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## Science and Society

The purpose of science in society is to enable us to react homeostatically to the vicissitudes of the future. This future is, however, not one which we can completely foresee beyond a certain very limited point, which moves ahead in time as our experience moves ahead. This being the case, we must always possess a much larger stock of information concerning the environment, physical, medical, and social, than we shall probably use in any particular course of history. It is of the utmost importance to our safety against the vicissitudes of the future that this stock of fundamental scientific information be kept extremely wide. It is of even greater importance that it be kept *potentially* extremely wide—that is, that the way for the internal development of science be kept open. It must not be at the mercy of historical predictions and prejudgments which belong primarily to one particular age, and may be proved false, incompletely justified, or irrelevant with the further development of history and the growth of our experience.

Thus the internal life of science must be preserved without a too direct dependence on the policies of the moment, or the official fashions of thought. This means that the scholar must retain for his own efficacy something—not too much—of the ivory tower attitude which it is the spirit of the times to decry.

It is well that we convince ourselves of the social usefulness of science before we go into it as a career. It is not well that we hold the test of social usefulness too immediately before us in the very difficult task of extending science.

The phenomenon that a human activity may be best pursued according to its internal logic, even if the general function of the activity should be considered most seriously in matters of the choice of a career, etc., is familiar to all of us. The man who becomes an officer in the army must be brave, but the man who asks during every military operation "Am I a brave man?" is not likely to make a good military officer. The surgeon should have convinced himself of a certain attitude of compassion before he is very far along in medical school, but the surgeon whose sense of compassion unnerves him in the performance of a cruel but necessary operation has chosen the wrong career.

Under these circumstances, we can see that it is possible for a scientist to be so socially minded that he does not find time or attention for the self-contained activity which forms a large part of the life of the working scientist. This fact has important consequences concerning the organization of scientific work. Certainly scientific work should be answerable for its value to the community—but at arm's length. If a man has no sense of social responsibility, don't appoint him, but if he is known to possess such a sense, for goodness' sake don't badger him with an unceasing inquiry as to his social responsibility while he is trying to perform the work that belongs to the fulfillment of his social responsibility. Science is a tender plant, which does not take kindly to a gardener who is in the habit of taking it up by the roots to see if it is growing properly.—NORBERT WIENER, Massachusetts Institute of Technology [excerpted from "Science and Society," which was originally published in *Voprosi Filosofii* and later in *Technology Review*, July 1961, pp. 49–52]