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"STRONG OBJECTIVITY": A RESPONSE TO THE NEW OBJECTIVITY QUESTION

ABSTRACT. Where the old "objectivity question" asked, "Objectivity or relativism: which side are you on?", the new one refuses this choice, seeking instead to bypass widely recognized problems with the conceptual framework that restricts the choices to these two. It asks, "How can the notion of objectivity be updated and made useful for contemporary knowledge-seeking projects?" One response to this question is the "strong objectivity" program that draws on feminist standpoint epistemology to provide a kind of logic of discovery for maximizing our ability to block "might makes right" in the sciences. It does so by delinking the neutrality ideal from standards for maximizing objectivity, since neutrality is now widely recognized as not only not necessary, not only not helpful, but, worst of all, an obstacle to maximizing objectivity when knowledge-distorting interests and values have constituted a research project. Strong objectivity provides a method for correcting this kind of situation. However, standpoint approaches have their own limitations which are quite different from the misreadings of them upon which most critics have tended to focus. Unfortunately, historically limited epistemologies and philosophies of science are all we get to choose from at this moment in history.

1. SCIENCE, SOCIETY AND THE NEW "OBJECTIVITY QUESTION"

Increasing skepticism about Enlightenment assumptions has raised fundamental challenges to philosophies of science. As the North's (the West's) status and projects in global social relations have changed, so too have scientific culture and practices, including scholarly and popular perceptions of the nature, history and value of modern sciences and their philosophies.

For almost four decades now, leading philosophers of science have pointed to the inadequacies of the older, self-confident logics of scientific explanation, and they have been joined in the last few decades by feminist and postcolonial intellectuals, among others. Observations are theory-laden; our beliefs form a network such that none are in principle immune from revision; theories are underdetermined by any possible set of evidence for them. In short, there is enough slack in scientific belief sorting to permit social values and interests fully to permeate these processes and their results. This slack turns out to be not a defect but a resource for the growth of scientific knowledge; it permits more than one theory to fit any set of observations, more than one interpretation of any theory to be reasonable, and, consequently, the growth of science in ever new directions (van Fraassen and Sigman 1993). Interpretive methods earlier found useful primarily in the humanities and social sciences increasingly are providing resources for philosophies, histories, and social studies of natural sciences. Consequently, few thinkers today are quite as confident as heretofore concerning such central Enlightenment assumptions as the possibility of glassy mirror minds, the uniquely describable rational order of the universe, and the potentially good fit between the two.

One consequence of such skepticism appears in the shift from the old to the new objectivity question. The old one asked, "Objectivity or relativism: which side are you on?"¹ The new one is still directed toward many of the concerns of those posing the older question: Which of competing grounds for claims about nature and social relations should we prefer? How can we block "might makes right" in the realm of knowledge production? How can we systematically identify widespread cultural assumptions about both nature and social relations that have distorted so much of what heretofore has passed as universally valid scientific knowledge? However, the new objectivity question takes the status and underlying assumptions of the old one also to be one of its problems. It asks what should be rejected and what saved of the older objectivism?² How can the notion of objectivity be modernized (postmodernized?) so that it is more useful for contemporary attempts to understand nature and social relations?

2. OBJECTIVITY: AN ESSENTIALLY CONTESTED CONCEPT?

Philosophers may well think that now is none too soon to define what objectivity is for the purposes of this discussion. However, I want to resist this urge. One problem is that the term has no single reference in prevailing discussions. Objectivity, or the incapacity for it, has been attributed to individuals, or groups of them, as in, "Women (or feminists, marxists, environmentalists, Blacks, welfare recipients, patients, etc.) are more emotional, less impartial, less capable of objective judgments." Second, it has been attributed to knowledge claims, where it does not seem to add anything to the assertion that a claim is better supported by evidence than its competitors. Third, objectivity is also attributed to methods or procedures that are fair: statistical, or experimental, or repeated procedures are more objective because they maximize standardization, impersonality or some other quality assumed to contribute to fairness. Fourth, objectivity is attributed to certain kinds of knowledge-seeking communities – in Kuhn's account, the kind characteristic of modern science (Kuhn 1970); in other

accounts, communities of experts, or ones that include (or exclude!) members of different classes, races and/or genders, or that maximize adversarial relations of rigorous criticism of ideas and claims, or that maximize ideal speech conditions, etc. Though distinct, these different referents of 'objective' clearly are not totally independent of each other in people's thinking. Most obviously, the other three should generate results of research that are better supported by evidence; that is, that are less false.³

But noting these four distinct references for the term is only the beginning of mapping its convoluted outlines. I cannot take space to continue that mapping here, but refer readers instead to two recent, highly-acclaimed histories of the notion. In one of them, Peter Novick shows that objectivity

is not a single idea, but rather a sprawling collection of assumptions, attitudes, aspirations and antipathies. At best it is what the philosopher W. B. Gallie has called an "essentially contested concept," like "social justice" or "leading a Christian life," the exact meaning of which will always be in dispute. (Novick 1988, p. 1)

Some elements in the notion originate in Aristotle's thought, others have arisen in the last few decades. However, "older usages remain powerful", (ibid. p. 2) and are called up today whenever people are struggling to determine the place that science, or more generally reason, should have in society. As Robert Proctor, the author of the other history, puts the point about the neutrality ideal that both he and Novick see as historically always required of anything deserving the label 'objective', "The ideal of valueneutrality is not a single notion, but has arisen in the course of protracted struggles over the place that science should have in society" (Proctor 1991, p. 262).

Both Novick and Proctor point out that asserting objectivity sometimes has been used to advance and sometimes to retard the growth of knowledge, and the same can be said of assertions of relativism. Thus neither position automatically claims the scientific or rational high-ground. Nor does either assure the political high-ground: each has been used at some times to block social justice and at other times to advance it. As Proctor puts the point, neutrality, the central requirement of the conventional notion, has been used as "myth, mask, shield and sword" (Proctor 1991, p. 262).

My concerns here are primarily with scientific methods. They arise from widespread criticisms in feminist, anti-racist, postcolonial, environmental and other movements for social justice that systematically distorted results of research in the natural and social sciences are the consequence not only of carelessness and inadequate rigor in following existing methods and norms for maximizing objectivity in research practices, but also of inadequacies in how those methods and norms are conceptualized. The prevailing standards for good procedures for maximizing objectivity are *too weak* to be able to identify such culture-wide assumptions as androcentric or Eurocentric ones.

Here I explore one line of response to the new objectivity question – the program for "strong objectivity" that draws on standpoint epistemologies to provide a kind of method for maximizing our ability to block "might makes right" in the sciences. Maximizing objectivity is not identical to maximizing neutrality, as conventional understandings have assumed. Nor, I argue, does it always require it; in a certain range of cases, maximizing neutrality is an obstacle to maximizing objectivity. Though developed as such in feminist theory, central insights of this kind of epistemology/philosophy of science have been expressed far more broadly. This is so in spite of its clear limitations, which, I shall conclude by showing, are significant, but are not those due to the misreadings of it upon which most critics have tended to focus, and which I address in Section 5.

3. WEAK OBJECTIVITY, OR WHEN IS NEUTRALITY AN OBSTACLE TO MAXIMIZING OBJECTIVITY?

In some ways, the fate of science parallels that of bourgeois democracy: both were born as exuberant forces for liberation against feudalism, but their very successes have turned them into caricatures of their youth. The bold, antiauthoritarian stance of science has become docile acquiescence; the free battle of ideas has given way to a monopoly vested in those who control the resources for research and publication. Free access to scientific information has been diminished by military and commercial secrecy and by the barriers of technical jargon; in the commoditization of science, peer review is replaced by satisfaction of the client as the test of quality. The internal mechanisms for maintaining objectivity are, at their best - in the absence of sycophancy toward those with prestige, professional jealousies, narrow cliques, and national provincialism - able to nullify individual capricious errors and biases, but they reinforce the shared biases of the scientific community. The demand for objectivity, the separation of observation and reporting from the researchers' wishes, which is so essential for the development of science, becomes the demand for separation of thinking from feeling. This promotes moral detachment in scientists which, reinforced by specialization and bureaucratization, allows them to work on all sorts of dangerous and harmful projects with indifference to the human consequences. The idealized egalitarianism of a community of scholars has shown itself to be a rigid hierarchy of scientific authorities integrated into the general class structure of the society and modeled on the corporation. And where the pursuit of truth has survived, it has become increasingly narrow, revealing a growing contradiction between the sophistication of science in the small within the laboratory and the irrationality of the scientific enterprise as a whole. (Levins and Lewontin 1993, pp. 315-316)

Two Politics of Science⁴

Has the philosophy of science conceptualized either politics or maximizing objectivity richly enough to meet the kind of widespread criticisms of

contemporary sciences and their philosophy represented in this passage by two distinguished biologists? One problem is that the kinds of politics that most threaten the objectivity of science these days escape conceptualization in leading philosophies of science.

There are two kinds of politics with which the philosophies of science must be concerned. One kind is the older notion of politics as the overt actions and policies intended to advance the interests and agendas of socalled special interest groups. This kind of politics intrudes into "pure science" through consciously chosen and often clearly articulated actions and programs that shape what science gets done, how the results of research are interpreted, and, therefore, scientific as well as popular images of nature and social relations. This kind of politics is conceptualized as acting on the sciences from outside, as politicizing a science that was otherwise free of politics - or, at least, of that particular politics. This is the kind of relationship between politics and science against which the ideal of objectivity as neutrality – objectivism – works best, though not perfectly, as Levins and Lewontin point out. It makes sense to think of these interests and values as, paradigmatically, intruding into science from outside it and as held by less than (sometimes none of) the group of individuals who constitute legitimate members of the scientific community. In at least many cases, it also is plausible to think of these interests and values as an obstacle to the growth of knowledge. Nazi science, Lysenkoism, or creationist biology are the kinds of examples of such threats to the neutrality of science by political "irrationalism" that the defenders of objectivism have in mind. They do not have in mind the "intrusion" into sciences of forces for maximizing objectivity and enlarging democratic tendencies; any and all "politics" are made to appear equally pernicious to the growth of scientific knowledge.

However, sciences are also always shaped by a different kind of politics. Here power is exercised less visibly, less consciously, and *not on but through* the dominant institutional structures, priorities, research strategies, technologies, and languages of the sciences – through the practice and culture that constitute a particular scientific episode (Pickering 1992; Rouse 1987; Shapin and Schaffer 1985). Paradoxically, this kind of politics functions through the depoliticization of science – through the creation of "normal" or authoritarian science. Thus a typical standard example that the neutrality enthusiasts cite to demonstrate the bad effects of politicizing science (and they are not wrong about this) can also, paradoxically, be understood as a paradigmatic example of the bad effects of depoliticizing science. It is certainly true that, in one important sense, the Nazis sought to politicize the sciences Yet in an important sense the Nazis might indeed be said to have "depoliticized" science (and many other areas of culture). The Nazis depoliticized science by destroying the possibility of political debate and controversy. Authoritarian science based on the "Fuhrer principle" replaced what had been, in the Weimar period, a vigorous spirit of politicized debate in and around the sciences. The Nazis "depoliticized" problems of vital human interest by reducing these to scientific or medical problems, conceived in the narrow, reductionist sense of these terms. The Nazis depoliticized questions of crime, poverty, and sexual or political deviance by casting them in surgical or otherwise medical (and seemingly apolitical) terms ... politics pursued in the name of science or health provided a powerful weapon in the Nazi ideological arsenal. (Proctor 1988, pp. 290, 293)

The institutionalized, normalized politics of male supremacy, class exploitation, racism and Eurocentrism, while only rarely initiated through the kind of violent politics practiced by the Nazis, similarly authoritarianly depoliticize Western scientific institutions and practices, thereby shaping our images of the natural and social worlds and legitimating past and future exploitative public policies. Thus feminist critics have focussed on how gender-coded concepts of the scientist, objectivity, rationality, mechanistic models, "master molecule" models, etc., escape standard procedures for producing value-neutrality because they have in the first place constituted the scientific institutions and practices which select neutrality-detecting procedures (e.g., Bordo 1987; Keller 1985; Lloyd 1984; Merchant 1980). In contrast to "intrusive politics", this kind of institutional politics does not force itself into pre-existing purportedly pure sciences; it already constitutes their natures and projects.

I have focussed here on the kinds of "normal science" authority that have especially interested feminists, but the new histories and anthropologies of science are full of examples of how state-of-the-art modern sciences draw on local cultural resources. They are all "ethnosciences" one might say after reading such accounts (e.g., Haraway 1989; Harding 1994, forthcoming; Latour 1988; Pickering 1984, 1992). This evaluation is reinforced when one notes that Joseph Needham's histories of the sciences of China (Needham 1969) have been followed by contemporary postcolonial critics who point to the constitution of European sciences through distinctively European assumptions and projects (Goonatilake 1984; Harding 1993a; Nandy 1990; Petitjean et al. 1992; Sardar 1988). Thus the feminist arguments are just one version of this now widespread analysis.

Neutrality: From Solution to Problem

In this second case, where the social *constitutes* scientific projects, the neutrality ideal provides no resistance to the production of systematically distorted results of research, as I shall shortly show in more detail. But to put the matter this way is too mild a criticism of it. It is not just useless in these

circumstances; worse, it becomes part of the problem. Objectivism defends and legitimates the institutions and practices through which the distortions and their often exploitative consequences are generated. It certifies as value-neutral, normal, natural, and therefore not political at all the policies and practices through which powerful groups can gain the information and explanations that they need to advance their priorities.

Such information and explanations may well "work" in the sense of enabling prediction and control. However, this obvious fact does not end the matter. One form of explanation may at the same time obscure or draw attention away from other regularities and their causes that would suggest other possibilities for organizing nature and social relations. One can get information about nature's order that makes possible building bigger bombs or performing lobotomies, or other information that makes possible the equitable distribution of means to satisfy basic human needs for food, shelter, health, work and just social relations. Moreover, the regularities of nature that make possible healing a body, charting the stars, or mining ores may be explained in ways permitting extensive (though not identical) prediction and control within radically different and even conflicting, culturally local, explanatory models. The kinds of explanations favored by modern science have not always been the most effective ones for all projects - for example, for achieving environmental balance or preventing chronic bodily malfunctions. "It works" is no guarantee of cultural neutrality,

The neutrality ideal functions more through what its normalizing procedures and concepts implicitly prioritize than through explicit directives. This kind of politics requires no informed consent by those who exercise it, but only that scientists be "company men" (and women), following the prevailing rules of scientific institutions and their intellectual traditions. This normalizing politics frequently defines the objections of its victims and any criticisms of its institutions, practices, or conceptual world as agitation by special interests that threatens to damage the neutrality of science and its "civilizing mission", as an earlier generation saw the matter. Thus, when sciences are already in the service of the mighty, scientific neutrality ensures that "might makes right".

It is many decades since it has been reasonable to think of modern natural and social sciences as small-scale, weak, guerilla warriors for truth, struggling courageously against the evil empires of ignorance and superstition – Davids against the Goliaths. We need a concept of objectivity, and methods for maximizing it, that enable scientific projects to escape containment by the interests and values of the kinds of powerful social tendencies identified by Levins and Lewontin. Objectivism can't do it. Such an analysis leads to one obvious possibility: to separate the goal of maximizing objectivity from the neutrality requirement in order to identify the knowledge-limiting values and interests that constitute projects in the first place. This possibility has been hinted at again and again in the literature without ever being formulated as a systematic program.

"Weak Objectivity" Cannot Identify Paradigms

From the perspective of this more comprehensive analysis of how politics can shape sciences, the conventional notion of objectivity that links it to the neutrality ideal appears too weak to do what it sets out to do. That it is too weak is only one thing wrong with it. But I use the term to acknowledge the usefulness of standards for objectivity-tied-to-neutrality in detecting the subset of distorting interests and values that do differ between individuals in the scientific community.

It is method that is supposed to "operationalize" neutrality and thus achieve objectivist standards; but method is conceptualized too narrowly to permit achievement of this goal. For one thing, method – in the sense in which students take methods courses or a research report describes its methods – is conceptualized as functioning only in the context of justification.⁵ It comes into play only after a problem is identified as a scientific one, after central concepts, a hypothesis and research design have already been selected. It is only after a research project is already *constituted* that methods of research, in the usual narrow sense of the term, start up. Moreover, the availability of a research technology that was itself selected in earlier contexts of discovery and found productive frequently helps select which scientific problems will be interesting to scientists and to funders.

However, as critic after critic has pointed out, it is in the context of discovery that culture-wide assumptions shape the very statement and design of the research project, and therefore select the methods. Of course in the "mangle of practice" (Pickering 1991) during scientific research, hypotheses, nature, and research technologies are adjusted to each other such that a certain element of objectivity is produced without the promise of total neutrality. Nature constrains our beliefs without uniquely confirming them. The most science can hope for is results that are *consistent* with "how nature is", not ones that are uniquely *coherent* with it, as the objectivist goal intended (Hayles 1992). Even the U.S. National Academy of Sciences – certainly not a den of wild-eyed radicals – now argues that the notion of research method should be enlarged beyond its familiar meaning of techniques to

include the judgments scientists make about interpretation or reliability of data, ... the decisions scientists make about which problems to pursue or when to conclude an investigation, ... the ways scientists work with each other and exchange information. (Nat. Acad. Sci. 1989, pp. 5–6)

Thus, methods for maximizing objectivism have no way of detecting values and interests that first constitute scientific problems, and then select central concepts, hypotheses to be tested, and research designs.

Let us approach the issue another way. One point of repeating observations, through experimental or other techniques, is so that variations in the results of observations can be scrutinized for the traces of social interests and values that would distort the image of nature and social relations produced by science. Any community that is a community, including the community of a laboratory or discipline as well as other kinds of cultural communities, shares values and interests. But if all observers share a particular value or interest, whether this arrives from the larger society or is developed in the group of legitimated observers, how is the repetition of observations by these like-minded people supposed to reveal it? It is not individual, personal, "subjective" error to which feminist and other social critics of science have drawn attention, but widely held androcentric, Eurocentric and bourgeois assumptions that have been virtually culture-wide across the culture of science. The assumptions of Ptolemaic astronomy, Aristotelian physics, or of an organicist world view were not fundamentally properties of individuals. Assumptions that women's biology, moral reason, intelligence, contributions to human evolution, or to history or present day social relations are inferior to men's are not idiosyncratically held beliefs of individual "subjects" but widespread assumptions of entire cultures. These assumptions have constituted whole fields of study, selecting their preoccupying problems, favored concepts, hypotheses and research designs; these fields have in turn lent support to male supremacist assumptions in other fields. The issue is not that individual men (and women) hold false beliefs, but that the conceptual structures of disciplines, their institutions, and related social policies make less than maximally objective assumptions.

In reflecting on how so much scientific racism and sexism could be produced by the most distinguished – and, in some cases, politically progressive – nineteenth century scientists, historian of biology Stephen Jay Gould puts the point this way:

I do not intend to contrast evil determinists who stray from the path of scientific objectivity with enlightened antideterminists who approach 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. (Gould 1981, pp. 21-22)

When a scientific community shares assumptions, there is little chance that more careful application of existing scientific methods will detect them.⁶

Moreover, Gould's reflection makes clear that not all cultural interests and values ("contexts") retard the growth of knowledge. Some advance it, he is saying: science has often progressed because of changes in its cultural contexts. So it is problematic that objectivism is supposed to enable the elimination of *all* social values and interests. Weak objectivity is unable to discriminate between those interests and values that enlarge our understanding and those that limit it.

Are Relativism and/or Moral Exhortations the Only Alternatives?

The preceding section has identified some of the main features that make objectivism only "weak objectivity". When confronted with such issues, one apparent solution has been to turn to objectivism's other, relativism (or subjectivism), sometimes with a resignation that undermines both the critiques of objectivism and turn to relativism; at other times with the project of transforming relativism into a useful epistemological tool.⁷ Excellent arguments both against objectivism and for relativism or subjectivism have been put forth by those who turn to this strategy. Without examining them further, we can nevertheless see one great disadvantage that they have: relativism is the weak term in the objective/relative pair. Since, as the historians pointed out, appeals to these epistemological notions are primarily made as part of political struggles to claim this or that position for science in society, the weak term is unlikely to be attractive for these engagements. Moreover, one cause of this weakness may well be that all alternatives to the neutrality of objectivism have been symbolized as feminine. Cultural definitions of manliness are at issue in turning away from objectivity-as-neutrality.8

Yet another response has been to retain the neutrality criterion for maximizing objectivity, but to settle for moral exhortations that natural and social scientists should be more critical and that they should engage in dialogue with those protesting their exclusion from scientific authority. It is better to have such moral gestures than not, but feminism and the other democracy-advancing social movements want and need more than this. Why should women feel all that optimistic that the very groups whose interests and values were constituting distorting research projects in the first place will want or know how to be more critical or engage in dialogue? So where might one find a *method* for maximizing objectivity that has the resources to detect (a) values and interests that constitute scientific projects, (b) ones that do not vary between legitimated observers, and (c) the difference between those values and interests that enlarge and those that limit our images of nature and social relations? This is where standpoint theory has provided useful resources that are not available – or, at least, not easily available – from other epistemologies.

4. STANDPOINT APPROACHES: SYSTEMATIC PROCEDURES FOR MAXIMIZING OBJECTIVITY

How could biological and social science research that clearly was guided by feminist politics manage to be producing empirically and theoretically more adequate accounts of nature and social relations? This is the question standpoint theorists set out to answer. Here I shall only review the main outlines of this theory of knowledge and philosophy of science since it has been developed, refined and critically discussed now for close to two decades.⁹

Standpoint theories argue that what we do in our social relations both enables and limits (it does not determine) what we can know.¹⁰ Standpoint theories, in contrast to empiricist epistemologies, begin from the recognition of social inequality; their models of society are conflict models, in contrast to the consensus model of liberal political philosophy assumed by empiricists. All human thought necessarily can be only partial; it is always limited by the fact of having only a particular historical location - of not being able to be everywhere and see everything, and of being "contained" by cultural assumptions that become visible only from outside that culture (hence: "medieval thought", Renaissance thought, etc.). However, standpoint theories are concerned with a distinctive dimension of social location that is more pernicious than these kinds of "positionality", and that is difficult to grasp from within the empiricist assumptions of modern scientific rationality. In hierarchically organized societies, the daily activities of people in the ruling groups tend to set distinctive limits on their thought, limits that are not created by the activities of the subjugated groups. Administrative-managerial activities, including the work of the natural and social sciences, is the form of "ruling" in our contemporary modern societies, and the conceptual frameworks of our disciplines are shaped by administrative-managerial priorities, just as pre-scientific observations of nature are shaped by other cultural priorities. Such priorities do enable gaining the kinds of information administrators need to function effectively, but they also distort and limit our understanding of just

what brings about daily social relations and interactions with nature, and they make it difficult to think possible any different kind of interactions. In order to gain a causal critical view of the interests and values that constitute the dominant conceptual projects, one must start one's thought, one's research project, from *outside* those conceptual schemes and the activities that generate them; one must start from the lives excluded as origins of their design – from "marginal lives."

The fundamental features of the standpoint proposal can be grasped most quickly by looking at what it is not. Those constrained by the old objectivity question will tend to distort standpoint theory by perceiving it only through the conceptual choices offered by "Objectivity or relativism: which side are you on?" They often construct it as just a variant of empiricism or, alternatively, as a kind of gynocentrism, special pleading, or unreasonably claimed privileged positionality. On such a reading, empiricism is politics-free, and standpoint theory is asserting epistemological/scientific privilege for one group at the expense of the equally valuable/distorted perceptions of other groups. Or, it is simply substituting one politics for another, and all political positions - the master's and the slave's, that of the rich and of the poor, the colonizer's and the colonized's, the rapist's and his victim's – all are equally valuable and/or distorted. This interpretation of difference as merely diversity is a serious misunderstanding of social realities, as well as of standpoint claims. Standpoint theory leads us to turn such a way of posing the alternatives into a topic for historical analysis: "What forms of social relations make this conceptual framework - the 'view from nowhere' versus 'special pleading' - so useful, and for what purposes?"

Not about Only Marginal Lives

First, standpoint theory is not only about how to get a less limited understanding of marginal lives – women's lives, for example. Instead, research is to *start off* from such locations (not to take as truth what people in those locations think or say) in order to explain not only those lives but also the rest of the micro and macro social order, including human interactions with nature and the philosophies that have been developed to explain sciences. The standpoint of women, as Dorothy Smith puts the point, enables us to understand women's lives, men's lives, and the relations between the two through concepts and hypotheses arising from women's lives rather than only ones arising from the lives of those assigned administrative/managerial work, a group that includes sociologists (and philosophers) (Smith 1987, 1990). The point is to produce systematic causal accounts of how the natural and social orders are organized such that the everyday lives of women and men, our activities and beliefs, end up in the forms that they do.

Grounded, but Not in the Conventional Way, in Women's Experiences

The phrase 'women's experiences' can be read in an empiricist way such that these experiences are assumed to be constituted prior to the social. Standpoint theory challenges this kind of reading. For a researcher to start from women's lives is not necessarily to take one's research problems in the terms in which women perceive or articulate their problems - and this is as true for women as it is for men thinkers. The dominant ideology restricts what everyone is permitted to see and shapes everyone's consciousness. Women, like men, have had to learn to think of sexual harassment not as a matter of "boys will be boys", but as a violation of women's civil rights. Marital rape was a legal and, for most people, conceptual impossibility until collective political struggle and theorizing resulted in its articulation in the law. European American feminists, like the rest of European Americans, are only beginning to learn how to conceptualize many of our issues in anti-Eurocentric terms. Women, too, have held distorted beliefs about our bodies, our minds, nature and society, and numerous men have made important contributions to feminist analyses - John Stuart Mill, Marx, Engels, and many contemporary scholars in history, sociology, economics, philosophy, literary and art criticism, etc. Moreover, it is obvious that "women's experience" does not automatically generate feminist analyses, since the former always exists but only occasionally does the latter emerge. Standpoint theorists are not making the absurd claim that feminist work simply flows from women's experiences.

Feminist knowledge is not a "neutral" elaboration of women's experiences, or what women say about their lives, but a collective political and theoretical achievement. Women's experiences and what women say are important guides to the new questions we can ask about nature, sciences, and social relations. However, the *answers* to such questions must be sought elsewhere than in women's experiences, since the latter are shaped by national and international policies and practices that are formulated and enacted far away from our daily lives – by Supreme Court decisions, international trade agreements, military policies on the other side of the world, etc. Standpoint theory is not calling for phenomenologies of women's world, or for ethnocentric (gynocentric) accounts. Nor is it arguing that only women can generate feminist knowledge; it is not an "identity politics" project. Men, too, can learn to start their thought from women's lives, as many have done. These misunderstandings come about because objectivism insists that the only alternatives to its view from nowhere are special interest claims and ethno-knowledges that can be understood only within a relativist epistemology. However, institutionalized power imbalances give starting off from the lives of those who least benefit from such imbalances a critical edge for generating theoretically and empirically more accurate and comprehensive accounts. Feminist accounts of marital rape, sexual harrassment, women's double-day of work or women's different and valuable forms of moral reason are capable of conceptualizing phenomena that were heretofore invisible because they start off from outside the dominant paradigms and conceptual schemes.

No Essential Woman's Life

Next, standpoint theory is not arguing that there is some kind of essential, universal woman's life from which feminists (male and female) should start their thought. In any particular research situation, one is to start off research from the lives of those who have been disadvantaged by, excluded from the benefits of, the dominant conceptual frameworks. What can we learn about that framework by starting from their lives? For example, what can we learn about biological models of the human body, or of human evolution, psychological and philosophical models of moral reasoning, historical models of social change and of progress, philosophical models of rationality, etc., by starting off thought about them from the lives of women of different races, ethnicities, classes and sexualities whose natures and activities each of these models defines as inferior in partially different ways?

The point here is that these kinds of models have also been used to define other groups - racial, ethnic, economic, etc. - as inferior. We can learn some similar and some new things about the conceptual frameworks of the disciplines by starting off thought about the latter from, for example, the lives of slaves, or "orientals", workers, etc. Moreover, "woman" and the homogeneity of "women" is an elitist fiction. These categories in everyday life are multiple and contradictory, and the theorization of this fact by women of color and others who started off their thought from women of color's lives is one of the great strengths of contemporary feminist thought. This "matrix theory" developed by women of color enables us to think how each of us has a determinate social location in the matrix of social relations that is constituted by gender, class, race, sexuality and whatever other macro forces shape our particular part of the social order (e.g., Collins 1991). Women are located at many positions in this matrix, and starting thought from each such group of lives can be useful for understanding social phenomena (including our relations with nature) that have effects on those lives.

"STRONG OBJECTIVITY"

Consciousness Not Determined by Social Location

For standpoint theorists, we each have a determinate location in such a social matrix, but that location does not *determine* one's consciousness. The availability of competing discourses enables men, for example, to think and act in feminist ways. They are still obviously men, who are thereby in determinate relations to women and men in every class and race; such relations cannot be changed simply by willing them. They can work to eliminate male supremacy, but no matter what they do, they will still be treated with the privilege (or suspicion!) accorded to men by students, sales people, other intellectuals, etc. A parallel account can be given about women, of course.

An Epistemology, a Philosophy of Science, a Sociology of Knowledge, and a Method for Doing Research

Several disciplines have competed to disown standpoint theory. Some philosophers claim it is only a sociology; some sociologists reject it as only an epistemology. Some scientists and philosophers have insisted that it could not have any implications for the natural sciences since it is concerned with intentionality, and physical nature is not intentional.

It is more useful to see it as all of these projects: a philosophy of knowledge, a philosophy of science, a sociology of knowledge, and a proposed research method. Each such project must always make assumptions about the others; for example, every philosophy of science must make epistemological assumptions about the nature and conditions for knowledge in general, historical ones about which procedures for producing knowledge have been most successful in the past, and sociological ones about how communities that have produced the best knowledge claims in the past have been organized. In periods of what we could refer to as "normal philosophy", these background assumptions can safely be left unexamined; but when skepticism arises about the adequacy of fundamental assumptions in any one of these areas, the others all present themselves as candidates for reexamination. Our beliefs face the tribunal of experience as a network, as Quine points out, and none are immune from possible revision when a misfit between belief and observation arises. Feminist challenges to conventional bodies of knowledge have forced reexamination of empiricist assumptions about the organization of scientific communities, ideals of the knower, the known, and how knowledge should be produced, rational reconstructions of the growth of scientific knowledge, and scientific method in the sense of "how to do good research". Standpoint theory's claims must find support and have effects in all of these fields.

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Asymmetrical Falsity and Truth in Scientific Practice

Standpoint theory claims that starting from women's lives is a way of gaining less false and distorted results of research. However, one gratuitously asks for trouble if one equates such claims with ones to truth or truthlikeness. This is a general point about scientific claims, not one peculiar to standpoint theories or to feminist philosophies of science. The claim that a result of research is "less false" is sufficient to capture what we can establish about the processes producing such a research result, and attributions of truth or truth-likeness are too strong for scientific claims. We do not have to be claiming to approximate the one true story about nature or social relations in order for it to make sense to argue that our account is less false than some specified set of competitors to it. For one thing, all that scientific processes could in principle produce are claims less false than competing ones as a hypothesis is tested against some chosen set of rivals - the dominant hypothesis, or another new one. Moreover, as a matter of principle one is never to assume that such processes generate what one can know to be true, since empirical claims have to be held open to future revision on the basis of empirical evidence and conceptual shifts. To put the point a familiar way, our best theories are always underdetermined by the evidence. As a glance at the history of science shows, nature says "yea" to many competing and, from our perspective, quite fantastic accounts of its regularities and their underlying causal tendencies; our best theories are only consistent with nature, not uniquely coherent with natural laws that are "out there" for our detection. (Hayles 1993, Harding forthcoming.)

Standpoint approaches were developed both to explain the surprising results of feminist research and to guide future research. They show us how to detect values and interests that constitute scientific projects, ones that do not vary between legitimated observers, and the difference between those values and interests that enlarge and those that limit our descriptions, explanations and understandings of nature and social relations. Standpoint approaches provide a map, a method, for maximizing a strong objectivity that can function more effectively for knowledge projects faced with the problem of sciences that have been constituted by the values and interests of the most powerful social groups.

Standpoint theory has become a site for some of the most pressing contemporary discussions about post-foundationalism, realism versus constructivism, identity politics and epistemologies, the role of experience in producing knowledge, alternatives to both the "view from nowhere" and relativism, and other issues controversial in the philosophy and social studies of science more generally. Although it rejects and tries to move beyond many of the distorting features of modernity's conceptual framework, it also retains central commitments of that tradition. One is to the importance of the notion of objectivity.

5. OBJECTIVITY: AN INDIGENOUS RESOURCE OF THE MODERN NORTH?

Objectivity is an important value for cultures that value sciences, and its value spreads to other cultures as they import Northern forms of democracy, their epistemologies and sciences. This is not to say that Northerners are particularly good at democracy or maximizing objectivity, or have any corner on the ideals. And, of course, Northern forms of these ideals are widely criticized by many Third World intellectuals, as they are by feminists, as ideologies that have justified excluding and exploiting the already less powerful. Nevertheless, 'objective' defines for many people today how they think of themselves; we are fair; we make decisions by principle, not by whim or fiat; we are against "might makes right"; we are rational; we can find ways to live together that value our cultural diversity ... and so forth. I am not saying that everyone who claims objectivity in fact maximizes it, but that such an ideal is deeply embedded in the ethic and rhetoric of democracy at personal, communal, and institutional levels. The notion is centered in natural and many social science discourses, in jurisprudence, in public policy, in many areas where decisions about how to organize social relations are made. Thus, while the diverse arguments for abandoning the notion are illuminating and important to keep in mind. to do so is to adopt a "bohemian" strategy; it is to do "something else" besides try to struggle on the terrain where philosophies, science projects and social policies are negotiated. Why not, instead, think of objectivity as an "indigenous resource" of the modern North? It needs updating, rehabilitation, so that it is capable of functioning effectively in the sciencebased society that the North has generated and that many now say is its major cultural export (cf. Harding 1994).

What of the epistemological status of this strong objectivity program itself? What limitations arise from the particular historical projects from which it started off? No doubt there are many such limitations, but four easily come to mind. First, the strong objectivity program is, indeed, a science project. It relegitimates scientific rationality (and a modern European form of it) in a world where many think the power of this rationality should be limited. Now the "context of discovery" and the values and interests shared within a research community are to be added to the phenomena to be analyzed with scientific rationality.

Second, this strong objectivity program and the standpoint theory that supports it originate in the North, and draw upon the historical and cultural legacies of those cultures – for example, European Marxian and feminist legacies. Thinkers in other cultures may well prefer to draw on the riches of their own legacies in order to develop resources for blocking "might makes right" in the realm of knowledge production. Third, one can wonder if the delinking of objectivity from the neutrality ideal can succeed eventually in bypassing the gender-coding of objectivity as inherently masculine (and European, bourgeois, etc.)? Or does the logic of discovery become feminized (no neutrality) leaving the logic of justification masculinized as usual (here seeking neutrality can be useful)?

Finally, it is hard to imagine this strong objectivity program effectively enacted right away within the present day culture and practices of sciences, which are largely resistant to the interpretive and critical skills and resources necessary to detect values and interests in the conceptual frameworks of scientific projects. Natural scientists are not trained to do this work, and they often are hostile to sharing authority about nature, let alone about how science should be done, with any individuals or groups that they conceptualize as "outside science". And yet, we should not be too pessimistic since mainstream concerns to bring science under more democratic control, the global and local social changes to which such terms as "diversity" and "multiculturalism" point, and the ever increasing adoption of feminist projects into mainstream cultures and practices (albeit without the label "feminist") offers hope that the borders of scientific culture and practice, too, can become more permeable to these tendencies.

To conclude, the strong objectivity program is one response to the new objectivity question. It is not perfect, but it does have considerable advantages over the alternatives so far in sight.

NOTES

¹ Or, in the nineteenth century formulation that has left problematic residues in contemporary epistemology: "Objectivity or subjectivism? ..." (Proctor 1991). Referring to all values and interests as subjective ones obscures the all-important difference between those that are idiosyncratically held by individuals and those that are culture wide – ideologies, world views, etc. Androcentrism, racism, Eurocentrism, etc., are fundamentally properties not of individuals but of cultures.

² Following the practice of Bernstein (1983), Keller (1985) and others, I shall use 'objectivism' to refer to the conventional concept that takes neutrality to be a requirement for maximizing objectivity, reserving the term 'objectivity' for the "strong objectivity", shorn of the neutrality requirement, that I have proposed.

³ For reasons to be recounted below, claims to less falsity are preferable to those for truth or verisimilitude. See Megill (1991) for a related account of four senses of objectivity prevalent in the history of philosophy.

⁴ I have discussed these issues in a number of places. The following account most closely

follows those given in Harding (1992) and (1993b).

⁵ This is not to say that no other good advice for successful research is given out in "methods" courses.

⁶ Some might think this problem can be resolved by adding members of excluded groups into the community or by seeking more criticism within scientific processes. Efforts in these directions certainly can be helpful, but reflection on the Gould discussion suggests their limitations. Won't those "included" be only the well-socialized, least critical of the excluded? Are privileged groups likely to listen carefully to, and seriously value the distinctive perspectives of, groups that dominant institutions have devoted considerable effort to justifying as inferior? What kind of vigorous criticism should one expect to arise from a few junior (or even senior) colleagues who know well how their continued "inclusion", and the inclusion of those who follow them, depends on their "not making trouble"?

⁷ See, e.g., the adoption of a disabling relativism in Bloor (1977), of a subjectivist epistemology in Code (1991), and the strengthening of relativist epistemologies in Feyerabend (1987).

⁸ I cannot take space to review these important arguments here. See Bordo (1987) and Lloyd (1984) and (1993) for important accounts of the manliness of neutrality.

⁹ The first essay on it is Dorothy Smith's (1974) paper, 'Women's Perspective as a Radical Critique of Sociology', reprinted in my (1987). For other important statements of this theory see Hartsock (1983), Jaggar (1983), Rose (1983), Smith (1987), (1990). See also my discussions of it in (1986b), (1991), (1993b). For two of the many innovative and clarifying recent developments of it, see Collins (1991) and Hennessy (1993).

¹⁰ This claim parallels those for experimental method where, also, what the scientist does both enables and limits (but does not determine, since our theories are always underdetermined by their evidence) what we can know.

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