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## Mutatis Mutandis: Congress, Science, and Law

The scientific community continues its seemingly endless debate about the roles of science and scientists in the body politic. Yet the content of the discourse reveals an uneasiness in coming to grips with the problems of relating science to the normative processes of representative government. Science is attempting to move from years of passiveness into the arena of public policy without having learned the finesse of politics.

Congress has been selected as the focal point for scientific input. Considering the limited role of the judiciary and the historical frustrations of dealing with the Executive Branch, choice of the Legislative Branch seems logical. But Congress is perhaps the branch of government least suited to receive, process, and use scientific information, not because of intellectual incapacity, but because of its organization and protocol and the nature of the legislative process.

Legislative policy is based more on form and procedure than on substance or scientific detail. There is a mismatch between what Congress needs and what science perceives that Congress needs—hence the plea for the "one-armed" scientist\* and the rejoinder contrasting problem-solving in the scientific sense to legal and political procedures†.

The natural tendency in conflict is to accuse the other party of shortcomings while ignoring one's own deficiencies. Thus, scientists have attributed the problems of the political community to the domination of politics by lawyers, who are allegedly trained to win cases rather than to solve problems. But the failure of scientists to communicate effectively with legislators cannot be explained away on the basis of academic differences.

An attitudinal survey was conducted in 1972 among members of the American Bar Association's Natural Resources Law Section, a group of lawyers who are in close contact with scientists and engineers.‡ The results were startling. A significant number of the 575 respondents questioned the objectivity and veracity of scientists—qualities that are considered to be fundamental to science. Lawyers also perceived scientists to be narrow in their social outlook and provincial in their approach to problems.

Given the opinions of lawyers as reflected by the survey, and considering the scientific community's attitude toward lawyers, it is not surprising that there is a communication gap with Congress. Whether the perceptions of the scientist or the lawyer are well founded is unimportant; that they exist at all is destructive of the communication process.

Steps have been taken to remedy this: (i) a joint committee of the American Association for the Advancement of Science and the American Bar Association has been established to improve interprofessional communication; (ii) the Office of Technology Assessment is now an institution of Congress; (iii) the AAAS and affiliated societies are sponsoring congressional science fellowships; and (iv) increasing numbers of scientists are attending law schools in recognition of the fact that law is at the interface of science and public policy.

If it is to be effective, the scientific community must learn to deal with Congress as it is, not as the scientist thinks it ought to be. We should, of course, continue to work for improvement of the legislative process; but we must recognize that representative government is, and should continue to be, predominantly an institution of laymen and generalists functioning as an alter ego of its constituents. Personal contact fosters understanding. This is demonstrated well by the experience of the congressional fellows. Having observed the first two groups of fellows function in the legislative milieu, I find it difficult to distinguish scientist from lawyer on Capitol Hill after a brief period of acclimatization. This suggests that it is perhaps the legislative process that molds the person, not the professional birthright.—JAMES W. CURLIN, *Senior Specialist in Ocean and Coastal Resources, Congressional Research Service, Library of Congress, Washington, D.C. 20540.*

\*E. E. David, Jr., editorial, *Science* 189, 679 (1975).  
†J. W. Curlin, *ABA Journal* 59, 157 (1973).

‡K. E. Boulding, editorial, *ibid.* 190, 421 (1975).