# **Problems with Feminist Standpoint Theory in Science Education**

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Abstract Feminist standpoint theory has important implications for science education. The paper focuses on difficulties in standpoint theory, mostly regarding the assumptions that different social positions produce different types of knowledge, and that epistemic advantages that women might enjoy are always effective and significant. I conclude that the difficulties in standpoint theory render it too problematic to accept. Various implications for science education are indicated: we should return to the kind of science education that instructs students to examine whether arguments, experiments, etc. are successful, rather than ask who presented them; when considering researchers and students for science education programs we should examine their scholarly achievements, rather than the group to which they belong; women should not be discouraged from engaging in "mainstream" science research and education (or other spheres of knowledge considered as "men's topics") and men should not be discouraged from engaging in what are considered "women's topics" in science (or outside it); we should not assume that there are different types of science for women and for men, nor different ways for women and men to study science or conduct scientific research.

# 1 Introduction

The purpose of this paper is to examine a theory held by some influential feminist theorists and philosophers of science, commonly called "standpoint theory" or "feminist standpoint theory." The acceptance or rejection of this theory has important implications for science

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<sup>&</sup>lt;sup>1</sup> There are also some non-feminist versions of standpoint theory (the most important of which are Marxist), but in what follows I will use "feminist standpoint theory" and "standpoint theory" interchangeably. Although my critique will focus on feminist standpoint theory, much of it is relevant, *mutatis mutandis*, also for non-feminist versions of the theory.

education. Various difficulties in this theory will be identified, and it will be suggested that they show that standpoint theory is too problematic to accept.<sup>2</sup>

Standpoint theory claims that people are socially positioned, and frequently differently so. For example, women's social position is different from men's social position. Standpoint theory also argues that social positions influence people's knowledge. Moreover, different social positions influence people's knowledge differently, thus yielding different types of knowledge. Yet another supposition is that some standpoints are epistemically advantaged. Finally, it is claimed that we can judge which these superior types of knowledge are by finding out which social positions yielded them. In some cases (e.g., Harding 1991, pp. 127–128) it is noted that the acquisition of the different, superior knowledge is not automatic, but has to be achieved through some training or action. But the standpoint claim must be (although this is frequently not explicitly mentioned) that one's social position still imparts difference and advantage *over and above* that training or action. Otherwise, what would affect the advantaged standpoint is simply the training or action that anyone—even those not from the "right" social position—can do.

The discussion is divided into three parts. Section 2 presents and then critiques the claim that different social positions necessarily produce different types of knowledge. Section 3 questions the claims relating to the advantaged standpoint. Section 4 focuses on the implications of this discussion for science education.

### 2 Special Knowledge

At least for the sake of discussion, I assume throughout this essay that knowledge is affected by social circumstances. Standpoint theory might be incorrectly presented as the only alternative to the claim that knowledge is completely unaffected by social circumstances, so that if one rejects the latter one must accept the former. However, this is a false dichotomy. Accepting that knowledge is affected by social circumstances does not commit one to standpoint theory; and rejecting standpoint theory does not commit one to rejecting the claim that knowledge is affected by social circumstances. In what follows I will assume that social circumstances affect knowledge, and suggest that standpoint theory cannot be accepted.

In many discussions of standpoint theory social positions are presented as simple, homogenous wholes. But when looked at more closely, they are exposed as not being so at all. Social positions are complex entities that are constituted of a plethora of interests, norms, economic conditions, views, preferences, behaviors, practices, tendencies, images, and so on. Take again women and men as examples of two groups with different social positions. Although their social positions differ, this does not mean that *all* aspects of their social positions. For example, almost all women and men share numerous aspects of their social positions. For example, almost all women and men share the need for shelter, nourishment, physical security and health. Some women and men share also less universal aspects, such

<sup>&</sup>lt;sup>3</sup> I will be mainly referring here to feminist standpoint theory as it is presented in Sandra Harding's classical and influential discussion (Harding 1991, pp. 119–137). Harding cites and relies on the work of, among others, Dorothy Smith, Hilary Rose, Nancy Hartsock, Jane Flax, Alison Jaggar, and Harding's own earlier work on the subject.



<sup>&</sup>lt;sup>2</sup> Part of my critique of standpoint theory is related to my critique of a common argument for the androcentricity of philosophy (Landau 2006, pp. 93–102). However, the discussions are independent and should be examined separately.

as the desire not to be persecuted because of their color. Many women and men share the experience of hunger. Many also have the same attitudes towards sex, gambling, crime, abortion, authority or politics. Some women and men share concerns and interests regarding unemployment or the environment. Thus, although women's and men's social positions differ, many aspects within those social positions may well be the same for many women and men.

It might be objected that some of these characteristics are not really aspects of social positions. I think that my use of "social positions" is correct and agrees with the way the notion is regularly used. However, my argument does not depend on this. Even if some (or all) of the aspects mentioned above are not components of social positions, they are nevertheless *social circumstances*. And as social circumstances, they too affect knowledge. Social circumstances affect knowledge even if they are not parts of the sub-group of social circumstances called social positions.

Since women and men share many aspects of social positions (as well as many social circumstances), it may well be that many people's knowledge of certain issues is affected by *shared* rather than *unshared* aspects or circumstances, and is thus unaffected by the differences in women's and men's social positions. Put differently, it may be that a certain claim, argument, observation, experiment, etc. is authored by a woman rather than by a man or vice versa, but that this does not make it gender specific. It *may*, of course, be gender specific, but it may also be gender neutral.

Various replies might be suggested here. It may be claimed, for example, that although women and men share many aspects and circumstances, those that affect knowledge are always the non-shared ones. But there seems no basis for this claim. Perhaps one way to try to corroborate it would be to claim that the unshared aspects are the most important ones. But that too seems wrong. Shared aspects concerning food and shelter, physical security, religion, country, politics and the environment are surely as important to many people as unshared aspects. Note, however, that my argument does not rest upon the supposition that shared aspects are the deepest or most important ones. Unshared aspects may well be the deepest or most important ones, but if shared aspects are also deep and important (even if to a somewhat lesser extent than unshared ones), the argument still holds: knowledge of various issues may be affected by the unshared aspects. Put differently, showing that a component is not the deepest or most important does not show that it is not effective.

Another possible response might be that one's knowledge of each and every thing must be affected by *all* social circumstances and aspects of social positions true of one. And since all social circumstances and aspects affect each and every thesis, argument, view, experiment, and so on, unshared circumstances and aspects must always be effective too, and hence knowledge must be situated. However, the number of interests, norms, economic conditions, practices, images, and so forth that apply to each of us probably reaches several dozens if not hundreds. It is quite implausible that *all* of them affect each and every argument, view, or critique. If we now took a piece of paper and wrote down the first 10 arguments, views or critiques that come to mind, it would be very difficult to show how each of them is affected by even 10 (or five, or three) different social circumstances or aspects, let alone 50 or a 100 or all of them. This response, then, is also unconvincing.

Another response might point out that there are certain cases where social positions clearly *did* affect knowledge to be situated. I fully agree. There are certain examples of this, but my claim is not that situated social positions *never* situate knowledge, but rather that they may or may not do so. We cannot extrapolate from those cases where we find them doing so to those cases where we do not any more than we can extrapolate in the inverse direction. Some cases where social positions do make knowledge situated are insufficient to



prove that all cases are like that. (It seems, however, that in many people's minds the faulty argument indeed proceeds in this way: they hear the generalizing, unreserved statement that different social positions *must always* produce different, situated types of knowledge; then they learn of several examples where different social positions did indeed produce different, situated types of knowledge; and so they become convinced that all cases are like that.)

It may also be argued that if certain different social positions do produce situated knowledge, we can empirically check different arguments, views, theories, observations and so forth to see whether they are situated. Again, I agree. Indeed, this is what I claim we *should* do. We should empirically and individually examine arguments, experiments, etc., and where we have reasons to believe that knowledge is situated we should point that out. (And where we have reasons to believe that knowledge is *not* situated we should also point *that* out too.) But doing so does not *deduce*—as standpoint theory purports to do—different types of knowledge from different social positions. It accepts, rather, that different social positions may produce situated knowledge, and may well also not do so.

Note that my argument is easy to corroborate and argumentatively strong because it is quite modest, while the theory I critique is difficult to corroborate and argumentatively weak because it is quite ambitious. My critique of standpoint theory does not have to claim that *no* knowledge is situated, only to suggest that *some* of it *may* be situated and some not. Standpoint theory, on the other hand, maintains the generalizing claim that *all* knowledge is situated. My critique accepts that there are both shared and unshared social circumstances or aspects, and that the unshared ones sometimes also have an effect. The theory critiqued has to assume that there are *only* non-shared ones, or that if there are both shared and unshared aspects and circumstances, only the non-shared ones have an effect. It is, of course, much easier to corroborate moderate, partial claims that allow exceptions and admit complexity than ambitious, universal claims that do not allow exceptions and emphasize homogeneity. Moreover, in the human and social spheres, moderate and partial claims that allow exceptions and admit complexity frequently concur better with reality since the latter, too, is frequently complex and multifaceted.

Up till now I have emphasized that different social positions may include shared, effective social components. But even if that were not the case, standpoint theory would not hold, since another of its presuppositions—that different social components *must* affect knowledge differently—is also problematic. I believe that different social components *may* affect knowledge differently, but they *do not have* to do so. There are many cases where different social circumstances have similar results and where different presuppositions lead to similar conclusions. For example, both war and peace can exacerbate social stratification. Both secularism and religious Protestantism can strengthen capitalism. Different people from different backgrounds can, in different ways, make us feel hopeful about ourselves. And two different scientists or philosophers, of different backgrounds, can reach the same conclusions using different methodologies and assumptions. Different suppositions *may* lead to similar conclusions. Thus, even in cases where knowledge is affected by different social circumstances or aspects, it cannot be deduced that the effects will differ and that different types of knowledge will emerge.

Before moving on to the question of privileged knowledge, I should like to emphasize how the critique of standpoint theory presented here differs from another one, which suggests that standpoint theory might fragment knowledge. According to that critique, standpoint theory can result in the splintering of knowledge so that we would have not only men's knowledge and women's (or feminist) knowledge, but also Hispanic feminist knowledge, Asian feminist knowledge, Black feminist knowledge, lesbian feminist knowledge, etc. Of course, Hispanic feminist knowledge can again be broken up into Cuban Hispanic



feminist knowledge, Mexican Hispanic feminist knowledge, Salvadorian Hispanic feminist knowledge, and so forth. A number of writers have expressed concern about such a state of affairs. For example, Hallberg (1989, pp. 5–6) writes:

It has been admitted...that there are many women's experiences and that therefore it is possible to maintain that, epistemologically, lesbian women, black women, working-class women, Third World women and so forth all have different and group-specific knowledge...My main concern in this respect is where to draw the limit? Why not add even further categories, such as young women, old women, married or unmarried women...This multiplication of groups and specific interests I think shows that one somehow ends up in extreme subjectivism.

If the assumptions of standpoint theory are accepted, they may well lead to such balkanization; indeed, it is not clear how this could be avoided. But if the criticisms suggested above are correct, such fragmentation need not occur. Knowledge can be (and frequently is) affected by shared rather than unshared social circumstances, or affected by unshared circumstances but to similar results.

# 3 Advantaged Standpoint

Feminist standpoint theory also suggests that women's situated knowledge is epistemically advantaged in comparison to others. It has been argued, for example, that since women are generally outsiders or "strangers" in the largely male social order, they have the advantage of noting aspects that those immersed in the familiar conventions cannot notice (Harding 1991, p. 124). Women's oppressed position also gives them a stronger drive to know and learn more (Harding 1991, pp. 125–126). Women's social position, which leads to familiarity with a wide array of works and activities, also helps mediate ideological tensions and divisions, such as that between nature and culture or intellectual work and emotional work (Harding 1991, pp. 130–131). There are also other suggestions as to why women's social position imparts epistemic advantages.

I fully accept the claim that having a certain cultural, social or economic position (e.g., being a woman, or being a feminist), can, in some cases, impart some epistemic advantages, either for the reasons suggested above or for other reasons. However, I argue that these advantages (even after training) need not always materialize, need not be significant, and should be placed within the context of many other factors that can impart epistemic advantages and are typically more significant than the ones just mentioned. The list of factors that can impart epistemic advantages is very long and includes, among other factors, intelligence, imagination, originality, critical spirit, good knowledge of the subject matter, good study habits, curiosity, interest in the subject matter, meticulousness, ability to concentrate and focus, diligence, a positive self-image, readiness to expose one's views to criticism from outside (moreover, encouragement of such criticisms), intellectually alert and curious friends, encouraging environment, and readiness to think anew about the issues in question. Yet another factor, which does not always receive sufficient recognition, is simply coincidence or good luck. Happening to hear a lecture on a certain topic, to meet someone who has an idea about this or that matter, or to overhear a story can ignite a chain of associations that may lead to finding a missing link or to thinking of a solution to a disturbing problem. The ways to knowledge are more chaotic than frequently believed.

Each of these factors increases the probability that (better) knowledge will be achieved, but none of them (or any combination of them) ascertains it. Of course, the more factors



present (and the more there is of each) the higher the probability that the effort to achieve knowledge will succeed. Nevertheless, none of the factors guarantee knowledge; they only impart an advantage. Note that several of them can sometimes also function in disadvantageous ways. For example, while being new to a subject allows one a fresh perspective, unburdened by established assumptions and accepted theories, it does not afford one expertise and deep knowledge. On the other hand, thorough familiarity enables the understanding of minute aspects of the subject, but may also impede noticing relevant facts that a newcomer might see immediately. An encouraging environment may promote both confidence and over-confidence. Ability to focus on a subject may help devote all of one's energy to the relevant matter, but may also cause one to overlook important connections with other subjects or fields.

The advantages mentioned above function more or less like good running shoes, general good health, encouraging friends, a good night's sleep, or a good mood would function for a competitive runner: each increases the probability that the runner will win the next competition, but it does no more than that, and some of them can also be, in some circumstances and to some degree, counterproductive (a good mood can, in some cases, make one lose focus on the race or not care sufficiently about it; encouraging friends can also make one feel over-stressed). And in both cases, luck also plays a role.

Note that I have employed the term "advantage," rather than another commonly used term in such discussions, "privilege" (see, e.g., Macdonald 2002; Thayer-Bacon 2003, pp. 430, 431). I have done so because the term "privilege" suggests a legal right that materializes itself whenever the agent who holds the privilege chooses to enjoy it. Usually, having a certain privilege does not merely increase the probability that one will enjoy a certain benefit; rather, it guarantees it. It also connotes the exclusion of those who do not have the privilege. However, I suggest that membership in an oppressed socio-economic group, as the other factors mentioned above, functions in a way that is typical of an advantage rather than of a privilege. Like good running shoes for a competitive runner, being a member of an oppressed group increases the probability of achieving new, insightful and correct knowledge, but it does not guarantee it; the advantage may or may not materialize, and may do so to a degree, and only in some cases. It may also be helpful in most cases, but counterproductive in others. Moreover, having the advantage, like having good running shoes, does not suggest that those who do not have this advantage will not achieve that knowledge.

It should be recognized, then, that although membership in certain social-economic groups can in some cases effect better knowledge, it will not always do so, and in some cases it may even be counterproductive. Other factors may also allow better knowledge and may be even more advantageous than membership in an oppressed group. Indeed, experience shows that high intelligence, sensitivity, dedication, diligence, willing to expose one-self to (as well as encouraging) other people's criticisms, and many other factors are more reliable and advantageous than those mentioned in standpoint theory. Put differently, of all the factors that may give epistemic advantages, I do not think that those mentioned in standpoint theory are, in comparison to others, very significant. The factors mentioned in standpoint theory can, in some cases, impart advantages, but standpoint theory seems to have taken them completely out of proportion as well as out of context.

## 4 Implications for Science Education

One of the important implications of the above for science education is that we should not a priori assume that some people will have different knowledge from others, or better



knowledge than others. They may have that, but they also may not, and we cannot know a priori which will be the case. To know whether a certain claim is correct, whether an experiment is successful, whether an argument is valid, and so forth, we have to continue with the old practice of checking whether they are so, without making any assumptions about their strength and without giving them "privileges" or beneficial treatment vis-à-vis other pieces of knowledge. Since we have to individually check arguments, experiments, and the like to see whether they are worthy, we do not need all the other indications of possible worth that might or might not be in effect; they become obsolete. We should continue to educate our science students, then, to employ the same critical examination of each item of knowledge and to see that examination as the sole arbiter of its worth.

What has been said here of experiments and theories is true also of scientists, students, teachers and researchers. Members of certain groups may or may not have important, interesting and correct things to say, but since we cannot know a priori whether they do, we have to check individually each scientist, student, teacher and so on in order to know which case pertains. This means that when we recommend or hire science teachers and researchers, we would do well to examine what they have done up to now rather than the group to which they belong. If they have proven up to now to be resourceful and interesting, and to produce good work, there is some likelihood that they may continue to do so. Clearly, this too is not an infallible indicator. But it is more reliable than using membership in a group as a guide. The same applies to students who seek admission to science education programs. Previous work of high quality and evidence of diligence, intelligence, imagination, creativity, seriousness, interest in the subject, and so on seem far better predictors of future success than membership in a group.

Of course, I recognize that there are also many affirmative action arguments for hiring as teachers and researchers, or accepting as students, women or members of other oppressed groups. I shall not enter into the question of affirmative action here; there is much good literature about it, and I do not think that there are many arguments or counter-arguments on this subject that have not yet been presented. But I believe that a sharp distinction should be drawn between arguments that relate to affirmative action policies—arguments that concern justice, compensation, or future social empowerment of members of certain groups—and arguments that rely on scientific–epistemic reasons.

Other arguments for accepting students or for hiring as teachers or researchers those who are members of oppressed groups revolve around the issue of diversity. If the motivation for the policy of diversity is moral or political then, again, I cannot enter into the question here and will only note that it should be sharply distinguished from the scientific–epistemic motivation. However, if the latter motivation is at work, so that one believes that it is good from the scientific point of view to be exposed to a wide variety of putatively correct views, then the discussion in the previous sections suggests, again, that we should find people who present these diverse views, rather than people who are members of certain groups. Put differently, we should find people who can present competing viable views, no matter their group membership.

Another implication of what has been argued above is that students and researchers of some groups should not be discouraged from learning about, researching, publishing or participating in discussions on issues related to what might be (wrongly, in my opinion) considered the situated knowledge of other groups. For example, men should not be discouraged from participating fully in discussion and research of feminist theory. It should not be assumed that they will do better in what may be considered "men's issues" or "men's topics" and worse in what may be considered "women's issues" or "women's topics," as standpoint theory seems to suggest. Similarly, it should not be assumed that women



will do better in what may be considered "women's issues" and "women's topics" and worse in what may be considered "men's issues" and "men's topics." Given that women have, for a long time, been discriminated against and excluded from studying and practicing science, it has been almost exclusively developed by men. Standpoint theory would see most scientific knowledge as a product of men's situated knowledge, and predict that women will not succeed as students or researchers in this sphere, thus discouraging women from entering into this field and achieving positions of leadership in it. The criticisms presented in this paper suggest that this would be an erroneous educational move.

Likewise, the criticisms above suggest that we need not assume that there will be different types of physics, astronomy, chemistry, biology, and so on, some of which are more suitable to women and others more suitable to men, nor should we expect that there are different ways of teaching science to women and teaching science to men. Similarly to what has been suggested above concerning other issues, here too I am not suggesting that it is impossible that we will find out in the future, as a matter of empirical fact, that some students do learn more efficiently by using certain methods rather than others, or that in the populations of certain "learning types" some groups will happen to be represented more than in others. But again, whether this is or is not the case should be checked empirically and not be decided a priori.

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