sions. I would like to raise a counter-question, however, on a more practical level. As a member of Section T—Information and Communication—and a communicator and teacher of communication through the mass media, I was a little appalled at the non-communicative nature of the Cleveland program. Could not Section T be put to work eliciting from AAAS members suggestions regarding the kinds of extracurricular do-gooding various branches of science might fruitfully engage in? It seems to me that the first approach to answering Greenberg's question, and I believe it deserves an answer, is step one in the scientific method: Accumulation of relevant data. Survey research people, I am confident, would gladly help design a questionnaire to be circulated to members on this point.

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Your comment implied that no physicists are concerned with the traffic problem. Quite a few of us throughout the nation do recognize the hazards of both the airplane and automobile and are trying to do something about them. Unfortunately, the goal is not as spectacular as that of banning the bomb, in that we can hardly hope to eliminate the hazard, but must plug away at small improvements.

We certainly need more dedicated scientists as well as material support. Let's not, however, imply that nothing is being accomplished and that no physicists are concerned with traffic problems.

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Emotion versus Intelligence in Public Support of Science

Scientists are sitting pretty—now. Scientists have achieved status, social and economic, that was only dreamt of in their philosophy a few years ago. Scientists are now offered opportunities in industry and research beyond what their numbers can take full advantage of; the journals' numerous advertisements of "openings," with their honeyed words beseeching scientists to apply, are evidence of this. On the campus the scientist is now the favored one of the faculty; his teaching load has in general been lightened, and his salary, often supplemented with extra-curricular fees, is apt to be nicely in the five-figure class. True, his research may call for sizable sums, but governmental grants are readily forthcoming and are adequate for the most sophisticated equipment and the most esoteric investigations. At last scientists have arrived and receive their just due. If everybody will now leave scientists alone with science—their preserve—and with their grants, this may now become the best of all possible worlds.

Anyone interested in science might well take another look at that prospect, not only because foresightedness is just good sense, but also because a second look at the situation will reveal less rosy aspects.

Much of the current liberal support of scientists' work may be credited to the general public's endorsement of any effort that it thinks of as scientific. The public "feels" that scientists must be given whatever they ask for. That is to say, the public's endorsement has an emotional rather than an intelligent basis. It follows that, if the future should bring a change in the image that the public now holds, of science and its capabilities or if the public should feel it has been let down or taken advantage of, then its endorsement of large appropriations for science can change with the winds of emotion to a hue and cry for retrenchment. Is it not true, then, that the future welfare of scientists (and science) as well as that of the public depends in important part on the public's being properly informed and educated about science, and intelligent rather than emotional in its support of science?

An excellent case might be stated for the thesis that the current public endorsement is based purely and simply on at least two emotional misconceptions of science—about its objectives and about its intellectual and educational merits. One misconception is based on the fear that the Russians are coming, that they are ahead of us because of their advances in science, and therefore we-the-people had better buy back our superiority; so let's give our scientists the dollars and tell them to give us the results. The other misconception is that science is the same as technology, that American technology is the best in the world at producing results, whether the problem is industrial or one of health, water supply, or other natural resources. That is, scientists are the golden genii; we don't need to understand them; let's just oil their lamps. There is little public conception of science as an intellectual endeavor of merit, or as an educational area of value, just as there is no public understanding of what science may and may not do in the present world situation.

It is dangerous for the future support of science to be dependent in any degree upon feeling born of ignorance or fear. It is worse that a public on whose education so much effort has been spent should "think" in such a manner. It is obvious that it is the duty of scientists to study this problem as intently as they do any other. There is no more fundamental and immediate question before the house of scientists.

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The question raised by Foote, "whether or not the opinion of the majority is almost always wrong" [*Science* **142**, 341 (18 Oct. 1963)], is a good one. Certainly skepticism about the rightness of the majority is proper and necessary for maintaining perspective on such gigantic programs as the crash project for a man in space. In the fever of emotion, large errors are made all too often.

Is it not possible, however, that the enthusiasm generated by the man-in-space program is necessary in order to gain public support for the legitimate costs of space science and of the exploration of outer space? The public was abruptly and convincingly sure at the end of World War II that atomic energy was a blessing and should be tremendously expanded. This almost blind faith has resulted in increasing advantages for everyone in the form of power plants, tracer studies, and the magnificent discipline of subatomic research.

I am not trying to condone an overzealous selling job on the part of man-in-space advocates or to support the argument that from evil (war) springs much good (atomic energy). My point is only that the emotions are part of all of us, that these emotions frequently are the reason for a change in our sense of values, and that these changes must be recognized and used to good advantage.

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