ABSTRACT. I argue against the assumption that the influence of non-cognitive values must lead to bad science, opening the way for the thesis that non-cognitive values are compatible with good science. This, in turn, allows us to answer feminist questions, principally, How do gender politics influence science? without (1) having to reject the question a priori because theories of science assume that political values cannot influence good scientific work and (2) having made a case for the influence of gender politics upon a particular bit of scientific work, being put into the ludicrous position of saying that it is bad science after all, even though the relevant community of scientists say it is good. Nevertheless, moral and political neutrality is held to be a norm of good science and a tacit metaphilosophical norm governing good philosophy of science, viz., a good philosophy of science reveals and analyzes the morally and politically neutral production of good science. This metaphilosophical norm insures that the philosophy of science (1) is blind to the influence of non-cognitive values on good science if and when these are present and so (2) acquiesces in the moral or political arrangements supported by the science in question.

To address the question, What is a feminist philosophy of science? we must consider the question, What is a philosophy of science? What is a philosophy of science supposed to do? When we attempt to answer this question with any precision, we do not find a consensus among philosophers of science. Earlier in this century, the answer would have been to explain scientific method – understood to be the paradigm of rationality – by giving a particular sort of account of it, e.g., determining the logical connections among an established set of propositions such as those in a textbook describing a theory. This is very different from saying, for example, that the purpose of a philosophy of science is to explain scientific activity, even when that activity is limited to the theoretical and experimental work of natural scientists. Early philosophy of science is well characterized as attempting to find wherein the rationality of scientific method lies, and answers attempted to reduce scientific method to logic, first to deductive logic (later including set theory) and then to the proper inductive logic. Throughout, of course, the sharp distinction between fact and value was assumed, driving other distinctions such as the one between sentences expressing cognitively meaningful propositions (expressing facts and susceptible of empirical verification or falsification) and meaningless sentences, including those that express values (and not susceptible of empirical verification or falsification). A brief look at the fate of the
fact/value distinction in twentieth century philosophy of science reveals that even among those of us who no longer believe the distinction is sharp, there lingers a deeply embedded suspicion that if non-cognitive values enter into scientific work, the result is bad science. This suspicion is bolstered by examining histories of bad science; many cases can be laid to the influence of value assumptions upon scientists as they worked. We all think of notorious cases such as Lysenkoism and Nazi science and feminists think of Victorian period accounts of the bodies and minds of both European and African women.¹

I will argue against the assumption that the influence of non-cognitive values must lead to bad science, opening the way for the thesis that non-cognitive values can be quite compatible with good science and thus compatible with scientific method – still understood to be a paradigm of rationality. And this, in turn, allows us to answer the question, What is a feminist philosophy of science? It is a philosophy of science allowing us, among other things, to answer feminist questions, principally the question, How do gender politics influence science? without (1) having to reject the question a priori because theories of science assume that political values cannot influence good scientific work and (2) having made out a case for the influence of gender (or race, or class, or sexuality) politics upon a particular bit of scientific work, being put into the ludicrous position of saying that it is bad science after all, even though the relevant community of scientists say it is good. Furthermore, I agree with Giere and others that a philosophy of science is adequate only if it admits the possibility of non-cognitive values in good scientific work; an adequate model of science allows us to examine the case histories of good scientific work to search for the influence of non-cognitive values. Finally, I will argue that, just as the acceptance of a scientific theory may be influenced by non-cognitive values, so the acceptance of a philosophy of science itself may be influenced by non-cognitive values. Thus, like science, rational philosophy of science must include methods for self-reflection.

One of the problems in dealing with the connection between science and values is stating precisely what the nature of the connection is alleged to be. We can distinguish three locations of possible connections: the inception or origin of a hypothesis or theory, its use after it is established and, of greatest interest, the technical work establishing the hypothesis, which is closely connected to what is sometimes called the “content” of the hypothesis or theory. Though we are increasingly alarmed at the influence exercised by the institutions financing research upon the choice of hypotheses to be investigated, we will not discuss the clear influence that non-cognitive (social, political, religious, economic, and so on) values have upon science