, "Gender, Politics, and the Theoretical Virtues," *Synthese* 104 (1995): 383–397; Lynn Hankinson Nelson, "Epistemological Communities," in *Feminist Epistemologies*, 121–159; Nancy Tuana, "The Values of Science: Empiricism from a Feminist Perspective," *Synthese* 104 (1995): 441–461; Tuana, ed., *Feminism and Science* (Bloomington: Indiana University Press, 1989); Alison Wylie, "Methodological Essentialism: Comments on Philosophy, Sex, and Feminism," *Atlantis* 13 (1988): 11–14. Cf. Paul Feyerabend, *Against Method* (London: New Left Bookstore, 1975); John Stuart Mill, *On Liberty*.

51. Longino, "Essential Tensions," 266; my emphasis.
52. Ibid.
53. Ibid., 265. See also Longino, *Science as Social Knowledge*, esp. chs. 4 and 9.
54. Longino, "Gender, Politics, and the Theoretical Virtues," 384.
55. Gross and Levitt, op. cit., 122, quoting the Biology and Gender Study Group, "The Importance of Feminist Critique for Contemporary Cell Biology," *Hypatia* 3 (1988): 61–76.
56. Gross and Levitt, op. cit., 274. See also Levin, op. cit., 100.
57. Gross and Levitt, op. cit., 110.
58. Gross and Levitt assert: "[T]here are as yet no examples . . . of scientific knowledge informed, reformed, enhanced by feminism" (ibid., 112). Their strategies for dealing with the numerous feminist contributions to the sciences which they subsequently cite are instructive: Briefly put, if feminist work is persuasive and is accepted as correct, it's simply good science; if not, it's bad science tainted by ideology. In other words, the feminist contributions to science are either *not feminist* or *not contributions*.
59. A reminder: This view does not incorporate the subtlety of much feminist philosophy of science; we are examining the toughest-case scenario of in-house scientific standards.
60. Fausto-Sterling, op. cit., 213; her emphasis.
61. Ibid.
62. Gross and Levitt, op. cit., 110.
63. Ibid., 44.
64. Ibid., 56; their emphasis.
65. Levin, op. cit., 102–103.
66. Gross and Levitt, op. cit., 112.
67. John R. Searle, "Rationality and Realism: What Is at Stake?" *Daedalus* 122 (1993): 71.
68. Ibid.
69. As Searle puts it: "The objective truth or falsity of [knowledge] claims made is totally independent of the motives, the morality, or even the gender, the race, or the ethnicity of the maker" (ibid., 66).
70. Treated at length in Elisabeth A. Lloyd, "Objectivity and the Double Standard for Feminist Epistemologies," *Synthese* 104 (1995): 351–381.
71. In fact, Searle uses precisely this alternate meaning in some places. See Searle, op. cit., 66, and *The Rediscovery of the Mind* (Cambridge, Mass.: MIT Press/Bradford Books, 1992), 192.
72. See, for example, Elizabeth Anderson, "Knowledge, Human Interests, and Objectivity in Feminist Epistemology," this journal, this issue, as well as the essays in *A Mind of One's Own*; *Feminist Epistemologies*; and *Feminist Perspectives in Philosophy*.
73. The contributions to this issue of *Philosophical Topics* by Candace Vogler and Louise Antony each address instances of this strategy, in moral philosophy and philosophy of mind, respectively.
74. Elisabeth A. Lloyd, "Objectivity and the Double Standard."
75. See John McDowell, "Virtue and Reason," *Monist* 62 (1979): 331–350; McDowell, "Values and Secondary Qualities," in Geoffrey Sayre-McCord, ed., *Essays on Moral Realism* (Ithaca, N.Y.: Cornell University Press, 1988), 166–180; McDowell, *Mind and World* (Cambridge, Mass.: Harvard University Press, 1994). David Wiggins' views are, in the relevant respects, similar in content and motivation to McDowell's. See David Wiggins, "Truth, Invention, and the Meaning of Life," *Proceedings of the British Academy* 62 (1976): 331–378; Wiggins, *Needs, Values, and Truth* (Oxford: Basil Blackwell, 1987); Wiggins, "Moral Cognitivism, Moral Relativism, and Motivating Moral Beliefs," *Proceedings of the Aristotelian Society* 91 (1991): 61–85.
76. Stanley Cavell, *Must We Mean What We Say?* (New York: Charles Scribner, 1969), 52.

77. McDowell, "Virtue and Reason," 339.
78. Ibid., 341.
79. Ibid., 345, 347.
80. Thomas Nagel, *The View from Nowhere* (New York: Oxford University Press, 1986), 140–141.
81. Ibid., 36.
82. Ibid., 108; my emphasis.
83. See, e.g., *Gender at the Crossroads of Knowledge*; Irene. H. Frieze et al., *Women and Sex Roles: A Social Psychological Perspective* (New York: W. W. Norton, 1978); Eleanor Burke Leacock, "Women in Egalitarian Societies," in Renate Bridenthal and Claudia Koonz, eds., *Becoming Visible: Women in European History* (Boston, Mass.: Houghton Mifflin, 1977); Leacock, *Myths of Male Dominance* (New York: Monthly Review, 1981); Leacock and Helen I. Safa, eds., *Women's Work: Development and the Division of Labor by Gender* (South Hadley, Mass.: Bergin and Garvey, 1986); Claude Levi-Strauss, *Man, Culture, and Society*, ed. Harry L. Shapiro (New York: Oxford University Press, 1956); Levi-Strauss, *The Elementary Structure of Kinship* (Boston, Mass.: Beacon Press, 1969); John Phillip Reid, *A Law of Blood: The Primitive Law of the Cherokee Nation* (New York: New York University Press, 1970); Rayna Rapp Reiter, ed., *Toward an Anthropology of Women* (New York: Monthly Review Press, 1975).
84. This conclusion extends to the approaches of Bernard Williams, Charles Peirce, Rudolf Carnap, and John Searle (see Elisabeth A. Lloyd, "Objectivity and the Double Standard").
85. A case could be made that a similar dynamic has been in effect in naturalized epistemology; see, e.g., Louise Antony, "Quine as Feminist: The Radical Import of Naturalized Epistemology," in *A Mind of One's Own*, 185–225; Stephen M. Downes, "Relativism, Reflexivity, and Power: Pointers to a Reconciliation between Feminist and Social Studies of Science" (manuscript, 1992); Downes, "Socializing Naturalized Philosophy of Science," *Philosophy of Science* 60 (1993): 452–468; Jane Duran, *Toward a Feminist Epistemology* (Savage, Md.: Rowman and Littlefield, 1991); Ronald N. Giere, *Explaining Science: A Cognitive Approach* (Chicago: University of Chicago Press, 1988); Lynn Hankinson Nelson, *Who Knows: From Quine to a Feminist Empiricism* (Philadelphia: Temple University Press, 1990); Nelson, "A Feminist Naturalized Philosophy of Science," *Synthese* 104 (1995): 399–421; Elizabeth Potter, "Gender and Epistemic Negotiation," in *Feminist Epistemologies*, 161–186; Potter, "Good Science and Good Philosophy of Science," *Synthese* 104 (1995): 423–439; Miriam Solomon, "Social Empiricism," *Nous* 28 (1994): 325–343; David Stumpe, "Naturalized Philosophy of Science with a Plurality of Methods," *Philosophy of Science* 59 (1992): 456–460.