

selection of government-sponsored research, but I would like to argue in favor of an approach which contains features of both freedom and control in such a way as to permit the productive scientist an opportunity to prove the administrator wrong in his value judgments.

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Travel Funds, Biochemists' Meeting

It has recently come to my attention through several inquiries that some confusion exists regarding support for attendance at the Sixth International Congress of Biochemistry by grantees of the U.S. Public Health Service. Officials of the Public Health Service have informed me that costs for attending this international congress in New York City, 26 July to 1 August 1964, are permissible charges under domestic grants in exactly the same manner as would apply to attendance at an ordinary scientific meeting in the United States.

The limitations on international travel under PHS grant regulations apply to meetings held outside the United States. PHS grants which include funds for attendance at this scientific meeting or similar meetings not otherwise limited may support appropriate costs of attendance at this congress.

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Teaching Science in Turkey

I am teaching sociology this year in the Universities of Istanbul and Ankara and intend to prepare a couple of my books in sociology for translation into Turkish. I have 1500 students, of whom those at Ankara are sophomores in the faculty of political science and those at Istanbul are from all classes in the faculties of economics and letters. In the course of my lectures, which concentrate almost entirely upon social change and the dynamic aspects of sociology, I referred to the subject of carbon-14 dating. To my surprise, none of my students or my assistants (Ph.D.'s) had heard of it before.

Since I am not well versed in physics, I had to find some explanation of carbon-14 dating that I could understand myself and could use to answer the students' requests for further information. One book dealing with the subject was listed in the American library at Istanbul, but it had been stolen. I found a copy of it in the similar library at Ankara and discovered that it was good up to 1960. But work in this field moves very fast. Even if the 1960 book had been translated into Turkish and had been a best seller, it would have been outdated by the time I needed it. I had some 1963 and 1964 issues of *Science* and searched through all of them, even the advertisements and the letters, and put together what I could to explain unstable isotopes and carbon-14 dating methods. I had to repeat the resulting lecture (during which I showed an advertisement for an electron microscope) seven times to different classes.

The archeological museum at Ankara uses carbon-14 measurements and dating and has a newer book about it. These two books and one or two informed persons constitute all the sources of information on the subject I could find in Turkey. Yet this country is trying to teach science in Turkish. I think a more radical solution is needed. I do not believe the sustained volume of literature necessary to make modern science intelligible and usable can be supported in the Turkish language. Should not all graduate education in a country such as this be done in English?

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Effective Legislation

In the editorial "Devil's advocates" (28 June 1963, p. 1365) a sane pragmatic approach is adopted to the immediate problem of making available to Congress effective advice in those enlarging areas of legislative action in which extensive technological and scientific capabilities and judgments are involved. The formation of special groups of able scientists, charged with the responsibility of digesting all the pertinent facts and then giving concise advice, is already becoming essential to effective legislation in the Western democracies.

To enforce this argument, however, the editorial points out that some emi-

nent scientists would make poor legislators (some of them currently make bad scientific administrators, too!)—but it leaves the impression that the status quo should be preserved, the seats in Congress or Parliament being largely occupied by men with business, legal, or trade union backgrounds. From a political rather than a budgetary viewpoint it seems to me even more important to devise realistic means for gradually changing the composition of legislative bodies than to improve their present scientific judgments.

This can be illustrated, within limits, by analogy with many large companies operating within certain established industries, such as railroading and steel-making. Such companies have been compelled by the pace of technological progress to provide their managements with highly competent advisers and consultants. In addition, in such industries it is becoming essential for the active board of management to include a substantial proportion of men whose natural bent and formal education lies, not in the arts, commerce, industrial management, or law—although they must have a flair for, and adequate training in, management—but in engineering, science, and technology. Management without such men stomps through the 1960's on a wooden leg. They do not, of course, replace the active engineers as consultants on specific technical problems, but the management of modern industries must embrace a wide spectrum of the intuitions, background interests, and mental habits which underlie "rational" decision and policies.

It is even more important that the members of our legislative bodies should, in time, represent a balance of the interests and achievements of current society. This is true irrespective of the present power of particular political machines or of graft in specific local wards. The necessary social upheavals in Britain during this century owe an immeasurable debt to those members of Parliament who not only had great political gifts but also had their mental roots firmly in the worker's world. These men were able to launch out into politics through the trade unions, and then to keep in touch at the "grass roots" level by virtue of their background. If they failed to become established in political life they could return to effective roles within their trade union organizations.

Within Western countries it is almost impossible at present for a young man with legitimate political aspirations to