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### “Strong Objectivity” and Socially Situated Knowledge

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In the preceding chapter I argued that a feminist standpoint theory can direct the production of less partial and less distorted beliefs. This kind of scientific process will not merely acknowledge the social-situatedness—the historicity—of the very best beliefs any culture has arrived at or could in principle “discover” but will use this fact as a resource for generating those beliefs.<sup>1</sup> Nevertheless, it still might be thought that this association of objectivity with socially situated knowledge is an impossible combination. Has feminist standpoint theory really abandoned objectivity and embraced relativism? Or, alternatively, has it remained too firmly entrenched in a destructive objectivism that increasingly is criticized from many quarters?

#### *The Declining Status of “Objectivism”*

Scientists and science theorists working in many different disciplinary and policy projects have objected to the conventional notion of a value-free, impartial, dispassionate objectivity that is supposed to guide scientific research and without which, according to conventional thought, one cannot separate justified belief from mere opinion, or real knowledge from mere claims to knowledge. From the perspective of this conventional notion of objectivity—sometimes referred to as “objec-

1. See Donna Haraway, “Situated Knowledges: *The Science Question in Feminism* and the Privilege of Partial Perspective,” *Feminist Studies* 14:3 (1988).

tivism”—it has appeared that if one gives up this concept, the only alternative is not just a cultural relativism (the sociological assertion that what is thought to be a reasonable claim in one society or sub-culture is not thought to be so in another) but, worse, a judgmental or epistemological relativism that denies the possibility of any reasonable standards for adjudicating between competing claims. Some fear that to give up the possibility of one universally and eternally valid standard of judgment is perhaps even to be left with no way to argue rationally against the possibility that *each person's* judgment about the regularities of nature and their underlying causal tendencies must be regarded as equally valid. The reduction of the critic's position to such an absurdity provides a powerful incentive to question no further the conventional idea that objectivity requires value-neutrality. From the perspective of objectivism, judgmental relativism appears to be the only alternative.

Insistence on this division of epistemological stances between those that firmly support value-free objectivity and those that support judgmental relativism—a dichotomy that unfortunately has gained the consent of many critics of objectivism as well as its defenders—has succeeded in making value-free objectivity look much more attractive to natural and social scientists than it should. It also makes judgmental relativism appear far more progressive than it is. Some critics of the conventional notion of objectivity have openly welcomed judgmental relativism.<sup>2</sup> Others have been willing to tolerate it as the cost they think they must pay for admitting the practical ineffectualness, the proliferation of confusing conceptual contradictions, and the political regressiveness that follow from trying to achieve an objectivity that has been defined in terms of value-neutrality. But even if embracing judgmental relativism could make sense in anthropology and other social sciences, it appears absurd as an epistemological stance in physics or biology. What would it mean to assert that no reasonable standards can or could in principle be found for adjudicating between one culture's claim that the earth is flat and another culture's claim that the earth is round?

The literature on these topics from the 1970s and 1980s alone is huge and located in many disciplines. Prior to the 1960s the issue was

2. See, e.g., David Bloor, *Knowledge and Social Imagery* (London: Routledge & Kegan Paul, 1977); and many of the papers in *Knowledge and Reflexivity*, ed. Steve Woolgar (Beverly Hills, Calif.: Sage, 1988).

primarily one of ethical and cultural absolutism versus relativism. It was the concern primarily of philosophers and anthropologists and was considered relevant only to the social sciences, not the natural sciences. But since then, the recognition has emerged that cognitive, scientific, and epistemic absolutism are both implicated in ethical and cultural issues and are also independently problematic. One incentive to the expansion was Thomas Kuhn's account of how the natural sciences have developed in response to what scientists have found "interesting," together with the subsequent post-Kuhnian philosophy and social studies of the natural sciences.<sup>3</sup> Another has been the widely recognized failure of the social sciences to ground themselves in methods and theoretical commitments that can share in the scientificity of the natural sciences. Paradoxically, the more "scientific" social research becomes, the less objective it becomes.<sup>4</sup>

Further incentives have been such political tendencies as the U.S. civil rights movement, the rise of the women's movement, the decentering of the West and criticisms of Eurocentrism in international circles, and the increasing prominence within U.S. political and intellectual life of the voices of women and of African Americans and other people of Third World descent. From these perspectives, it appears increasingly arrogant for defenders of the West's intellectual traditions to continue to dismiss the scientific and epistemological stances of Others as caused mainly by biological inferiority, ignorance, underdevelopment, primitiveness, and the like. On the other hand, although diversity, pluralism, relativism, and difference have their valuable political and intellectual uses, embracing them resolves the political-scientific-epistemological conflict to almost no one's satisfaction.

I make no attempt here to summarize the arguments of these numerous and diverse writings.<sup>5</sup> My concern is more narrowly focused: to

3. Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

4. This is an important theme in Richard Bernstein, *Beyond Objectivism and Relativism* (Philadelphia: University of Pennsylvania Press, 1983). Similar doubts about the ability of legal notions of objectivity to advance justice appear in many of the essays in "Women in Legal Education: Pedagogy, Law, Theory, and Practice," *Journal of Legal Education* 38 (1988), special issue, ed. Carrie Menkel-Meadow, Martha Minow, and David Vernon.

5. Discussions on one or more of these focuses can be found in Martin Hollis and Steven Lukes, eds., *Rationality and Relativism* (Cambridge, Mass: Harvard University Press, 1982); Michael Krausz and Jack Meiland, eds., *Relativism: Cognitive and Moral*

state as clearly as possible how issues of objectivity and relativism appear from the perspective of a feminist standpoint theory.

Feminist critics of science and the standpoint theorists especially have been interpreted as supporting either an excessive commitment to value-free objectivity or, alternatively, the abandonment of objectivity in favor of relativism. Because there are clear commitments within feminism to tell less partial and distorted stories about women, men, nature, and social relations, some critics have assumed that feminism must be committed to value-neutral objectivity. Like other feminists, however, the standpoint theorists have also criticized conventional sciences for their arrogance in assuming that they could tell one true story about a world that is out there, ready-made for their reporting, without listening to women's accounts or being aware that accounts of nature and social relations have been constructed within men's control of gender relations. Moreover, feminist thought and politics as a whole are continually revising the ways they bring women's voices and the perspectives from women's lives to knowledge-seeking, and they are full of conflicts between the claims made by different groups of feminists. How could feminists in good conscience do anything but abandon any agenda to legitimate one over another of these perspectives? Many feminists in literature, the arts, and the humanities are even more resistant than those in the natural and social sciences to claims that feminist images or representations of the world hold any special epistemological or scientific status. Such policing of thought is exactly what they have objected to in criticizing the authority of their disciplinary canons on the grounds that such authority has had the effect of stifling the voices of marginalized groups. In ignoring these views, feminist epistemologists who are concerned with natural or social science agendas appear to support an epistemological divide between the

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(Notre Dame, Ind.: University of Notre Dame Press, 1982); Richard Bernstein, *Beyond Objectivism*; and S. P. Mohanty, "Us and Them: On the Philosophical Bases of Political Criticism," *Yale Journal of Criticism* 2:2 (1989). A good brief bibliographic essay on the recent philosophy of science within and against which the particular discussion of this chapter is located is Steve Fuller, "The Philosophy of Science since Kuhn: Readings on the Revolution That Has Yet to Come," *Choice*, December 1989. For more extended studies that are not incompatible with my arguments here, see Steve Fuller, *Social Epistemology* (Bloomington: Indiana University Press, 1988); and Joseph Rouse, *Knowledge and Power: Toward a Political Philosophy of Science* (Ithaca: Cornell University Press, 1987).

sciences and humanities, a divide that feminism has elsewhere criticized.

The arguments of this book move away from the fruitless and depressing choice between value-neutral objectivity and judgmental relativism. The last chapter stressed the greater objectivity that can be and has been claimed to result from grounding research in women's lives. This chapter draws on some assumptions underlying the analyses of earlier chapters in order to argue that the conventional notion of objectivity against which feminist criticisms have been raised should be regarded as excessively weak. A feminist standpoint epistemology requires strengthened standards of objectivity. The standpoint epistemologies call for recognition of a historical or sociological or cultural relativism—but not for a judgmental or epistemological relativism. They call for the acknowledgment that all human beliefs—including our best scientific beliefs—are socially situated, but they also require a critical evaluation to determine which social situations tend to generate the most objective knowledge claims. They require, as judgmental relativism does not, a scientific account of the relationships between historically located belief and maximally objective belief. So they demand what I shall call *strong objectivity* in contrast to the weak objectivity of objectivism and its mirror-linked twin, judgmental relativism. This may appear to be circular reasoning—to call for scientifically examining the social location of scientific claims—but if so, it is at least not viciously circular.<sup>6</sup>

This chapter also considers two possible objections to the argument presented, one that may arise from scientists and philosophers of science, and another that may arise among feminist themselves.

6. Additional writings informing this chapter include esp. Haraway, "Situated Knowledges"; Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989); Jane Flax, *Thinking Fragments: Psychoanalysis, Feminism, and Postmodernism in the Contemporary West* (Berkeley: University of California Press, 1990); and the writings of standpoint theorists themselves, esp. Nancy Hartsock, "The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism," in *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology, and Philosophy of Science*, ed. Sandra Harding and Merrill Hintikka (Dordrecht: Reidel, 1983); Dorothy Smith, *The Everyday World as Problematic: A Feminist Sociology* (Boston: Northeastern University Press, 1987); Hilary Rose, "Hand, Brain, and Heart: A Feminist Epistemology for the Natural Sciences," *Signs* 9:1 (1983); Patricia Hill Collins, "Learning from the Outsider Within: The Sociological Significance of Black Feminist Thought," *Social Problems* 33 (1986)—though each of these theorists would no doubt disagree with various aspects of my argument.

### *Objectivism’s Weak Conception of Objectivity*

The term “objectivism” is useful for the purposes of my argument because its echoes of “scientism” draw attention to ways in which the research prescriptions called for by a value-free objectivity only mimic the purported style of the most successful scientific practices without managing to produce their effects. Objectivism results only in semi-science when it turns away from the task of critically identifying all those broad, historical social desires, interests, and values that have shaped the agendas, contents, and results of the sciences much as they shape the rest of human affairs. Objectivism encourages only a partial and distorted explanation of why the great moments in the history of the natural and social sciences have occurred.

Let me be more precise in identifying the weaknesses of this notion. It has been conceptualized both too narrowly and too broadly to be able to accomplish the goals that its defenders claim it is intended to satisfy. Taken at face value it is ineffectively conceptualized, but this is what makes the sciences that adopt weak standards of objectivity so effective socially: objectivist justifications of science are useful to dominant groups that, consciously or not, do not really intend to “play fair” anyway. Its internally contradictory character gives it a kind of flexibility and adaptability that would be unavailable to a coherently characterized notion.

Consider, first, how objectivism operationalizes too narrowly the notion of maximizing objectivity. The conception of value-free, impartial, dispassionate research is supposed to direct the identification of all social values and their elimination from the results of research, yet it has been operationalized to identify and eliminate *only* those social values and interests that differ among the researchers and critics who are regarded by the scientific community as competent to make such judgments. If the community of “qualified” researchers and critics systematically excludes, for example, all African Americans and women of all races, and if the larger culture is stratified by race and gender and lacks powerful critiques of this stratification, it is not plausible to imagine that racist and sexist interests and values would be identified within a community of scientists composed entirely of people who benefit—intentionally or not—from institutional racism and sexism.

This kind of blindness is advanced by the conventional belief that the truly scientific part of knowledge-seeking—the part controlled by methods of research—is only in the context of justification. The con-

text of discovery, where problems are identified as appropriate for scientific investigation, hypotheses are formulated, key concepts are defined—this part of the scientific process is thought to be unexaminable within science by rational methods. Thus “real science” is restricted to those processes controllable by methodological rules. The methods of science—or, rather, of the special sciences—are restricted to procedures for the testing of already formulated hypotheses. Untouched by these careful methods are those values and interests entrenched in the very statement of what problem is to be researched and in the concepts favored in the hypotheses that are to be tested. Recent histories of science are full of cases in which broad social assumptions stood little chance of identification or elimination through the very best research procedures of the day.<sup>7</sup> Thus objectivism operationalizes the notion of objectivity in much too narrow a way to permit the achievement of the value-free research that is supposed to be its outcome.

But objectivism also conceptualizes the desired value-neutrality of objectivity too broadly. Objectivists claim that objectivity requires the elimination of *all* social values and interests from the research process and the results of research. It is clear, however, that not all social values and interests have the same bad effects upon the results of research. Some have systematically generated less partial and distorted beliefs than others—or than purportedly value-free research—as earlier chapters have argued.

Nor is this so outlandish an understanding of the history of science as objectivists frequently intimate. Setting the scene for his study of nineteenth-century biological determinism, Stephen Jay Gould says:

I do not intend to contrast evil determinists who stray from the path of scientific objectivity with enlightened antideterminists who approach

7. This is the theme of many feminist, left, and antiracist analyses of biology and social sciences. See, e.g., Anne Fausto-Sterling, *Myths of Gender: Biological Theories about Women and Men* (New York: Basic Books, 1985); Stephen Jay Gould, *The Mismeasure of Man* (New York: Norton, 1981); Robert V. Guthrie, *Even the Rat Was White: A Historical View of Psychology* (New York: Harper & Row, 1976); Haraway, *Primate Visions*; Sandra Harding, ed., *Feminism and Methodology: Social Science Issues* (Bloomington: Indiana University Press, 1987); Joyce Ladner, ed., *The Death of White Sociology* (New York: Random House, 1973); Hilary Rose and Steven Rose, eds., *Ideology of/in the Natural Sciences* (Cambridge, Mass.: Schenkman, 1979); Londa Schiebinger, *The Mind Has No Sex: Women in the Origins of Modern Science* (Cambridge, Mass.: Harvard University Press, 1989).

data with an open mind and therefore see truth. Rather, I criticize the myth that science itself is an objective enterprise, done properly only when scientists can shuck the constraints of their culture and view the world as it really is. . . . Science, since people must do it, is a socially embedded activity. It progresses by hunch, vision, and intuition. Much of its change through time does not record a closer approach to absolute truth, but the alteration of cultural contexts that influence it so strongly.<sup>8</sup>

Other historians agree with Gould.<sup>9</sup> Modern science has again and again been reconstructed by a set of interests and values—distinctively Western, bourgeois, and patriarchal—which were originally formulated by a new social group that intentionally used the new sciences in their struggles against the Catholic Church and feudal state. These interests and values had both positive and negative consequences for the development of the sciences.<sup>10</sup> Political and social interests are not “add-ons” to an otherwise transcendental science that is inherently indifferent to human society; scientific beliefs, practices, institutions, histories, and problematics are constituted in and through contemporary political and social projects, and always have been. It would be far more startling to discover a kind of human knowledge-seeking whose products could—alone among all human products—defy historical “gravity” and fly off the earth, escaping entirely their historical location. Such a cultural phenomenon would be cause for scientific alarm; it would appear to defy principles of “material” causality upon which the possibility of scientific activity itself is based.<sup>11</sup>

Of course, people in different societies arrive at many of the same empirical claims. Farmers, toolmakers, and child tenders in every culture must arrive at similar “facts” about nature and social relations if their work is to succeed. Many of the observations collected by medieval European astronomers are preserved in the data used by

8. Gould, *Mismeasure of Man*, 21–22.

9. E.g., William Leiss, *The Domination of Nature* (Boston: Beacon Press, 1972); Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: Harper & Row, 1980); Wolfgang Van den Daele, “The Social Construction of Science,” in *The Social Production of Scientific Knowledge*, ed. Everett Mendelsohn, Peter Weingart, and Richard Whitley (Dordrecht: Reidel, 1977).

10. The usefulness of such political movements to the growth of knowledge in the sciences is discussed in Chapter 3.

11. See Chapter 4. Rouse, *Knowledge and Power*, provides a good analysis of the implications for science of Foucauldian notions of politics and power.



astronomers today. But what “facts” these data refer to, what further research they point to, what theoretical statements they support and how such theories are to be applied, what such data signify in terms of human social relations and relations to nature—all these parts of the sciences can differ wildly, as the contrast between medieval and contemporary astronomy illustrates.

There are yet deeper ways in which political values permeate modern science. For even relatively conservative tendencies in the post-Kuhnian philosophies of science, the sciences’ power to manipulate the world is considered the mark of their success. The “new empiricism” contrasts in this respect with conventional empiricism. As Joseph Rouse puts the point:

If we take the new empiricism seriously, it forces us to reappraise the relation between power and knowledge in a more radical way. The central issue is no longer how scientific claims can be distorted or suppressed by polemic, propaganda, or ideology. Rather, we must look at what was earlier described as the achievement of power through the application of knowledge. But the new empiricism also challenges the adequacy of this description in terms of “application.” The received view distinguishes the achievement of knowledge from its subsequent application, from which this kind of power is supposed to derive. New empiricist accounts of science make this distinction less tenable by shifting the locus of knowledge from accurate representation to successful manipulation and control of events. Power is no longer external to knowledge or opposed to it: power itself becomes the mark of knowledge.<sup>12</sup>

The best as well as the worst of the history of the natural sciences has been shaped by—or, more accurately, constructed through and within—political desires, interests, and values. Consequently, there appear to be no grounds left from which to defend the claim that the objectivity of research is advanced by the elimination of all political values and interests from the research process. Instead, the sciences need to legitimate *within scientific research*, as part of practicing science, crit-

12. Rouse, *Knowledge and Power*, 19. Among the “new empiricist” works that Rouse has in mind are Larry Laudan, *Progress and Its Problems: Toward a Theory of Scientific Growth* (Berkeley: University of California Press, 1977); Mary Hesse, *Revolutions and Reconstructions in the Philosophy of Science* (Bloomington: University of Indiana Press, 1980); Nancy Cartwright, *How the Laws of Physics Lie* (Oxford: Oxford University Press, 1983).

ical examination of historical values and interests that may be so shared within the scientific community, so invested in by the very constitution of this or that field of study, that they will not show up as a cultural bias between experimenters or between research communities. What objectivism cannot conceptualize is the need for critical examination of the “intentionality of nature”—meaning not that nature is no different from humans (in having intentions, desires, interests, and values or in constructing its own meaningful “way of life,” and so on) but that nature as-the-object-of-human-knowledge never comes to us “naked”; it comes only as already constituted in social thought.<sup>13</sup> Nature-as-object-of-study simulates in this respect an intentional being. This idea helps counter the intuitively seductive idea that scientific claims are and should be an epiphenomenon of nature. It is the development of strategies to generate just such critical examination that the notion of strong objectivity calls for.

Not everyone will welcome such a project; even those who share these criticisms of objectivism may think the call for strong objectivity too idealistic, too utopian, not realistic enough. But is it more unrealistic than trying to explain the regularities of nature and their underlying causal tendencies scientifically but refusing to examine *all* their causes? And even if the ideal of identifying all the causes of human beliefs is rarely if ever achievable, why not hold it as a desirable standard? Anti-litter laws improve social life even if they are not always obeyed.<sup>14</sup>

Weak objectivity, then, is a contradictory notion, and its contradictory character is largely responsible for its usefulness and its widespread appeal to dominant groups. It offers hope that scientists and science institutions, themselves admittedly historically located, can produce claims that will be regarded as objectively valid without their having to examine critically their own historical commitments, from which—intentionally or not—they actively construct their scientific research. It permits scientists and science institutions to be unconcerned with the origins or consequences of their problematics and practices, or with the social values and interests that these problematics and practices support. It offers the possibility of enacting what Francis

13. See Haraway, *Primate Visions*, esp. chap. 10, for analysis of differences between the Anglo-American, Japanese, and Indian constructions of “nature” which shape the objects of study in primatology.

14. Fuller uses the anti-litter law example in another context in *Social Epistemology*.

Bacon promised: "The course I propose for the discovery of sciences is such as leaves but little to the acuteness and strength of wits, but places all wits and understandings nearly on a level." His "way of discovering sciences goes far to level men's wits, and leaves but little to individual excellence; because it performs everything by surest rules and demonstrations."<sup>15</sup>

For those powerful forces in society that want to appropriate science and knowledge for their own purposes, it is extremely valuable to be able to support the idea that ignoring the constitution of science within political desires, values, and interests will somehow increase the reliability of accounts of nature and social life. The ideal of the disinterested rational scientist advances the self-interest of both social elites and, ironically, scientists who seek status and power. Reporting on various field studies of scientific work, Steve Fuller points out that Machiavellian judgments

simulate those of the fabled "rational" scientist, since in order for the Machiavellian to maximize his advantage he must be ready to switch research programs when he detects a change in the balance of credibility—which is, after all, what philosophers of science would typically have the rational scientist do. To put the point more strikingly, it would seem that as the scientist's motivation approximates total *self-interest* (such that he is always able to distance his own interests from those of any social group which supports what may turn out to be a research program with diminishing credibility), his behavior approximates total *disinterestedness*. And so we can imagine the ultimate Machiavellian scientist pursuing a line of research frowned upon by most groups in the society—perhaps determining the racial component in intelligence is an example—simply because he knows of its potential for influencing the course of future research and hence for enhancing his credibility as a scientist.<sup>16</sup>

The history of science shows that research directed by maximally liberatory social interests and values tends to be better equipped to identify partial claims and distorting assumptions, even though the credibility of the scientists who do it may not be enhanced during the short run. After all, antiliberatory interests and values are invested in the natural inferiority of just the groups of humans who, if given real equal access

15. Quoted in Van den Daele, "Social Construction of Science," 34.

16. Fuller, *Social Epistemology*, 267.

(not just the formally equal access that is liberalism's goal) to public voice, would most strongly contest claims about their purported natural inferiority. Antiliberatory interests and values silence and destroy the most likely sources of evidence against their own claims. That is what makes them rational for elites.

### *Strong Objectivity: A Competency Concept*

At this point, what I mean by a concept of strong objectivity should be clear. In an important sense, our cultures have agendas and make assumptions that we as individuals cannot easily detect. Theoretically unmediated experience, that aspect of a group's or an individual's experience in which cultural influences cannot be detected, functions as part of the evidence for scientific claims. Cultural agendas and assumptions are part of the background assumptions and auxiliary hypotheses that philosophers have identified. If the goal is to make available for critical scrutiny *all* the evidence marshaled for or against a scientific hypothesis, then this evidence too requires critical examination *within* scientific research processes. In other words, we can think of strong objectivity as extending the notion of scientific research to include systematic examination of such powerful background beliefs. It must do so in order to be competent at maximizing objectivity.

The strong objectivity that standpoint theory requires is like the "strong programme" in the sociology of knowledge in that it directs us to provide symmetrical accounts of both "good" and "bad" belief formation and legitimation.<sup>17</sup> We must be able to identify the social causes of good beliefs, not just of the bad ones to which the conventional "sociology of error" and objectivism restrict causal accounts. However, in contrast to the "strong programme," standpoint theory requires causal analyses not just of the micro processes in the laboratory but also of the macro tendencies in the social order, which shape scientific practices. Moreover, a concern with macro tendencies permits a more robust notion of reflexivity than is currently available in the sociology of knowledge or the philosophy of science. In trying to identify the social causes of good beliefs, we will be led also to examine

17. I use "good" and "bad" here to stand for "true" and "false," "better confirmed" and "less well confirmed," "plausible" and "implausible," and so on.

critically the kinds of bad beliefs that shape our own thought and behaviors, not just the thought and behavior of others.

To summarize the argument of the last chapter, in a society structured by gender hierarchy, “starting thought from women’s lives” increases the objectivity of the results of research by bringing scientific observation and the perception of the need for explanation to bear on assumptions and practices that appear natural or unremarkable from the perspective of the lives of men in the dominant groups. Thinking from the perspective of women’s lives makes strange what had appeared familiar, which is the beginning of any scientific inquiry.<sup>18</sup>

Why is this gender difference a scientific resource? It leads us to ask questions about nature and social relations from the perspective of devalued and neglected lives. Doing so begins research in the perspective from the lives of “strangers” who have been excluded from the culture’s ways of socializing the “natives,” who are at home in its institutions and who are full-fledged citizens. It starts research in the perspective from the lives of the systematically oppressed, exploited, and dominated, those who have fewer interests in ignorance about how the social order actually works. It begins research in the perspective from the lives of people on the “other side” of gender battles, offering a view different from the “winner’s stories” about nature and social life which men’s interpretations of men’s lives tend to produce. It starts thought in everyday life, for which women are assigned primary responsibility and in which appear consequences of dominant group activities—consequences that are invisible from the perspective of those activities. It starts thought in the lives of those people to whom is assigned the work of mediating many of the culture’s ideological dualisms—especially the gap between nature and culture. It starts research in the lives not just of strangers or outsiders but of “outsiders within,” from which the relationship between outside and inside, margin and center, can more easily be detected. It starts thought in the perspective from the life of the Other, allowing the Other to gaze back “shamelessly” at the self who had reserved for himself the right to gaze “anonymously” at whomsoever he chooses. It starts thought in the lives of people who are unlikely to permit the denial of the interpretive

18. As emphasized in Chapters 5 and 7, starting thought from women’s lives is something that both men and women must *learn* to do. Women’s telling their experiences is not the same thing as thinking from the perspective of women’s lives.

core of all knowledge claims. It starts thought in the perspective from lives that at this moment in history are especially revealing of broad social contradictions. And no doubt there are additional ways in which thinking from the perspective of women’s lives is especially revealing of regularities in nature and social relations and their underlying causal tendencies.

As analyzed further in Part III, it is important to remember that in a certain sense there are no “women” or “men” in the world—there is no “gender”—but only women, men, and gender constructed through particular historical struggles over just which races, classes, sexualities, cultures, religious groups, and so forth, will have access to resources and power. Moreover, standpoint theories of knowledge, whether or not they are articulated as such, have been advanced by thinkers concerned not only with gender and class hierarchy (recollect that standpoint theory originated in class analyses) but also with other “Others.”<sup>19</sup> To make sense of any actual woman’s life or the gender relations in any culture, analyses must begin in real, historic women’s lives, and these will be women of particular races, classes, cultures, and sexualities. The historical particularity of women’s lives is a problem for narcissistic or arrogant accounts that attempt, consciously or not, to conduct a cultural monologue. But it is a resource for those who think that our understandings and explanations are improved by what we could call an intellectual participatory democracy.

The notion of strong objectivity welds together the strengths of weak objectivity and those of the “weak subjectivity” that is its correlate, but excludes the features that make them only weak. To enact or operationalize the directive of strong objectivity is to value the Other’s perspective and to pass over in thought into the social condition that creates it—not in order to stay there, to “go native” or merge the self with the Other, but in order to look back at the self in all its cultural particularity from a more distant, critical, objectifying location. One

19. See, e.g., Samir Amin, *Eurocentrism* (New York: Monthly Review Press, 1989); Bettina Aptheker, *Tapestries of Life: Women’s Work, Women’s Consciousness, and the Meaning of Daily Life* (Amherst: University of Massachusetts Press, 1989); Collins, “Learning from the Outsider Within”; Walter Rodney, *How Europe Underdeveloped Africa* (Washington, D.C.: Howard University Press, 1982); Edward Said, *Orientalism* (New York: Pantheon Books, 1978); Edward Said, Foreword to *Selected Subaltern Studies*, ed. Ranajit Guha and Gayatri Chakravorty Spivak (New York: Oxford University Press, 1988), viii.

can think of the subjectivism that objectivism conceptualizes as its sole alternative as only a “premodern” alternative to objectivism; it provides only a premodern solution to the problem *we* have here and now at the moment of postmodern criticisms of modernity’s objectivism. Strong objectivity rejects attempts to resuscitate those organic, occult, “participating consciousness” relationships between self and Other which are characteristic of the premodern world.<sup>20</sup> Strong objectivity requires that we investigate the relation between subject and object rather than deny the existence of, or seek unilateral control over, this relation.

### *Historical Relativism versus Judgmental Relativism*

It is not that historical relativism is in itself a bad thing. A respect for historical (or sociological or cultural) relativism is always useful in starting one’s thinking. Different social groups tend to have different patterns of practice and belief and different standards for judging them; these practices, beliefs, and standards can be explained by different historical interests, values, and agendas. Appreciation of these empirical regularities are especially important at this moment of unusually deep and extensive social change, when even preconceived schemes used in liberatory projects are likely to exclude less-well-positioned voices and to distort emerging ways of thinking that do not fit easily into older schemes. Listening carefully to different voices and attending thoughtfully to others’ values and interests can enlarge our vision and begin to correct for inevitable ethnocentrism. (The dominant values, interests, and voices are not among these “different” ones; they are the powerful tide against which “difference” must swim.)

To acknowledge this historical or sociological fact, as I have already argued, does not commit one to the further epistemological claim that there are therefore no rational or scientific grounds for making judgments between various patterns of belief and their originating social practices, values, and consequences. Many thinkers have pointed out that judgmental relativism is internally related to objectivism. For ex-

20. See Morris Berman, *The Reenchantment of the World* (Ithaca: Cornell University Press, 1981), for an analysis of the world that modernity lost, and lost for good. Some feminists have tried to dismantle modernist projects with premodernist tools.

ample, science historian Donna Haraway argues that judgmental relativism is the other side of the very same coin from “the God trick” required by what I have called weak objectivity. To insist that no judgments at all of cognitive adequacy can legitimately be made amounts to the same thing as to insist that knowledge can be produced only from “no place at all”: that is, by someone who can be every place at once.<sup>21</sup> Critical preoccupation with judgmental relativism is the logical complement to the judgmental absolutism characteristic of Eurocentrism. Economist Samir Amin criticizes the preoccupation with relativism in some Western intellectual circles as a kind of “inverted Eurocentrism”:

The view that any person has the right—and even the power—to judge others is replaced by attention to the relativity of those judgments. Without a doubt, such judgments can be erroneous, superficial, hasty, or relative. No case is ever definitely closed; debate always continues. But that is precisely the point. It is necessary to pursue debate and not to avoid it on the grounds that the views that anyone forms about others are and always will be false: that the French will never understand the Chinese (and vice versa), that men will never understand women, etc; or, in other words, that there is no human species, but only “people.” Instead, the claim is made that only Europeans can truly understand Europe, Chinese China, Christians Christianity, and Moslems Islam; the Eurocentrism of one group is completed by the inverted Eurocentrism of others.<sup>22</sup>

Historically, relativism appears as a problematic intellectual possibility only for dominating groups at the point where the hegemony of their views is being challenged. Though the recognition that other cultures do, in fact, hold different belief, values, and standards of judgment is as old as human history, judgmental relativism emerged as an urgent intellectual issue only in nineteenth-century Europe, with the belated recognition that the apparently bizarre beliefs and behaviors of Others had a rationality and logic of their own. Judgmental relativism

21. Haraway, “Situated Knowledges” makes these points and uses the phrase “the God trick.”

22. Amin, *Eurocentrism*, 146–47. Amin further makes clear that it takes more than mere debate—i.e., only intellectual work—to come to understand the lives or point of view of “people” who are on trajectories that oppose one’s own in political struggles. The following paragraph draws on “Introduction: Is There a Feminist Method?” in *Feminism and Methodology*, p. 10.



is not a problem originating in or justifiable in terms of the lives of marginalized groups. It did not arise in misogynous thought about women; it does not arise from the contrast feminism makes between women's lives and men's. Women do not have the problem of how to accommodate intellectually both the sexist claim that women are inferior in some way or another and the feminist claim that they are not. Here relativism arises as a problem only from the perspective of men's lives. Some men want to appear to acknowledge and accept feminist arguments without actually giving up any of their conventional androcentric beliefs and the practices that seem to follow so reasonably from such beliefs. "It's all relative, my dear," is a convenient way to try to accomplish these two goals.

We feminists in higher education may have appeared to invite charges of relativism in our language about disseminating the results of feminist research and scholarship beyond women's studies programs into the entire curriculum and canon. We speak of "mainstreaming" and "integrating" the research, scholarship, and curriculum of Other programs and of encouraging "inclusiveness" in scholarship and the curriculum. We enroll our women's studies courses in campuswide projects to promote "cultural diversity" and "multiculturalism," and we accept students into such courses on these terms. Do these projects conflict with the standpoint logic? Yes and no. They conflict because the notions involved are perfectly coherent with the maintenance of elitist knowledge production and systems. Let me make the point in terms of my racial identity as white. "They (those people of color at the margins of the social order) are to be integrated with us (whites at the center), leaving us unchanged and the rightful heirs of the center of the culture. They are to give up their agendas and interests that conflict with ours in order to insert their contributions into the research, scholarship, or curriculum that has been structured to accommodate our agendas and interests." This is just as arrogant a posture as the older cultural absolutism. From the perspective of racial minorities, integration has never worked as a solution to ethnic or race relations in the United States. Why is there reason to think it will work any better for the marginalized projects in intellectual circles?

Should we therefore give up attempts at an "inclusive curriculum" and "cultural diversity" because of their possible complicity with sexism, racism, Eurocentrism, heterosexism, and class oppression? Of course the answer must be no. It is true that this kind of language

appears to betray the compelling insights of the standpoint epistemology and to leave feminist programs in the compromised position of supporting the continued centering of white, Western, patriarchal visions. But many feminist projects—including women’s studies programs themselves—are forced to occupy whatever niches they can find within institutional structures that are fundamentally opposed to them or, at least, “prefeminist.” An implicit acceptance of pluralism, if not judgmental relativism—at least at the institutional level—appears to be the only condition under which women’s voices and feminist voices, male and female, can be heard at all.

After all, isn’t feminism just one “equal voice” among many competing for everyone’s attention? The nineteenth-century “natives” whose beliefs and behaviors Europeans found bizarre were not in any real sense competing for an equal voice within European thought and politics. They were safely off in Africa, the Orient, and other faraway places. The chances were low that aborigines would arrive in Paris, London, and Berlin to study and report back to their own cultures the bizarre beliefs and behaviors that constituted the “tribal life” of European anthropologists and *their* culture. More important, there was no risk at all that they could have used such knowledge to assist in imposing their rule on Europeans in Europe. Women’s voices, while certainly far from silent, were far more effectively contained and muted than is possible today. As a value, a moral prescription, relativism was a safe stance for Europeans to choose; the reciprocity of respect it appeared to support had little chance of having to be enacted. Today, women and feminists are not safely off and out of sight at all. They are present, speaking, within the very social order that still treats women’s beliefs and behaviors as bizarre. Moreover, their speech competes for attention and status as most plausible not only with that of misogynists but also with the speech of other Others: African Americans, other peoples of color, gay rights activists, pacifists, ecologists, members of new formations of the left, and so on. Isn’t feminism forced to embrace relativism by its condition of being just one among many countercultural voices?

This description of the terrain in which feminists struggle to advance their claims, however, assumes that people must either choose only one among these countercultures as providing an absolute standard for sorting knowledge claims, or else regard all of them as competing and assign them equal cognitive status. Actually, it is a different scenario

that the countercultures can envision and even occasionally already enact: the fundamental tendencies of each must permeate each of the others in order for each movement to succeed. Feminism should center the concerns of each of these movements, and each of them must move feminist concerns to its center.

To summarize, then, a strong notion of objectivity requires a commitment to acknowledge the historical character of every belief or set of beliefs—a commitment to cultural, sociological, historical relativism. But it also requires that judgmental or epistemological relativism be rejected. Weak objectivity is located in a conceptual interdependency that includes (weak) subjectivity and judgmental relativism. One cannot simply give up weak objectivity without making adjustments throughout the rest of this epistemological system.

### *Responding to Objections*

Two possible objections to the recommendation of a stronger standard for objectivity must be considered here. First, some scientists and philosophers of science may protest that I am attempting to specify standards of objectivity for all the sciences. What could it mean to attempt to specify *general* standards for increasing the objectivity of research? Shouldn't the task of determining what counts as adequate research be settled within each science by its own practitioners? Why should practicing scientists revise their research practices because of what is thought by a philosopher or anyone else who is not an expert in a particular science?

But the issue of this chapter is an epistemological issue—a meta-scientific one—rather than an issue within any single science. It is more like a directive to operationalize theoretical concepts than like a directive to operationalize in a certain way some particular theoretical notion within physics or biology. The recommended combination of strong objectivity with the acknowledgment of historical relativism would, if adopted, create a culturewide shift in the kind of epistemology regarded as desirable. Certainly, strategies for enacting commitments to strong objectivity and the acknowledgment of historical relativism would have to be developed within each particular research program; plenty of examples already exist in biology and the social sciences. My position is that the natural sciences are backward in this

respect; they are not immune from the reasonableness of these directives, as conventionalists have assumed.

The notion of strong objectivity developed here represents insights that have been emerging from thinkers in a number of disciplines for some decades—not just “wishful thinking” based on no empirical sciences at all. Criticisms of the dominant thought of the West from both inside and outside the West argue that its partiality and distortions are the consequence in large part of starting that thought only from the lives of the dominant groups in the West. Less partiality and less distortion result when thought starts from peasant life, not just aristocratic life; from slaves’ lives, not just slaveowners’ lives; from the lives of factory workers, not just those of their bosses and managers; from the lives of people who work for wages and have also been assigned responsibility for husband and child care, not just those of persons who are expected to have little such responsibility. This directive leaves open to be determined within each discipline or research area what a researcher must do to start thought from women’s lives or the lives of people in other marginalized groups, and it will be easier—though still difficult—to provide reasonable responses to such a request in history or sociology than in physics or chemistry. But the difficulty of providing an analysis in physics or chemistry does not signify that the question is an absurd one for knowledge-seeking in general, or that there are no reasonable answers for those sciences too.

The second objection may come from feminists themselves. Many would say that the notion of objectivity is so hopelessly tainted by its historical complicity in justifying the service of science to the dominant groups that trying to make it function effectively and progressively in alternative agendas only confuses the matter. If feminists want to breathe new life into such a bedraggled notion as objectivity, why not at least invent an alternative term that does not call up the offenses associated with the idea of value-neutrality, that is not intimately tied to a faulty theory of representation, to a faulty psychic construction of the ideal agent of knowledge, and to regressive political tendencies.

Let us reorganize some points made earlier in order to get the full force of this objection. The goal of producing results of research that are value-free is part of the notion of the ideal mind as a mirror that can reflect a world that is “out there,” ready-made (see Chapter 4). In this view, value-free objectivity can locate an Archimedean perspective from which the events and processes of the natural world appear in

their proper places. Only false beliefs have social causes—human values and interests that blind us to the real regularities and underlying causal tendencies in the world, generating biased results of research. True beliefs have only natural causes: those regularities and underlying causal tendencies that are *there*, plus the power of the eyes to see them and of the mind to reason about them. This theory of representation is a historically situated one: it is characteristic only of certain groups in the modern West. Can the notion of objectivity really be separated from this implausible theory of representation?

Value-free objectivity requires also a faulty theory of the ideal agent—the subject—of science, knowledge, and history. It requires a notion of the self as a fortress that must be defended against polluting influences from its social surroundings. The self whose mind would perfectly reflect the world must create and constantly police the borders of a gulf, a no-man's-land, between himself as the subject and the object of his research, knowledge, or action. Feminists have been among the most pointed critics of this self-versus-Other construct,<sup>23</sup> referring to it as “abstract masculinity.”<sup>24</sup> Moreover, its implication in Western constructions of the racial Other against which the “white” West would define its admirable projects is also obvious.<sup>25</sup> Can the notion of objectivity be useful in efforts to oppose such sexism and racism?

Equally important, the notion of value-free objectivity is morally and politically regressive for reasons additional to those already mentioned. It justifies the construction of science institutions and individual scientists as “fast guns for hire.” It has been used to legitimate and hold up as the highest ideal institutions and individuals that are, insofar as they are scientific, to be studiously unconcerned with the

23. See, e.g., Nancy Chodorow, *The Reproduction of Mothering* (Berkeley: University of California Press, 1978); Dorothy Dinnerstein, *The Mermaid and the Minotaur: Sexual Arrangements and Human Malaise* (New York: Harper & Row, 1976); Carol Gilligan, *In a Different Voice: Psychological Theory and Women's Development* (Cambridge, Mass.: Harvard University Press, 1982); Evelyn Fox Keller, *Reflections on Gender and Science* (New Haven, Conn.: Yale University Press, 1984).

24. Hartsock, “The Feminist Standpoint.”

25. See, e.g., Sander Gilman, *Difference and Pathology: Stereotypes of Sexuality, Race, and Madness* (Ithaca: Cornell University Press, 1985); V. Y. Mudimbe, *The Invention of Africa: Gnosis, Philosophy, and the Order of Knowledge* (Bloomington: Indiana University Press, 1988); Said, *Orientalism*, and Foreword to Guha and Spivak, *Subaltern Studies*.

origins or consequences of their activities or with the values and interests that these activities advance. This nonaccidental, determined, energetic lack of concern is supported by science education that excludes training in critical thought and that treats all expressions of social and political concern—the concerns of the torturer and the concerns of the tortured—as being on the same low level of scientific “rationality.” Scandalous examples of the institutional impotence of the sciences as sciences to speak to the moral and political issues that shape their problematics, consequences, values, and interests have been identified for decades (see Chapter 4). The construction of a border between scientific method and violations of human and, increasingly, animal rights must be conducted “outside” that method, by government statements about what constitutes acceptable methods of research on human and animal subjects, what constitutes consent to experimentation, the subsequent formation of “ethics committees,” and so on. Can the notion of objectivity be extracted from the morals and politics of “objective science” as a “fast gun for hire”?

These are formidable objections. Nevertheless, the argument of this book is that the notion of objectivity not only can but should be separated from its shameful and damaging history. Research is socially situated, and it can be more objectively conducted without aiming for or claiming to be value-free. The requirements for achieving strong objectivity permit one to abandon notions of perfect, mirrorlike representations of the world, the self as a defended fortress, and the “truly scientific” as disinterested with regard to morals and politics, yet still apply rational standards to sorting less from more partial and distorted belief. Indeed, my argument is that these standards are more rational and more effective at producing maximally objective results than the ones associated with what I have called weak objectivity.

As I have been arguing, objectivity is one of a complex of inextricably linked notions. Science and rationality are two other terms in this network. But it is not necessary to accept the idea that there is only one correct or reasonable way to think about these terms, let alone that the correct way is the one used by dominant groups in the modern West. Not all reason is white, masculinist, modern, heterosexual, Western reason. Not all modes of rigorous empirical knowledge-seeking are what the dominant groups think of as science—to understate the point. The procedures institutionalized in conventional science for distinguishing between how we want the world to be and how it is are not

the only or best ways to go about maximizing objectivity. It is important to work and think outside the dominant modes, as the minority movements have done. But it is important, also, to bring the insights developed there into the heart of conventional institutions, to disrupt the dominant practices from within by appropriating notions such as objectivity, reason, and science in ways that stand a chance of compelling reasoned assent while simultaneously shifting and displacing the meanings and referents of the discussion in ways that improve it. It is by thinking and acting as “outsiders within” that feminists and others can transform science and its social relations for those who remain only insiders or outsiders.

One cannot afford to “just say no” to objectivity. I think there are three additional good reasons to retain the notion of objectivity for future knowledge-seeking projects but to work at separating it from its damaging historical associations with value-neutrality.

First, it has a valuable political history. There have to be standards for distinguishing between how I want the world to be and how, in empirical fact, it is. Otherwise, might makes right in knowledge-seeking just as it tends to do in morals and politics. The notion of objectivity is useful because its meaning and history support such standards. Today, as in the past, there are powerful interests ranged against attempts to find out the regularities and underlying causal tendencies in the natural and social worlds. Some groups do not want exposed to public scrutiny the effect on the environment of agribusiness or of pesticide use in domestic gardening. Some do not want discussed the consequences for Third World peasants, for the black underclass in the United States, and especially for women in both groups of the insistence on economic production that generates profit for elites in the West. The notion of achieving greater objectivity has been useful in the past and can be today in struggles over holding people and institutions responsible for the fit between their behavior and the claims they make.

Second, objectivity also can claim a glorious intellectual history. The argument of this chapter has emphasized its service to elites, but it also has been invoked to justify unpopular criticisms of partisan but entrenched beliefs. Standpoint theory can rightfully claim that history as its legacy.

Finally, the appeal to objectivity is an issue not only between feminist and prefeminist sciences but within each feminist and other emancipatory movement. There are many feminisms, some of which result

in claims that distort the racial, class, sexuality, and gender relationships in society. Which ones generate less and which more partial and distorted accounts of nature and social life? The notion of objectivity is useful in providing a way to think about the gap we want between how any individual or group wants the world to be and how in fact it is.

The notion of objectivity—like such ideas as science and rationality, democracy and feminism—contains progressive as well as regressive tendencies. In each case, it is important to develop the progressive and to block the regressive ones.

### *Reflexivity Revisited*

The notion of “strong objectivity” conceptualizes the value of putting the subject or agent of knowledge in the same critical, causal plane as the object of her or his inquiry. It permits us to see the scientific as well as the moral and political advantages of this way of trying to achieve a reciprocal relationship between the agent and object of knowledge. The contrast developed here between weak and strong notions of objectivity permits the parallel construction of weak versus strong notions of reflexivity.

Reflexivity has tended to be seen as a problem in the social sciences—and only there. Observation cannot be as separated from its social consequences as the directives of “weak objectivity,” originating in the natural sciences, have assumed. In social inquiry, observation changes the field observed. Having recognized his complicity in the lives of his objects of study, the researcher is then supposed to devise various strategies to try to democratize the situation, to inform the “natives” of their options, to make them participants in the account of their activities, and so forth.<sup>26</sup>

26. A fine account of the travails of such a project reports Robert Blauner and David Wellman’s dawning recognition that nothing they did could eliminate the colonial relationship between themselves and their black informants in the community surrounding Berkeley; see their “Toward the Decolonization of Social Research,” in Ladner, *The Death of White Sociology*. Economist Vernon Dixon argues that from the perspective of an African or African American world view, the idea that observation would not change the thing observed appears ridiculous; see his “World Views and Research Methodology,” in *African Philosophy: Assumptions and Paradigms for Research on Black Persons*, ed. L. M. King, Vernon Dixon, and W. W. Nobles (Los Angeles: Fanon Center,



Less commonly, reflexivity has been seen as a problem because if the researcher is under the obligation to identify the social causes of the “best” as well as the “worst” beliefs and behaviors of those he studies, then he must also analyze his own beliefs and behaviors in conducting his research project—which have been shaped by the same kinds of social relations that he is interested to identify as causes of the beliefs and behaviors of others. (Here, reflexivity can begin to be conceptualized as a “problem” for the natural sciences, too.) Sociologists of knowledge in the recent “strong programme” school and related tendencies, who emphasize the importance of identifying the social causes of “best belief,” have been aware of this problem from the very beginning but have devised no plausible way of resolving it—primarily because their conception of the social causes of belief in the natural sciences (the subject matter of their analyses) is artificially restricted to the micro processes of the laboratory and research community, explicitly excluding race, gender, and class relations. This restricted notion of what constitutes appropriate subject matter for analyses of the social relations of the sciences is carried into their understanding of their own work. It generates ethnographies of their own and the natural science communities which are complicitous with positivist tendencies in insisting on the isolation of research communities from the larger social, economic, and political currents in their societies. (These accounts are also flawed by their positivist conceptions of the object of natural science study).<sup>27</sup>

These “weak” notions of reflexivity are disabled by their lack of any mechanism for identifying the cultural values and interests of the researchers, which form part of the evidence for the results of research in both the natural and social sciences. Anthropologists, sociologists, and the like, who work within social communities, frequently appear to desire such a mechanism or standard; but the methodological assumptions of their disciplines, which direct them to embrace either weak objectivity or judgmental relativism, have not permitted them to develop one. That is, individuals express “heartfelt desire” not to harm the

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Charles R. Drew Postgraduate Medical School, 1976), and my discussion of the congruence between African and feminine world views in *The Science Question in Feminism* (Ithaca: Cornell University Press, 1986), chap. 7.

27. See, e.g., Bloor, *Knowledge and Social Imagery*; and Steve Woolgar’s nevertheless interesting paper, “Reflexivity Is the Ethnographer of the Text,” as well as other (somewhat bizarre) discussions of reflexivity in Woolgar, *Knowledge and Reflexivity*.

subjects they observe, to become aware of their own cultural biases, and so on, but such reflexive goals remain at the level of desire rather than competent enactment. In short, such weak reflexivity has no possible operationalization, or no competency standard, for success.

A notion of strong reflexivity would require that the objects of inquiry be conceptualized as gazing back in all their cultural particularity and that the researcher, through theory and methods, stand behind them, gazing back at his own socially situated research project in all its cultural particularity and its relationships to other projects of his culture—many of which (policy development in international relations, for example, or industrial expansion) can be seen only from locations far away from the scientist’s actual daily work.<sup>28</sup> “Strong reflexivity” requires the development of oppositional theory from the perspective of the lives of those Others (“nature” as already socially constructed, as well as other peoples), since intuitive experience, for reasons discussed earlier, is frequently not a reliable guide to the regularities of nature and social life and their underlying causal tendencies.

Standpoint theory opens the way to stronger standards of both objectivity and reflexivity. These standards require that research projects use their historical location as a resource for obtaining greater objectivity.

28. This notion is developed more fully in Chapter 11.