# Having It All: Naturalized Normativity in Feminist Science Studies

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*The relationship between facts and values—in particular, naturalism and normativity—poses an ongoing challenge for feminist science studies. Some have argued that the fact/value holism of W.V. Quine's naturalized epistemology holds promise. I argue that Quinean epistemology, while appropriately naturalized, might weaken the normative force of feminist claims. I then show that Quinean epistemic themes are unnecessary for feminist science studies. The empirical nature of our work provides us with all the naturalized normativity we need.*

## Introduction

Understanding the complex relationship between descriptive facts and prescriptive values poses an ongoing challenge for science studies, particularly for the politicized science research engaged in by feminists. In response, a number of feminists have argued that the fact/value holism of Quine's naturalized epistemology holds particular promise (see, for example, Nelson 1990, 1993; Tuana 1992; Antony 1993; Campbell 1994, 1998). More particularly, feminists engaged in naturalized epistemology argue that when we devise criteria for evaluating knowledge claims in science, whether these be claims of fact *or* value, we are properly confined to the explanations provided by natural and social theories of human sensation and perception. Beliefs about both facts and values arise from, and can be adjudicated by, the same empirical processes; both come to form the same "web of belief."

In this paper I argue that Quinean epistemology, while going a long way toward paying naturalistic/descriptive attention to the empirical facts of human cognition, does not necessarily strengthen the normative/prescriptive force of

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feminist claims. In fact, Quine's project might weaken it. Shifting the terrain from epistemology to the philosophy of language, I then show that introducing Quinean epistemic themes is unnecessary for feminist science and science studies. The empirical nature of our work provides us with all the naturalized normativity we need.[1]

## The Fact/Value Distinction in Science Studies

Within science studies both science apologists and critics have tended to characterize facts and values as conceptually distinct. Values are often characterized as conceptual schemes, or filters, internal to the private workings of individual minds. It is through the filters of our values that the factual content from the empirical world is said to pass. We owe this scheme/content model in large part to the epistemological theories of Descartes.

Feminists have made important criticisms of the Cartesian model, especially concerning the radical individualism it implies; however, two other aspects of the Cartesian metaphysical picture make trouble for science studies, feminist or otherwise. First, if values are viewed as filters for empirical data rather than as aspects of the empirical picture, then, no room exists for the empirical adjudication of values—we have no empirical way to defend our values from skeptical attack. A second skeptical opening concerns the conceptual relativism that results when values are viewed as part of the private and subjective realm rather than as part of the public and objective world of empirical data. Truth, then, becomes relative to the subjective values of individual knowers, in science as elsewhere.

Within feminist science studies, the influence of the Cartesian scheme/content model is clearest when the androcentrism of traditional scientists (and the feminism of various science critics) is characterized as an inner biasing filter or organizational scheme. The androcentric schemes, in particular, are often described as impeding the clear representation of the objective scientific evidence or content. Again, the problem is that these schemes are conceived as a filter through which content from the empirical world passes, rather than as a set of empirical beliefs themselves available to critical scientific scrutiny. Even if we conceive of our own feminist filters as being less opaque than androcentric filters, we still end up fighting skeptical questions about the accuracy of our own filtered representations. We struggle, too, with relativistic worries that the truth of our representations is simply relative to the private and inaccessible schemes through which they were filtered.

The dangers the scheme/content distinction poses for feminist science studies are exemplified in Ruth Bleier's now classic critique of the sexist values infusing sociobiology. In her book *Science and Gender* (1984) Bleier incorporates the Cartesian language of scheme vs. content in fairly typical ways, with predict-

ably skeptical results. After over eight chapters of careful, empirical criticism of the sexism inherent in the reductionist programs of sociobiology, she offers the following epistemic analysis:

> Scientific ideas and theories represent efforts to describe and explain the natural world; that is, reality. That reality, in the form of our perceptions and interpretations of it, is like the rest of our culture, a product of human thought. Yet it is perceived as objective reality, which becomes incorporated, in its various forms, into our early and developing consciousness. That consciousness is the medium through which we perceive and interpret the "objective realities" of the external world, learn our individual location within it, and form a worldview. That consciousness and its worldview provide a framework for ordering and interpreting our experiences, which come to confirm the worldview of which they are, in part, the products (193).

That Bleier encounters the problem of conceptual relativism is revealed in her admission that her own critique of sociobiology involves offering "'counter facts'" no less free of values and interests than the "'facts'" offered by sociobiologists (1984, 13, scare quotes in the original). She implies that no objective standard exists against which the two sets of facts can be compared. This implication is consistent with the skepticism present in the introduction to her book, where she argues that the only justification for her own feminist criticisms is not that her arguments are better supported by the evidence (even though the empirical critique she proceeds to offer makes the evidential support clear), but rather that her arguments better disrupt the status quo (13).

As I've argued elsewhere (Clough 1998, 2003) the remnants of this Cartesian scheme/content distinction can be found in a number of classic works in feminist science and science studies. While most feminist analyses of science have quite rightly wanted to retain some notion of objective truth—some claims (for example, the claims of feminist science studies) are indeed more objective than others (for example, the claims of traditional science apologists)—on those occasions when we've been confined by the Cartesian terms of the debate, our claim to objectivity has been open to question. Why, the traditional science apologist might ask, should one believe that feminist value-laden filters are any more objective than those they try to replace? And so it goes. This skeptical line of questioning severely weakens the normative force of our important political concerns.

At this point I want to highlight the distinction between the global skepticism that I think we can and should avoid and the more down-to-earth fallibilistic worries that we properly entertain about the empirical accuracy of our scientific results, and so forth. These latter worries we cannot avoid, nor

should we try to. However, this fallibilistic set of worries is different from the epistemological skepticism introduced when values are viewed as private filters for, and therefore metaphysically separate from, empirical facts. Global skepticism of this sort undercuts our faith in even the most well-justified claims, in feminist or any other science studies, as it is the nature of empirical justification itself that gets called into doubt.

## Quine and Fact/Value Holism

Building on the work of Quine, a number of feminists engaged in science studies have encouraged a greater recognition of the holistic relationship between facts and values (see, for example, Nelson 1990, 1993; Antony 1993, Campbell 1994, 1998). Concerned about the skepticism and conceptual relativism encountered in previous science studies, Lynn Hankinson Nelson, and Richmond Campbell, in particular, prescribe the holism of Quine's epistemology naturalized as an improvement over the scheme/content split of the traditional Cartesian model.

The attraction of naturalizing epistemology is two-fold. First, as an epistemic project, naturalism attempts to provide science and science studies with normative criteria for judging knowledge claims generally, no matter where they fall on the fact/value continuum—that is, it provides a mechanism for examining the limits of our knowledge. As a normative project, feminist science and science studies turns on the existence of such limits. Feminists have shown that scientific investigations are often biased in ways that disadvantage the weakest members of our society. And they have argued that the bias must be corrected. Philosophical appeals to epistemology attempt to analyze and in some cases reconfigure the normative criteria by which scientific claims are judged.

A second attraction is that Quine's focus on naturalism in epistemology more fully recognizes the ways in which our criteria for judging knowledge claims are themselves products of empirical investigation. An important implication here is that if the criteria employed by scientists and knowers more generally are the products of empirical processes, then both the criteria and the knowledge claims we use the criteria to adjudicate are contingent and fallible. Feminists have provided crucial insights into the social nature of the contingencies and the extent of the resulting fallibility. As Naomi Scheman writes, "To naturalize epistemology is to acknowledge that we need to study how actual people actually know (and) one thing we ought to know about actual people is that they inhabit a world of systematic inequality . . ." (1993, 166). Quine's prescription for naturalism opens up this field of study.[2]

I agree that it is important to reveal the naturalized processes at work in the justificatory formulations of knowers generally, and of scientists in particular. Similarly, I agree that feminist studies of science needs a framework that pro-

vides normative force. In what follows, however, I sketch a series of arguments to suggest that Quinean epistemology, while naturalized, does not necessarily improve our levels of normativity.

## Quinian Epistemology Naturalized

A prominent and compelling feature of Quine's project is his claim that the study of the acquisition and justification of belief should be based on what science tells us about human cognition (for example, see Quine 1969). The circularity of his naturalist appeals to one set of (scientific) beliefs in order to justify another set of beliefs is not a concern, he argues. As Neurathian sailors we are always busy rebuilding the very ship in which we are floating. There is no dry dock, no foundation on which to rest and rebuild from scratch. As one feminist Quine scholar explains: "Naturalized epistemology tells us that there is no presuppositionless position from which to assess epistemic practice" (Antony 1993, 210).

Another important feature of Quine's project is his holistic approach to meaning and truth (Quine 1960). Unlike the reductionistic views of his positivist colleagues, Quine argues that only sentences, not individual terms, can be said to have meaning, and that this meaning comes from the sentence's role in the larger theory of which it is a part. Quine is also holistic about the division between sentences with observational/factual content and sentences without. That is, for the most part, he views the division as a continuum. The criterion for whether a sentence is "observational" or "nonobservational" is relative to the placement of that sentence in the web of sentences from which it derives its meaning.

Nelson finds Quine's holism to be particularly useful for feminist epistemology. She argues that his concept of a web of meaning allows for more attention to the way that social values (for example, patriarchal values) influence meaning—attention inaccessible in traditional models that view social forces as irrelevant. Indeed, she takes Quine to task for his refusal to expand the web of belief in just this direction, though she sees his refusal as a failure of execution, rather than conception (1990, chap. 3).

However, reasons exist to question the ease with which we can push Quine's project in the direction of a more thoroughgoing holism. The line between problems of execution and conception is extremely fuzzy in this case. Below, I argue that modeling our epistemology on Quine's naturalized project does not buy us much improvement with respect to fact/value holism. Elements of a scheme/content distinction can still be found in some of Quine's writings, and so global skepticism and its relativist variants still feature as problems in his account. While I am sympathetic with Nelson's project of "Quining Quine" (see also Nelson 1997), the risks of inviting skepticism and relativism into our accounts of feminist science and science studies seem too high.

## Concerns With Quine

Quine occasionally admits that, despite his claims to holism, the division between sentences with observable content (sentences expressing facts) and those without (sentences expressing values) is an epistemologically crucial division. For example, he argues that what makes a sentence (or theory) true is its relation to sensory stimulation (see Quine 1960, chaps. 1 and 2).

In later writing Quine re-emphasizes this point. For example, in his contribution to a collection of essays devoted to Richard Rorty's *Philosophy and the Mirror of Nature* (Rorty 1979) Quine notes that he differs from Rorty "on the score of observation sentences," which, according to Quine, "do have the 'special epistemological status' of being keyed directly to sensory stimulation and thus linking theory with outer reality" (Quine 1990b, 119).

Rorty's differences with Quine are a result of Rorty's philosophical allegiances to Quine's student, Donald Davidson. For Davidson, observation sentences have no epistemic significance except as entry points for the "radical interpreter"—the notion (borrowed from Quine) of a linguist parachuted into the midst of speakers whose language is entirely new to her (see for example, Davidson 1991a). For the radical interpreter, the truth values of observation sentences are relatively easy to establish (when she utters "there is a cat on the mat" her listeners either nod or look confused), and this, in turn, helps identify the sentence's truth conditions. But observation sentences play no foundational role with respect to truth—a point that helps Davidson and Rorty avoid the questions of skepticism that, I will argue, are still present in Quine.

As Davidson describes it, Quine still wants "to anchor at least some words or sentences [the observation sentences] to non-verbal rocks." Davidson describes views such as Quine's further: "Whatever there is to meaning must be traced back somehow to experience, the given, or patterns of sensory stimulation, something intermediate between belief and the usual objects our beliefs are about" (Davidson 1991a, 126).

Unfortunately, this "something intermediate" leaves conceptual space for skepticism. Injecting sensory intermediaries between the meaning of our beliefs and that which would make our beliefs true encourages skepticism, because we don't know if these intermediaries are supplying us with correct information. How could we ever step outside the process to check? (Davidson 1986; 1991a, 125).

A further problem results from the fact that there is no way to tell at what point the sensation of the external, objective world ends and our subjective interpretation or perception begins. This is the problem of the scheme/content distinction in its traditional guise. One of the more well-known examples of Quine's early adherence to the scheme/content distinction involves his claim that we can "subtract our sensory cues," that is, the facts, from our worldviews, or values. We do this, says Quine, in order to discover "the domain within which [we] can revise the theory while saving the data" (1960, 5).

Here, then, is another place where Quine's holism begins to slip. He makes the questionable assumption that a meaningful epistemological distinction exists between unanalyzed sensory cues and one's worldview or values filtering those cues, even though his naturalism toward the subject that produces the worldview gives him little conceptual apparatus for making the distinction.

I worry that when Quine talks about subtracting our sensory cues from our worldview, the split between scheme (values) and content (the empirical facts, sensory cues) disallows the empirical examination of values and robs us of the normative force we need to say that some values are better justified than others.

The split introduces the further concern that if people do not share values, then, in principle, they will be unable to translate each other's linguistic behavior. (The inclusion of the phrase "in principle" is important, because Davidson acknowledges that in practice many situations exist where we encounter difficulties in interpreting each other—more on this point shortly).

Davidson (1984) calls the conceptual relativism that results from notions of untranslatability the "third dogma of empiricism." He argues that the interdependence of belief and meaning, described in the model of radical interpretation, makes it impossible for us both to recognize someone as a speaker of a language, and to identify that language as untranslatable. Our recognition of others as speakers of languages involves attributing beliefs to them, and the meaning of those beliefs is established through the triangulation between us, them, and the externally, empirically accessible data about which they are speaking. The possibility of both recognizing their behavior as speech *and* failing to translate the communicated message is incoherent. Again, though, translation can be incredibly difficult in practice. While Quine, too, speaks of triangulation, he insists that the focus of the triangle is more proximal than Davidson's conception of a completely public, distal stimulus (Quine 1990a; 1990c). Davidson (1990) argues that it is precisely the distance between the proximal and distal stimuli that provides the space for skepticism.

In *Philosophy and the Mirror of Nature*, Rorty provides a helpful discussion of the relation between the scheme/content distinction and the traditional Cartesian metaphor of a mirror-like relation between humans and the world. Whenever philosophers invoke a split between inner, subjective mind and the outer external world it mirrors or represents, they invite the problems of skepticism and conceptual relativism (for example, see Rorty 1979, 139–40). That is, they invite the concern that our mirror images, for example, the meanings we attribute to words, might be globally mistaken. Worse, we'd have no objective method for checking, as our notions of truth and falsity would be relative to our private conceptual schemes. Recall that, on the traditional Cartesian model, our meanings are the private, inner productions of our minds; we can't

get outside to check for accuracy. While Quine has naturalized his conception of the "inner" side of the equation, writing of sensory stimulation rather than mental representations, those stimulations are still private and inaccessible (for example, see Rorty 1979, chap. 4, esp. 170–71). And so, argues Rorty, skepticism about their accuracy, and indeed conceptual relativism about the notion of accuracy itself, becomes a real concern .

Few feminists who make use of Quine's work mention the debates among Quine, Davidson, and Rorty. Nelson comes the closest to engaging the problems of skepticism and relativism that Davidson and Rorty find in Quine. While she makes no direct mention of Davidson or Rorty, Nelson often refers indirectly to Davidson in discussions about Quine's possible scheme/content dualism. However, her defense of Quine on this point is not a focus of her project. She dismisses the arguments that Quine invokes conceptual relativism and then refers readers to Quine's essay "On the Very Idea of a Third Dogma" (Nelson 1990, 25). In this essay, Quine (1981) tries to clarify his scheme/content dualism by specifying that he should have called it a language/content dualism. Briefly, Davidson's response is that a language/content split is still a scheme/content split in all the important ways, and so still allows room for the conceptual possibility of languages that could be untranslatable (Davidson 1990).

Nelson also defends Quine from the charge that he is an epistemic foundationalist (1990, 23), despite the fact that observation sentences do play something like a foundational role in his theory, however holistic and relative to a community that foundation is described as being (a point she acknowledges later in her book [1990, 110–11]).

Finally, Nelson argues that skepticism is not a problem for Quine because Quine's is a theory of evidence rather than a theory of truth and skepticism is only a problem for the latter (Nelson 1990, 27). She examines this question further in her essay "A Question of Evidence" (1993). Again, however, because Davidson's criticisms on this point are not central to her discussion, it is difficult to evaluate her claim. For the moment I suspect that the difference between a theory of evidence and a theory of truth, in much of Quine's writings, is a difference without a difference. Davidson argues, convincingly, that distinctions between empiricist theories of truth and empiricist theories of evidence are difficult to sustain. He asks, "How can one describe knowledge, or its origins [that is, how can one answer a descriptive question of the origins of evidence] without deciding what knowledge is?" [that is, without answering a prescriptive question of truth and/or justification] (Davidson 1991b, 193). Davidson writes that "Quine's answer to this question is that we must accept what science and enlightened common sense dictate without trying to justify it; his account of how we come by this knowledge is, however, just the kind of account that has traditionally been taken to constitute an attempt at justification" (Davidson,

1991b, 193). And, thinks Davidson, Quine fails at this attempt, because Quine's account focuses on the private, filtered experiences of empirical data, rather than conceiving of the filters as themselves accessible to empirical assessment.

According to Davidson (1990), if we paid more attention to the external nature of language learning, skepticism would not arise as a concern. Nor would concerns about conceptual relativism. The stimulus that matters is not some proximal, subjective feature of each speaker, as Quine argues; rather, it is the distal, objective cause noted by two (or more) speakers.[3]

So far, I have sketched an argument for the claim that Quine's naturalized epistemology, while taking important steps toward fact/value holism, still invokes a distinction between scheme and content that works against such holism. While Quine has more thoroughly naturalized the process by which subjects filter empirical content through the values and worldviews of their conceptual schemes, his account is still centered on how these schemes privately and subjectively organize our experience of sense data. On this account, the truth of our beliefs is relative to our conceptual schemes. Also, because Quine conceives of our values as filters for empirical data rather than as further strands in our web of belief, Quine's account does not allow for the empirical adjudication of values. If Davidson is right, these worries about conceptual relativism and skepticism undermine the normative force needed to justify any claims, but of concern here, of course, is that they undermine the normativity needed for our feminist evaluations of science.

While the debates about skepticism and relativism in Quine's naturalized epistemology are certainly not settled by any of the arguments reviewed here, I question whether inviting epistemic debates of this sort is worth the risk for feminist science and science studies. This risk assessment becomes even more pointed when certain of Davidson's observations about language use suggest that the epistemic debates are unnecessary: we can get all the naturalized normativity we need from the empirical themes already present in feminist science. More specifically, Davidson's studies of language behavior remind us that the socially-sophisticated empirical testing we find in the work of feminist scientists implies the very fact/value holism for which we've been searching.

We have arrived, then, at something of a crossroads. Characterizing our science studies in terms of an epistemic scheme/content distinction has often worked against a proper understanding of the holistic relationship between facts and values. Some feminist theorists have argued that we can address the problem by producing an improved (Quinean) epistemic analysis—one that more fully sheds its Cartesian inheritance—and this is certainly an option. However, as I have argued, it is an option that still invites worries about global skepticism and its relativist variants. I will suggest instead that we reexamine the fact/value holism already embodied in the scientific practices of feminists. Often this reexamination will involve peeling away epistemic analyses that

obscure the underlying holism. (Sometimes, as in the case of Bleier, we will have to peel away epistemic analyses offered by the scientists themselves.)

## Reexamining Feminist Science And Science Studies

Recall that feminism is itself an empirically-based set of claims, arising from sociological observations of group behavior. More specifically, feminism involves the claim that if we take into account group membership demarcated by sex/gender, for example, we will capture a significant amount of the variance in any given explanation of human behavior—variance that cannot be explained if the role of sex/gender is ignored. That is, our theories will be more empirically accurate if we take sex/gender into account. Feminists have used this descriptive, sociological claim about the importance of sex/gender, and other social axes, to criticize, that is, to make prescriptive or normative arguments about any number of social institutions, including science and scientists (even, and perhaps especially, sociologists themselves).

Put in terms of fact/value holism, feminism applied to science and science studies involves identifying various value claims about women and men, claims often implicit or assumed in traditional scientific practices, and examining the empirical data on which those value claims are thought to be based. By improving the quality of the data we improve the value claims, and vice versa. At their most persuasive then, feminist science and science studies reveal the conceptual links between a certain set of facts and values in traditional science accounts and rework those links to produce better science; better values.

Within feminist science, the importance of reworking the conceptual links between the descriptive and the prescriptive can be seen as far back as the early 1900s. Examples of feminist science from this period include criticisms of evolutionary theory made by biologists, psychologists, and sociologists such as Mary Calkins (1896), Leta Stetter Hollingworth (1914), Helen Montague and Hollingworth (1914) and Helen Thompson Woolley (1910, 1914).[4] These scientists discovered that when explaining the results of social studies of human psychology and biology, the sex/gender of the subjects, the experimenters, the measuring instruments, and/or the operational definitions employed provided significant predictive value. They noted also that this predictive value was otherwise concealed or ignored by non-feminist scientists, and that this concealment and/or ignorance decreased the empirical accuracy of the original explanations.

A couple of examples from more contemporary feminist science are worth reviewing here to highlight the naturalistic/descriptive detail that can be captured within a prescriptive/normative context. One well-known case involves the discovery of the predictive value that sex/gender plays in the measuring instruments and definitions used by anthropologists. Feminist anthropologists

such as Jane Lancaster (1975) and Barbara Smuts (1987) examined the effect of the gender-laden word "harem" as it was used in descriptions of primate groups that contain only one adult male. They showed that a number of empirical inaccuracies resulted when the concept of a harem was used to frame field observations, *viz.*, passive female behaviors were over-reported while female aggression was under-reported (see Donna Haraway 1989, for a review of this literature). This empirical work helped feminist anthropologists justify their normative characterizations of traditional primate research as bad science. Feminist anthropologists were also able to document the conceptual links between the empirically weak data underwriting traditional primatological theory and the value claims such theory countenanced about "proper" behavior for men and women (Haraway notes that norms of proper behavior differed according to racial stereotypes as well [see, for example, Haraway 1989, pp. 345–55]). Retracing the holistic links between beliefs about facts and beliefs about values, feminist anthropologists have inspired us to ask how the visibility of certain behaviors might change if we instead described the primate groups as all-female troops that employ the services of a stud as needed for sexual pleasure and/or reproduction. (And why is it that we do not even have a word for this arrangement?)

Another example comes from feminist analyses of physiology and endocrinology, and concerns the role of sex/gender assumptions with respect to the composition of subject pools. To keep costs down, most subject pools are drawn exclusively from male populations, because traditionally, it was believed that accounting for variations in the hormonal cycling of females would unnecessarily lengthen the time required to complete experiments (Tavris 1992, 96–106). Feminist scientists showed that this gendered economic stricture was conceptually linked to a value claim, namely the claim that hormonal cycling in females is an aberration from the human norm (Okruhlik 1994). In fact, most hormones in both sexes are released in cyclical patterns (Kihlstrom 1971). Insulin is one of the few hormones that don't cycle. Based on more accurate empirical data, feminist scientists reworked the traditional understanding of both facts and values and have inspired us to ask, What would happen if we studied female animals and made the *absence* of hormonal cycling the aberration? What if we actively researched why it is that males don't menstruate?[5]

Each of these examples serves to illustrate the naturalistic and normative trajectory of feminist science and science studies as arising from a set of empirical, sociological analyses that are then used to explain and change the activities, operational definitions, and methodological restrictions within a variety of scientific settings. I have argued that this fact/value holism is lost when feminist or any other science studies is conceived of in epistemic terms that invoke a scheme/content distinction. We are better off conceiving of our normative analyses not as private epistemic schemes that filter the empirical data, but as particularly well-justified pieces of the empirical picture.

Davidson points to human language use as the key to shifting our analyses completely away from private, internal sensations and toward public, external behaviors (for example, Davidson 1991c). Pushing Quine's naturalism one step further, Davidson switches gears from epistemology to language studies, showing us that it is through public communication with others that we are reminded of our place in the natural (and social) order. It is through the external triangulation between two speakers and a third object of interest that communication begins. Any one of the three points of this triangle is, in principle, accessible to a naturalized, empirical analysis, whether those points include beliefs about the chemical make-up of oxygen or beliefs about the morality of abortion. Indeed, as Davidson shows, communication about either sort of belief would be impossible unless such empirical analysis was available. The two sorts of beliefs, about both facts and values, are holistically related in our webs of belief. Just as factual beliefs are influenced by value beliefs, it is the web-like relation with factual beliefs that gives value beliefs their content.

Building on these Quinean holistic insights, Davidson reminds us that the possibility of a skeptical gulf between inner, subjective selves and the external, objective world is belied by the ease with which we use language to communicate with each other about shared features of our world (1991c, 156). But, of course, "ease" should be read here as an idealized description. In practice, communication is often difficult, especially for those working for social change. We are constantly battling misinterpretation, using a language we know to be vulnerable to ideological concealment.

This last point might give us pause. How can we square our experience of misinterpretation with Davidson's idealized descriptions of the transparency of communication? It's all very well to talk about our feminist science and science studies solely in terms of socially sophisticated empirical testing, but what about the resistance we meet, no matter how well-justified our claims? Worries of just this sort often underlie the view that we need an added layer of epistemic analysis—an analysis that would provide a more universal notion of normativity against which we (and everyone else) could measure our claims and the claims of those we criticize.

While I appreciate the worries that might motivate a renewed search for this sort of epistemic analysis, I hope I've at least introduced doubts about the efficacy of such a search, especially with respect to addressing the problems of skepticism and relativism. In the next section I argue that, in any event, these worries are misplaced. The experience of misinterpretation, untranslatability and ideological concealment that feminist scientists often experience in critical responses to their work does not in fact conflict with Davidson's descriptions of the transparency of linguistic communication.

## Davidson, Linguistic Analysis, and Feminist Science Studies

Davidson's descriptions of linguistic communication center on the concept of interpretational charity; however, his use of the concept is often misunderstood. If the principle of charity is understood as the prescription that we view our interlocuters as speaking truthfully at all times, then not only do we encounter an inconsistency between our experiences of misinterpretation and Davidson's idealized account, but we also lose the normative stance required for feminist theorizing. We need to be able to argue that scientists informed by androcentrism, racism, and classism have got the world wrong, and we need not to be charitable about this. I argue that Davidson's principle of charity is consistent with, and even encouraging of, a critical feminist approach to science studies.

Davidson's claim amounts to the point that for interpretation to begin, the radical interpreter must initially assume that the same relationship between truth and belief holds for those she is interpreting as it does for herself. The radical interpreter needs to assume this relationship at the start, not because she's a quietistic, charitable sort who doesn't want to criticize her new community, but because at this point, assigning too much falsity robs her of the empirical base necessary to identify the foreign speakers as having beliefs about anything at all. Once she has acquired a sufficient number of utterances *then* she can begin to identify false ones by sifting for inconsistencies, etc. Identifying inconsistencies and falsity in beliefs is precisely what those engaged in feminist science and science studies are good at.

However, there might still be a lingering sense of conflict between Davidson's principle of charity and the possibility of diagnosing the linguistic concealment of truths, especially the concealment practiced by those in positions of dominance who want to keep their power, for example, some scientists. If we say that meaning is given simply by externally available truth conditions, then it is, in principle, impossible to address the ways that patriarchy works precisely because it controls and *conceals* truth conditions.

Bjørn Ramberg responds to precisely this concern in his essay "Charity and Ideology" (1988). He approaches the problem by analyzing the differences in theories of meaning given by Michael Dummett and Davidson. Ramberg argues that Dummett is right that language involves conventions (see, for example, Dummett 1986). We don't always, in fact we *seldom*, look to truth-conditions when interpreting each other; instead we fall back on established conventions and shortcuts. However, Ramberg is faithful to Davidson's claim that language isn't *essentially* convention-driven (indeed, this is one of the points we learn from the practices of the radical interpreter). Part of what keeps us from being idealized radical interpreters is that we do so often rely on conventions in meaning rather than always testing for truth conditions. Ramberg argues that it is this semantic laziness on our part that explains how ideological concealment becomes possible (1988, 647).

To illustrate this point, let's examine the argument made by some scientists in the early 1900s that girls should not pursue secondary education (see, for example, Hall 1904, vol. 1. Note that the debate was centered on the fate of girls of European ancestry; the education of boys and girls of the "lower races" was not considered). The justification for restricting these girls was typically characterized as being in the best interests of all concerned—that, for example, (European) men and women have each evolved with inherent differences and these differences need to be identified if we are to treat the members of each sex fairly and encourage them to rise to levels of excellence appropriate to their natural capacities.[6] Ramberg acknowledges that merely identifying this claim as false does not help us. The claim has meaning precisely because it trades on various linguistic conventions, such as our agreement about the meaning of the words "treat fairly" and "encourage levels of excellence." Ramberg argues that, here, the ideology at work produces a three-way tension "between the subject's perception of the world, her perception of the conventions of her language, and her perception of the meaning of the description" (1988, 648), in this case the description of sex- and race-differences in human evolution. Ideology, he continues, "both uses and undermines the present conventions of a language, and thereby gradually alters the conventional meanings of the words, or rather, the truth-conditions of sentences" (1988, 649).

Confronting the alteration of truth conditions requires vigilance on the part of those wishing to criticize oppressive ideology, in science as elsewhere. Such normative critique is difficult but not impossible, and certainly not constrained by the principle of charity. Ideological critique, writes Ramberg, "is a never-ending labour, a continuous struggle to clarify meaning, to recapture the efficacy of language" (Ramberg 1988, 649). A Davidsonian description of our linguistic behavior shows that our normative science critique is not only possible but desirable.

## Conclusion

The holistic relationship between descriptive facts and prescriptive values is an important feature of feminist science and science studies—a feature lost when we cast our work in epistemic terms that invoke a Cartesian scheme/content distinction. A number of feminist theorists have responded to the problems of the traditional Cartesian approach by prescribing Quine's epistemology naturalized. Quine's holistic project promises the normativity of an epistemic program while paying naturalistic, that is, descriptive, attention to the empirical details of knowledge production. I have introduced arguments from Davidson and Rorty to suggest that Quine's naturalism, while an improvement on the traditional epistemic model, stops short of producing a thoroughgoing fact/value holism. The elements of the scheme/content distinction that linger in his work invite a reflexive skepticism and relativism that rob us of normativity.

I suggest that when we reexamine the practices of feminist scientists we find the very fact/value holism for which we've been searching obscured, though it often is by the scheme/content metaphysics of our epistemic analyses. It may seem that a layer of epistemic analysis is needed in order to provide a normative framework against which we can measure the accuracy of our beliefs about the world. However, these epistemic projects are risky, and besides, as Davidson reminds us, our linguistic practices function as well as they do precisely *because of* the reliability of the relationship between the empirical world and our beliefs about that world. As language users we are part of the empirical world, and by testing for truth conditions we can better examine which of our beliefs about that world are justified and which are not.

I conclude that the most reliable source for justifying our normative prescriptions in feminist science and science studies continues to come from the naturalistic details, the descriptive evidence, that we've tested and established in those same studies. In the end that is all we have. Luckily, it is also all we need.

## Notes

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1. For a more detailed presentation of these arguments, see *Beyond Epistemology* (Clough 2003, esp. chaps. 2 and 7).

2. Quine focused on neuroscience and behaviorism rather than sociology and political theory, but feminists using his work have argued that a more consistent naturalism can and should include empirical data from both the natural and the social/political worlds (see, Nelson 1990, chap. 3; Antony 1993, 202–203).

3. See Clough (1999) for a discussion of one of the last public debates between Quine and Davidson on the distal vs. proximal distinction and its relation to the problem of skepticism.

4. For a more thorough discussion of the contributions of these early feminist criticisms of Darwin, see *Beyond Epistemology* (Clough 2003, esp. chaps. 1 and 8.)

5. For a new twist on this question see Marjorie Profet (1993) and Clough (2002).

6. Revised from Ramberg's original example that focused instead on the ideological claims used by leaders of the apartheid regime in South Africa (Ramberg 1988, 648).

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