more transmitter per impulse. Briggs and Kitto [*Psychol. Revs.* **69**, 537 (1962)] reached essentially similar conclusions in a paper I wish I had written. Although they published the hypothesis at the time I did, they have clear priority because their manuscript was accepted some 7 months before mine was. Their work, like Baslow's, deserves the attention of readers interested in this problem.

C. E. SMITH
San Jose State College, San Jose, California

Smoking, Arteriosclerosis, and Age

The excellence of the report "Cigarette smoking and arteriosclerosis" [*Science* **138**, 975 (1962)] is lessened by the fact that the statistics were not adjusted for age. In large epidemiological studies the average age of nonsmokers is usually 4 or more years higher than that of smokers. In this particular study the age difference of the two groups might have been greater or it might have been insignificant. It is not possible to correctly interpret the author's conclusion without this information because of the association of arteriosclerosis with age.

GEORGE E. MOORE
Roswell Park Memorial Institute, Buffalo, New York

In the report "Cigarette smoking and arteriosclerosis," Sigmund L. Wilens and Cassius M. Plair state, "There is no proof that sclerosis of coronary arteries develops more rapidly in cigarette smokers than in nonsmokers." However, they fail to present the distribution, in tabular or statistical form, of their subjects' ages, and their most sophisticated evidence (Table 3) seems to contradict their statement. They do say that the cigar and pipe smokers (for whom they have no criterion for determining intensity of smoking) tend to be older than the other groups, and that the light and moderate smokers of cigarettes are "a somewhat younger group on the whole, than . . . the other groups." No comparison of the age of the nonsmokers and the heavy smokers is presented, though such a comparison is essential if we are to interpret the findings objectively. The authors are analyzing for evidence of degenerative diseases (or the effects of aging), such as myocardial infarcts, vascular scars of kidneys, cerebral infarcts, and

cerebral hemorrhage. Surely the age of the people at death is a critical, pivotal characteristic in this type of research, for if the smokers of cigarettes are generally younger than the nonsmokers, one should naturally expect them to show fewer of the degenerative diseases (other things being equal)—not more, as is generally the case in the evidence presented for the "diseases" listed above.

In the one case where they make specific use of the subject's age in relating smoking habits to the severity of aortic sclerosis at necropsy (see their Table 3), they gave each aorta "an 'arteriosclerotic age' through comparison with a set of previously prepared photographic transparencies of aortas which represented the standard or average degree of sclerotic change observed in each half-decade of adult life." As a result of this method of analysis, Wilens and Plair found highly significant differences ($P = .001$) in the degree of aging, favoring 40 percent of the non-smokers as compared to the heavy smokers.

I was confused by the fact that the probability figure in their Table 1 was given as $P = .028$, while they claimed that this was not significant, until I discovered that this was a typographical error and that the probability should actually have read .28.

We need more information before it can be so firmly stated that cigarette smoking does not contribute to the development of arteriosclerosis.

CARL L. JOHANNESSEN
College of Liberal Arts, University of Oregon, Eugene

The mean and median ages of the various categories of smokers discussed in our report are shown here in Table 1. Undoubtedly, if heavy smokers of cigarettes had survived, on the average, 3 years longer, as the nonsmokers did, the incidence of myocardial infarcts among them would have been somewhat but not greatly increased. The reports on the clinical incidence of myocardial infarcts suggest that the increased susceptibility in heavy smokers of cigarettes is so pronounced that it is not concealed by their tendency to develop fatal cancer of the lung.

The development of one fatal condition unquestionably influences the incidence at necropsy of other fatal conditions. In other words, if a high percentage of heavy smokers of cigarettes did not die of cancer of the lung, they might die a few years later of myocardial infarction. Our observation that the severity of aortic sclerosis is significantly increased in such smokers suggests that this might be the case. Whether or not this is so, the fact remains that in our series there was no significant increase in the number of myocardial infarcts at necropsy in the heavy smokers of cigarettes, contrary to what the clinical reports would have led one to expect.

Table 1. Mean and median ages of smokers in various categories.

Category	No.	Age	
		Mean (yr)	Median (yr)
Nonsmokers	161	60.2	64
Cigarette smokers:			
Light	153	59.3	64
Moderate	289	58.3	61
Heavy	199	57.7	61
Pipe and cigar smokers	71	66.5	68
Unknown or unclassified	120	63.3	65

We did not intend to state "firmly" that "cigarette smoking does not contribute to the development of arteriosclerosis" but meant to suggest that the connection between the two, if it exists, is much more tenuous than has been claimed and that, as a practical matter, the heavy smoker of cigarettes may not be much more likely to develop a myocardial infarct than a nonsmoker.

S. L. WILENS
New York Veterans Administration Hospital, New York

Science Reporting in Journals and Newspapers

The editorial of 18 January, "Science reporting," treats fairly neither the problem nor the proposed solution. The policy of the American Institute of Physics, I believe, is to deny publication to papers the main contents of which have been released by the authors or their organizations to the daily press, but to encourage the publication and the release to the public of such information after it has appeared in the scientific journals. Thus, reporters who wish to verify the relevance of a release may consult their scientific advisers, who will have details at hand in a form guaranteed by the editorial standards of the scientific journal to be reasonably lucid, complete, and of some novelty. In my opinion, the results of a scientific investigation do not exist until