Comments on Anderson
Commentary on Elizabeth Anderson’s “Uses of Value Judgments in Science”

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Elizabeth Anderson’s paper “Uses of Value Judgments in Science” is a bold challenge to the classic positivist position that scientific inquiry, whether in natural science or social science, should be wertfrei, value-free (except, of course, for cognitive values). Her thesis goes beyond the weaker, still somewhat defensive riposte articulated by some feminists that, because of Quinean theory underdetermination, values will necessarily play some role in theory choice, to the stronger, more aggressive claim that value orientation of research is a positive thing, to be actively encouraged, since at least some “noncognitive,” that is, moral and political, values are actually more conducive to good scientific practice. It is not merely that we cannot get away from values but that we should be actively and self-consciously incorporating them (the right ones) into our research programs, since there is a “bidirectional” influence of facts and values that undermines the orthodox mainstream picture of factual and value judgments “as occupying sharply demarcated spheres ... each isolated from logical or evidentiary connections with the other” (22).

In its detail and ingenuity, her paper is one of the most sophisticated statements I have read of the extrapolation of the original feminist epistemology argument to philosophy of science. Though her focus is on feminist theory and feminist science, the thesis, with appropriate changes, is obviously of more general application, and, if it could be successfully established, would be warmly embraced by progressives working in oppositional political theory in general. Indeed, it is worth pointing out that the original target of these positivist strictures was not, of course, feminism (which would have had no presence in the academy at the time) but Marxism. Marxism’s demands that theory be engage—or, perhaps more accurately, that theory always was engage, whether it wanted to admit it or not—was seen as an outrageous violation of the canons of good methodology. So whereas Marx was interpreted as indicting most “bourgeois” social science as “ideology,” and calling on bourgeois intellectuals to commit class suicide and develop a proletarian theory appropriate for changing the world, Karl Mannheim accused Marxists themselves of being ideologists, and recommended instead the model of the freischwebend, socially unattached intellectual as the ideal. So this is a longstanding debate within social theory, raised whenever subordinated groups are seeking to challenge Establishment scholarship. Since (as an erstwhile and still sometime Marxist) I am completely sympathetic to Anderson’s line of argument, and have tried to follow a committed scholarship in my own work without at all thinking that that invalidates its worth, these
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comments will not be a critique. Rather my efforts here will, in part, involve the mental effort of trying to put myself in the shoes of her adversaries. In other words, what do I imagine they would say in reply?

1. First, a minor point. Anderson uses the phrase “noncognitive values” simply to demarcate moral and political values from “cognitive values” like empirical adequacy, consistency, scope, and so forth (3). But it is worth remembering that in the first half of the 20th century, the dominant meta-ethical position was noncognitivism in the different sense that moral judgments, or what seemed to have the logical form of moral judgments, actually had no propositional cognitive content, but were really either expressions of emotion (emotivism) or veiled prescriptions (prescriptivism). So one justification of the positivist thesis was that, given the noncognitivity of values, their contribution to scientific inquiry would either be pernicious or, at best, adventitiously positive. It was not just that values were linked to partisan political projects, but that they were not the kind of entity that could be objective in the first place. Meta-ethical noncognitivism no longer has the influence it once did, of course, and objectivism of one kind or another, whether a refurbished old-fashioned moral realism, or varieties of idealized constructivism, has been respectable in ethical theory for decades. Anderson takes this for granted, insofar as she speaks of the bidirectional relationship between facts and values, and suggests that “value judgments function like empirical hypotheses” (11). So a possible response to her thesis from at least some critics might be that her argument presupposes cognitivism about values, and it would not go through, or would have much more difficulty in going through, if cognitivism were false. Today, of course, many adherents of the ideal of value-free inquiry would be cognitivists also, but at least some unreconstructed positivists who remain convinced of the dubiousness of moral properties, might simply dig in their heels on that point, and insist that moral and political values are doubly “noncognitive.”

2. But consider now a critique from, so to speak, the opposite direction: people who are cognitivists about moral and political values, and who even accept much of Anderson’s argument that value judgments need not be dogmatic and can function like empirical hypotheses, but endorse nonetheless the value-free ideal. They might argue that different versions of the positivist thesis need to be distinguished, and that while Anderson’s logical and conceptual points, and empirical case study, constitute a successful refutation of the strong version, they do not refute weaker versions. Consider the following five alternatives:

(a) Value-commitment (of any kind) necessarily leads to bad scientific practice.
(b) Value-commitment (of any kind) is significantly more likely/somewhat more likely to lead to bad scientific practice.
(c) Value-commitment (where the values are good) sometimes does (and sometimes does not) lead to good scientific practice.
(d) Value-commitment (where the values are good) is significantly more likely/somewhat more likely to lead to good scientific practice.
(e) Value-commitment (where the values are good) necessarily leads to good scientific practice.

Now obviously (a), which asserts an ineluctable connection between value-commitment and bad scientific practice, is the strongest possible statement of the positivist thesis (short of conceptual identity: value-committed science just is, as a
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matter of definition, bad scientific practice). Suppose we take Anderson to have refuted (a). What has she established, as a positive thesis? Presumably she is not committed to the correspondingly strong, and correspondingly implausible, (e) (after all, people can hold values dogmatically), but she obviously takes herself to be saying more than the wishy-washy (c). So I suggest that what she is really asserting is (d), whether in weaker or stronger form. But then the question is this: if the positivist retreats to (b), or perhaps says she really meant (b) in the first place and that (a) is a misrepresentation of her views, does Anderson’s refutation go through as is, or would it have to be supplemented by other kinds of arguments and other kinds of data? In other words, the positivist could acknowledge the force of Anderson’s aprioristic logical and conceptual points, and admire the protocols of her case study, while still insisting (b), that on the whole, value-commitment is more likely (or much more likely) to have a negative than a positive effect on inquiry, and should be eschewed for that reason.

Now how can this debate—probabilistic rather than conceptual—be resolved? I suggest that (at least) two main kinds of considerations can be adduced as evidential supports: actual examples from the history of science, and inductive generalizations both therefrom and from (somewhat) more theoretically-backed claims from cognitive science. In the first category, of course, the positivist will be able to enumerate a long list of horror stories: the history of “scientific” racism and sexism (by no means over), Lysenkoism in the Soviet Union (“proletarian” science), South African leader Thabo Mbeki’s refusal to accept Western diagnoses of the cause of AIDS, claims by some Afrocentrists (not all, I emphasize) about pre-colonial African achievements that go far beyond the historical evidence, and so forth. Moreover, many of these views, as with racism and sexism, were, of course, not remotely limited to the academy, but shared by hundreds of millions of people. The positivist will argue that this disastrous record demonstrates that while Anderson’s logical and conceptual points are all very well in theory, in practice the result is likely to be somewhat different. Anderson will reply, of course, that for at least some of these examples (pre-eminently scientific racism and sexism) the horror stories vindicate her thesis rather than the positivist’s, since the problem was not value-commitment as such, but commitment to values that were themselves undermining of the scientific enterprise (the corollary of (d)). But the question is how to establish this, given that retrospective accounts can with some plausibility be read either way.

And here, perhaps, cognitive science and naturalized epistemology—to which feminists like Anderson are generally sympathetic—may be called upon by the positivist to support the point that in resolving this debate, we need to focus not on the idealized cognizers of abstract epistemology and philosophy of science, but on real-life, deeply fallible human cognizers, prone to characteristic ways of getting things wrong. If values and value judgments should not be separated by a conceptual firewall from empirical statements and hypotheses, but integrated into the Quinean web of belief, they are (it might be claimed) nonetheless crucially differentiated in generally being closer to the center, and being far more likely to be held dogmatically. (So the whole framework of the argument shifts from the modal—what necessarily follows epistemically—to weaker, but still substantive claims about likely cognitive patterns and asymmetrical directions of influence.) Anderson cites the example of the “Millions of people in Eastern Europe, once dedicated communists, [who] were disillusioned of it when they found out what living under communism was like” (8). But in a sense this is a stacked example: after all, there could be nothing more potent than the direct experience of oppression, and the frosty depths of Stalinism—the world of mass purges, deportations, and killings, of show trials and secret police—were such as to shatter all illusions for its victims. Communist cognition was not operating in an
entirely closed and self-validating epistemic universe, but, it might be argued, it took far longer than it should have to see the truth, precisely because of this aprioristic commitment to a left-wing analysis. If it takes mass killings to tell you that something is wrong, is there not something problematic about your methodology?

And what about the millions of communists outside the Soviet Union—with this direct experience, but with access to newspapers and books about it—who were able to suppress their doubts and continue to believe for decades? The positivist will concede that “value judgments needn’t be held in these [dogmatic] ways” (8), but will claim that, because of the peculiar nature of values and their intimate link with people’s self-image and life-projects, they are more likely to be held in these ways, and so to be not in principle “unrevisable,” but definitely less amenable to correction by the factual evidence. (When the value judgments are linked with social subordination—to class, gender, and racial ressentiment—they may well be even more antithetical to objective scientific inquiry because of being imbued with self-righteous anger, and a perception that any criticism represents the adversarial theoretical defenses of the oppressing group.)

So the claim would not be a logical or conceptual one, but an empirical generalization (possibly underpinned theoretically by findings from cognitive science). The basis would not be definitions of science, but plausible assumptions about human psychology, our tendency to self-deception, our remarkable capacities for ignoring what we do not want to see, and so forth; all those issues summed up in the analytic tradition by the phrase “motivated irrationality.”

4. Finally, Anderson seems to imply that all the sciences, without qualification, would benefit from feminist (and presumably other kinds of anti-oppression) value commitment, and writes in her concluding paragraph: “Thus, ethical inquiry and scientific inquiry are of a piece” (23). Now admittedly, the work of feminist theorists has opened our eyes to the astonishing extent to which even the most seemingly neutral and innocuous categories and conceptual framings are biased by gender. The pervasiveness of the gender-structuring of human life seems to affect all social spheres. Yet, even if the social sciences can persuasively be argued to be subject to this ubiquitous bias, and be

3. A similar point can be made about emotions. One can agree with Anderson that emotional experiences can have cognitive content, be independent of what they are evidence for, and be defeasible (9-10), while still being skeptical that they will generally be reliable enough to guide cognition in the desirable ways. Think again of the untold millions of men who have had sexist beliefs through the ages, and that much smaller but still huge number of whites (given the comparative historic recency of race and racism) who have had racist beliefs in the past few hundred years. Do we have any reason to assume that they did not have a rich emotional life? Yet for whatever reason, emotions tracking the wrongness of the practices in which they were engaged were obviously for the most part either absent, or drowned by other emotions, or fused into affective complexes in such a fashion that overall they did not “make salient” (9) the oppressiveness for their victims of the structures of patriarchy and white supremacy. And though the emotions of the oppressed—when they have not adjusted to that oppression, which of course happens all the time—may be reliable as indicating the brute fact of oppression, they may well not be reliable in locating the fine-grained details of that oppression objectively, manifesting themselves instead in an undifferentiated hatred of men and whites, and a correspondingly inverted sexism and racism that simply turn upside-down the conceptual framework of the hegemonic group.
correspondingly depicted as appropriately to be reformed by feminist recommendations, can the same really be said of all the natural sciences? Anthropology, insofar as it deals with human beings, is the obvious candidate (and feminist anthropologists have indeed done illuminating work there), and also certain sections of biology. But what about subjects like, say, chemistry, physics, geology, astronomy, cosmology? Can a convincing case really be made that the investigation of their subject matter also has been affected by gender bias? Admittedly, in the modern period their findings were sometimes “political” in the sense of challenging the precepts of established religion (“The solar system is heliocentric, not geocentric”; “The earth is more than 6000 years old”). But surely the crucial “values” here are the cognitive ones (empirical adequacy, consistency, scope, etc.), marshalled against tradition, the Bible, and the ecclesiastical authority of Vatican-sanctioned dogmatism, rather than ethical and political values in the sense demarcated by Anderson. And what about the non-empirical sciences such as mathematics, topology, solid geometry? Can even this attenuated connection be found here? In her closing sentence, Anderson makes the very strong claim that “the active direction of scientific inquiry by value judgments is not only legitimate, but indispensable” (23). How would feminist values, or any other politically progressive values, play an “indispensable” role in the case of these subjects? So it might be that the range of the thesis needs to be limited to certain kinds of sciences, and in certain areas, rather than being generalized without qualification to all.

So, to repeat, while I am completely in sympathy with Anderson’s thesis, these are some of the objections that I think would be raised to it, and some of the qualifications that might need to be entered in her formulation of it.