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COVER

Merced River, central California. When sunlight interacts with dissolved humic substances in natural waters, transient free-radical oxidants are formed. These radicals can selectively oxidize the trace amounts of synthetic chemicals commonly found in many lakes and rivers of industrialized countries. See page 886. [Janice D. Mill, Palo Alto, California]
The debate regarding the federal role in the support of social science research is long-standing and tends to intensify at this time of year as Congress begins its annual examination of the President's budget. There are supporters of the social sciences in Congress, but there are also vigorous critics. Criticism follows two contradictory lines of argument. In the first, social science research is regarded as irrelevant to societal needs and, therefore, a waste of taxpayers' dollars. The contrary argument is that the social sciences are all too relevant—leading to social engineering and manipulation of moral values—and should not be encouraged, let alone supported. Both of these views create difficulties for those who argue for increased support for social science research.

How has this debate affected federal funding for the social sciences? The facts are surprising. As a percent of the federal budget for both basic and applied research, the social sciences—defined in the National Science Foundation data base as anthropology, economics, political sciences, geography, and sociology—have remained remarkably constant at 5 percent of the total for well over a decade. A somewhat different picture emerges, however, if one examines where the research is performed (in colleges and universities, independent nonprofit organizations, industry, or government laboratories). Consider, for example, federal funds for basic research. Across all fields of science, the percentage of basic research performed at academic institutions has been roughly constant at 48 percent since 1973—the first year such data were collected. In contrast, 60 percent of basic research in the social sciences was performed at academic institutions in 1973, but that number had decreased to 47 percent by 1978. The cumulative impact is significant: from 1973 to 1979, federal funds for basic research at colleges and universities in all scientific fields increased 97 percent; in social sciences the increase was 37 percent. The same trends hold for federally supported applied research and for the composite of basic and applied research.

Setting aside questions about the classification of basic and applied research and possible spillovers from developmental work, these data indicate a shift of social science research away from academic institutions. We will have to know more about the nonacademic performers and the research they are doing before the trends can be interpreted. We do know that the job market is a factor. Although faculty positions in the social sciences have increased at about the same rate as the average for all fields of science, the number of new social science Ph.D.'s requires that many seek employment outside universities. Another factor may be that federal agencies are exercising more control over the content and climate of research. Professor Theodore Schultz, the University of Chicago's most recent Nobel Laureate in Economics, has commented on the distortions in economic research introduced by the influence of patrons—federal and private—and the resultant decline in academic research with no readily apparent utility. Constrained by the criticisms mentioned above, funding agencies may be trying to ensure that the relevance of the social science they support is easily justified and, at the same time, poses no threat to society's values.

The shift away from academia in the social sciences has consequences for graduate education, for methodological work, and for the balance between fundamental and policy-oriented research. A case can be made that the shift has been beneficial for certain specialties and has strengthened links between academia and the real world. Whatever the judgment, it is important that we be aware of what is taking place and consider the consequences in planning for the future.—Richard C. Atkinson, Director, National Science Foundation, Washington, D.C. 20550