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Communicating with the Publics

Many scientists are apprehensive about the trends they perceive in the support of basic research. In part, the concerns arise from self-interest, but in large measure they stem from a deep desire to be of long-term help to all humanity.

Feeling their status threatened, and being dependent on the support of others, scientists have increasingly talked of the need to increase the public understanding of science. But when it comes to communicating few scientists are skillful. The majority cannot even effectively convey scientific information to each other. This is true of verbal presentations, in which decade after decade most scientists use slides that cannot be read beyond the front row of the audience. This illustrates not only technological incompetence but, more seriously, a blind spot—a failure to take into account the other person's requirements. In general, people who cannot or do not customarily analyze and respond to the needs of others cannot communicate.

Part of the difficulty scientists have in interacting lies in the fact that their daily experiences and their value system differ markedly from those of many other people. Individuals who adopt science as a career tend to be introverted and idealistic. Another factor is that scientists are among the few members of society who engage in efforts that they believe will have an enduring effect. A tendency toward maintaining an unusual value system is reinforced by the demands of the profession. To be really effective in research, scientists must be totally convinced of the great importance of truth, new knowledge, and new understanding. To sustain that commitment, dedicated scientists seek to associate with and talk with other dedicated scientists. Thus scientists spend much of their time isolated from the rest of the world.

Funkhouser*, commenting on the public understanding of science, has distinguished between various "publics" and pointed out differences between them and scientists. He is concerned that spokesmen for science may tend to address a "public" that they conceive as being much like themselves. His point is well taken.

Many of the publics which scientists would like to influence have quite different value systems. For example, consider the politicians. Most of the individuals drawn to politics are attracted to it because they are extroverts who interact easily with other people. Almost all the upper echelon politicians are intelligent, well-informed people. When they wish to, and that is most of the time, they can be completely charming. They know how (perhaps it is instinctive) to establish rapport with almost anyone they meet.

Necessarily, they devote much effort in striving to maintain and increase their power, and the quest for and exercise of power can come to dominate their actions. As do other humans, they value truth and understanding. However, in comparison to the quest for power, the search for truth is an also-ran. Moreover, politics usually leaves little time for long-term considerations. The future is limited to what happens in the next election. The scientist who wishes to be influential in Washington must understand the value system that prevails there.

That other people have other value systems and behave differently from scientists is a fact of life. But it is not cause for dismay. Opinion polls† show that scientists are relatively highly regarded. They cannot expect, nor would it be healthy for them, to escape all criticism. They must be prepared to defend themselves before other publics. In facing the future it would not be amiss for them to strive just a little more to understand those other publics' points of view.—PHILIP H. ABELSON

*G. R. Funkhouser, in *Science at the Bicentennial—A Report from the Research Community*, report of the National Science Board (Government Printing Office, Washington, D.C., 1976), page 84. †National Science Board, *ibid.*, pages 82–91.