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EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005; Phones: (Area code 202) Central Office: 467-4350; Book Reviews: 467-4367; Business Office: 467-4411; Circulation: 467-4417; Guide to Scientific Instruments: 467-4480; News and Comment: 467-4430; Reprints and Permissions: 467-4483; Research News: 467-4321; Reviewing: 467-4440. Cable: Advancesci, Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. See also page xv, *Science*, 29 June 1973. ADVERTISING CORRESPONDENCE: Room 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE-6-1858.

Relevance—There and Here

Marxist philosophy holds that the most important problem does not lie in understanding the laws of the objective world and thus being able to explain it, but in applying the knowledge of these laws actively to change the world.—Excerpted from *Quotations from Chairman Mao Tse-Tung* (Foreign Language Press, Peking, 1972).

If one removes the first four words, the quotation from Chairman Mao takes on an oddly familiar ring. Any recent visitor to China has seen how the Cultural Revolution has reoriented China's scientists to the demands of social relevance. Any recent visitor to the United States must have noticed a similar reorientation—albeit accomplished through the persuasion of the research grant and the job market rather than self-criticism meetings and tours of duty in factories and communes.

The difference in means of persuasion is fundamental and should not be forgotten. But we also should not ignore the parallels between the demands that the two societies make upon their scientists. To lay claims to the resources of his society, a scientist must produce what the society wants. And what it wants is a little knowledge and a lot of relevance.

The myth prevails that during the Golden Age (that is, the last decade) American society supported basic science and now does not. The fact is that it never supported basic science on a large scale—as basic science. It supported science that it believed would solve health problems (National Institutes of Health) and would diminish the threats of Russian military superiority achieved through atomic technology (Atomic Energy Commission), space technology (National Aeronautics and Space Administration), and other high technology applied to military purposes (Advanced Research Projects Agency, Office of Naval Research). Even society's support of the National Science Foundation has been predicated mainly on the premise—which most of us accept—that the research will ultimately be relevant to society's needs.

Most scientists have a deep commitment to knowledge for its own sake, knowledge as intrinsically relevant to man's deepest need—his need to understand. On those occasions when we scientists talk with T. C. Mits (the common man in the street), we are reminded that he doesn't much share that value. He sometimes responds to our aspirations, but usually because he believes, with most of us, that basic science is the nutrient on which application feeds.

As scientists and experts, we hope to choose the agenda of science with a minimum of interference from T. C. Mits. We share his values, we say to ourselves, our hearts are pure, and we are best qualified to judge. T. C. Mits is not so sure. Of course he recognizes our expertise and defers to it—up to a point. But he also detects in us our unusual thirst for knowledge and he understands that no man is a thoroughly trustworthy custodian of the public interest when it does not coincide completely with his own private interest.

The "contradiction," as Mao would phrase it, between expertise and social relevance is real. It is as real in the United States as in China. In our society, that contradiction is resolved through a political process that allocates resources to science in competition with many other activities. Necessarily, relevance will be the primary basis for successful claims to such resources. We who have a thirst for knowledge can be thankful that basic knowledge usually does prove relevant to social needs. That's why we're tolerated and sometimes nurtured.—HERBERT A. SIMON, Department of Psychology, Carnegie-Mellon University, Pittsburgh, Pennsylvania 15213