

If we are to speak of scientific discipline, we must think of something more than a rigidity of formal process enforced for its own sake: we must instead think of a discipline growing out of a set of ethical standards. The principles and philosophy of science, if these are to be seen as something more worthy than the rules for a complex game, must surely reflect a set of ethical standards which, at root, derive from a fundamental and unshakable belief in truth, that is scientific truth.

Scientific truth deals with more than facts. It has to contend with scientific issues of scientific complexity which stretch human intellect to its very limits. Scientific truth has to cope with uncertainty as well as certainty; the existence of uncertainty is itself sometimes a scientific truth.

Numerous issues of great scientific importance will be dealt with at this World Symposium. But there is no need to go beyond that of the relative danger of asbestos in order to see how economic factors may crush the delicate spring-shoot of scientific truth. On that one issue, scientific truth has to survive the economic pressures which in one group of nations act in the opposite direction to those in another group of nations; it has to survive the economic pressures of conflicting commercial interests, it has to survive the contradiction that scientific research is itself an economic interest group often needing to live by handouts from government and industry.

Under these circumstances, surely, the only hope for scientific truth lies in a return to ethical standards for science?

Ethics is a system of moral principles or values. It encompasses high-standards of honest and honorable dealing.

The ethical dilemmas in morally or financially sponsored research persist when the right course of action is not clear, action in which honorable people may differ and no consistent rule obtains.

Society tends to look at the relation between science and human ethics in an inconsistent manner. On the one hand there is much fear that science is interfering with morality, and on the other hand some people expect science and its methods to define morality, looking to science for their ethical principles as others look to their religion.