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There Ought To Be a Science!

The call for a "new collaborative science, the science of human survival," which was published two weeks ago in this journal, expressed the views of its six authors, who wrote as individuals and not as representatives of the AAAS. The article was published "to stimulate further discussion." This editorial, which is a contribution to that discussion, expresses the views of one person, who also writes as an individual and not as a representative of the AAAS.

The article "Science and human survival" assures us that it "lies within the power of science . . . to discover social inventions to replace [modern war]." The authors admit, and, in fact, are at pains to stress, the great complexity of the problem of finding an alternative to war as a means of settling disputes among nations. They are not entirely dismayed, however, claiming that the "problem of modern war is of a type that is not wholly new to science." Entirely new the problem is not, but there is also a certain lack of novelty in the proposed approach to a solution.

What is being offered is simply a new variety of the familiar claim that we can solve social problems scientifically, if only. . . . We are in a bad way, the argument runs, and the hour grows late. Science has dealt successfully with things, but it has been applied only in bits and pieces to man. What is needed to bring the pieces together is a big interdisciplinary push. We can succeed, the argument concludes, if only we bring together experts from a wide variety of fields. In this new variety of the claim, the specific problem is modern war, and the experts who will solve the problem, if only they are brought together, include not only workers in the social sciences—anthropologists, psychologists, and economists—but also workers in the natural sciences—physicists and biologists.

Just how the various disciplines are to be brought together has not been made clear in previous calls to action, and the present call is no exception. What is more, by including the natural sciences, the present call has the added burden of showing how these sciences are even relevant to the task of dealing with social problems scientifically.

A few examples of interdisciplinary projects are cited, it is true, but these examples illustrate nothing that bears on the task. Thus, the authors mention the International Geophysical Year, but this effort was feasible not in spite of, but because of, its complexity—a complexity of a rather special sort. What was needed were vast masses of data collected simultaneously all over the earth, data such as the declinations of magnetic needles. What made us want to make such measurements and lent them meaning once made was the presence of comprehensive physical theories, such as electromagnetic theory.

Where, however, are the counterparts to such theories that are to direct the work of the science of survival? There are at hand impressive techniques of measurement, such as the measurement of intelligence in psychology, and some impressive theories, such as the theory of marginal utility in economics. But there exist no theories—comprehensive and commanding the general acceptance so common in the natural sciences—to do for the study of human survival what the theories of physics did for the study of the earth.

This call to action contributes little to science or to survival, and it may do some mischief. These are times when public understanding of the results and methods of science is growing in importance. It does not help such understanding when a document aimed indirectly at the general public implies that it is merely a lack of will and togetherness that prevents us, in the science of man, from moving from the vestibule into the edifice proper.—J.T.