Experiment Planned to Test Feasibility of a "Science Court"

The federal government is moving cautiously toward a test of the value of a "science court" to help resolve controversial technical issues in which the basic facts are disputed. But many of those involved in planning the test are skeptical about the enterprise, and at least one group of activist scientists has denounced the proposed court as an "ominous" threat to free public discussion.

The chief advocate of a science-court system is Arthur Kantrowitz, chairman of the Avco Everett Research Laboratory, Inc., in Everett, Mass.

Although he is flexible and persuadable on details, the core of Kantrowitz's proposal is that technical disputes would be argued out in adversary proceedings before a panel of sophisticated scientist-judges, who would presumably be better able than the public or its political leaders to weed out exaggerations, errors, and outright lies.

In any given technical controversy, experts would be appointed to argue each side of the issue. At the start, they would attempt to agree on statements of scientific fact relevant to the issue. Where they were unable to agree, they would argue their cases before the scientist-judges and would be subject to vigorous cross-examination, just as in a legal proceeding. At the conclusion of the proceedings, the judges would issue a report giving their opinion of what the scientific facts of the matter seemed to be, along with estimates of the probable validity of their conclusions.

The court's judgment would be limited to "scientific fact" and would not include recommendations for public policy or regulatory decisions, since such decisions generally involve a host of social, ethical, and economic considerations that lie beyond the expertise of scientists. Thus the findings of a science court would provide one piece of evidence—but presumably not the only evidence—upon which a government regulator might base a decision.

The proposal has not stimulated any noticeable ground swell of enthusiasm, but Kantrowitz has been doggedly proselytizing and seems to have won at least lukewarm support for a trial run of the concept. Last fall, Kantrowitz wrote a paper that triggered discussion of the idea at meetings of the Commerce Technical Advisory Board, of which he is a member. That board ultimately endorsed the idea of an experiment although a number of individual board members have reservations about the approach. The Commerce Department plans to host a meeting in September at which advocates and opponents will discuss the pros and cons of the idea and attempt to agree on procedures that might be used. Commerce is interested in science courts, according to William Holt, outgoing executive secretary of the advisory board, because many controversial technical issues—such as whether or not to ban fluorocarbons because of their possible effect on the ozone shield—involve potentially large effects on the economy. But Commerce has kept a low profile on the issue, Holt added, because it recognizes that many public interest scientists view Commerce as spokesman for "a business point of view" and "we were afraid our support would be the kiss of death."

With Commerce acting shy, the chief forum for pushing the idea became the White House advisory groups on science and technology, which were appointed by President Ford late last fall and on which the ubiquitous Kantrowitz holds a seat. The advisory groups designated Kantrowitz as head of a task force that ultimately numbered 19 members and produced a report proposing a series of experiments to test the science court concept. Although many members of the parent advisory groups were skeptical that the scheme would work, they endorsed the idea of trying it out. In fact, Simon Ramo, of TRW, Inc., chairman of one of the parent groups, virtually guaranteed a federally funded experiment.

At one meeting of the White House advisers, Ramo asked Philip Handler, president of the National Academy of Sciences, if the Academy would be willing to serve as home base for the experiment and Handler, with what some observers interpreted as diffidence, allowed as how it would. Then Ramo asked H. Guyford Stever, director of the National Science Foundation, if his agency would fund such an experiment, and Stever allowed as how NSF would consider such a proposal. That understanding has since been formalized in an exchange of letters.

At this writing, the Academy staff is just beginning to grapple with the problem of how best to conduct an experiment. Handler's letter to NSF made it clear that the Academy does not want to be limited to a test of the Kantrowitz proposal but wants the flexibility to explore "several models" for dealing with technical controversies. Some key figures at the Academy are skeptical about their ability to design an experiment that will really prove anything in a scientific sense, and they are dubious that adversary proceedings are really the best way to illuminate issues. They also fear that pronouncements from a science court might be "glorified" and given more weight than desirable. Such reservations leave Kantrowitz fretting that the Academy will botch the job if it doesn't put people who are enthusiastic about the concept in charge of conducting the trial run (although a neutral panel could be appointed to evaluate the results).

Meanwhile, two agencies—the Consumer Product Safety Commission and the Environmental Protection Agency—have indicated a willingness to serve as guinea pigs if an appropriate experiment can be designed that would assist them in resolving a regulatory issue.

The only outright opposition to emerge from the scientific community thus far has been voiced by leaders of the Scientists Institute for Public Information (SIPI). Barry Commoner, SIPI chairman, has described the court as "a very serious attempt to reintroduce authoritarianism in science." And Alan McGowan, SIPI president, has warned that scientists who develop material challenging the "official line" laid down by the court will "be under great pressure to 'play ball' with the 'Supreme Court' team," thereby diminishing the varied content of public debate. McGowan says he is opposed even to conducting an experiment, because the experiment might well be made to work but the concept would remain bad. However, James S. Turner, a leading consumer advocate and lawyer, favors experimenting with the science court approach as a way to *limit* the authority accorded to scientists' pronouncements. If the courts focus solely on facts, he reasons, they will help screen out the value-laden policy recommendations which experts often pass off as "scientific judgment."

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