

京大過去問 2004年 第1問

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The public is interested in scientific work for a great variety of reasons. Science is powerful, expensive, elitist, inaccessible, yet also forward-looking, optimistic, full of promise, even, at times, spectacular. More than any other area of knowledge, science carries with it the sense of advancement, moving ahead, exploration, newness. (1)Science visibly improves its own powers, adds to itself, and carries us all forward with it. There have long been moral and emotional reasons to be informed about the latest advances, and now there are political and social ones as well. Knowing some of the facts and issues surrounding the latest research developments allows one to be part, and feel part, of the decision-making process. Some of this knowledge — and related impressions — have come from media reporting itself, past and present. But this does not mean that scientists are required to adopt and repeat such images in every instance.

What does the public need to know about a particular branch of scientific work? There is no simple answer. Indeed, the question itself is often misinterpreted. Researchers, that is, can all too readily confuse public understanding of science with public appreciation. Understanding (for example, how nuclear energy is generated) can lead to queries, to criticism, and even to rejection. To know something of science is not necessarily to love it; the truly aware researcher must realize that and be prepared for it.

Interest in science is also deeply affected by the media. Consider that the great majority of media publications are meant to be skimmed, not studied; readers are able to retain very little specific information from a newspaper article, magazine story, or especially television or radio broadcast. (2)This problem is due both to the style of exposure (quick, one-time reading or listening) and to the fact that there are usually many such exposures on a wide range of subjects to be consumed at a single sitting. The popular media is not something that provides people with opportunities for concentrated learning or continuing education. Reporters know that; they know they must write stories, not textbooks for beginners.

Public interest in science is complex, and difficult to define in any precise way. But one thing can be said for sure: in the popular media, this interest always comes back, sooner or later, to “news.” (3)By and large, news reveals only a part of the scientific pyramid — that part of science which is today in progress, being conducted in the here and now. This is the most debated, and, in a social sense, exciting part of science. But it is also the most difficult to write about in any definitive way. It is one thing to review for a public audience the basic principles of chemistry; it is

quite another to discuss the merits, hotly debated, of a new hypothesis on the physical chemistry of superconducting materials.