Science and Society: British Group to Be Harbinger of Dangers

A notably English approach to the problems of science and society was launched last month in London. A number of establishment scientists and the establishment's severest critics met together on the former's turf (the new and maybe oversumptuous premises of the Royal Society) to announce the formation of the Council for Science and Society, a body that plans to rouse public discussion about scientific advances it deems to be consequential for the community.

The council will operate by setting up working parties to study scientific problems as they come over the horizon. Computer privacy, viral insecticides, and the use of antibiotics in animal feeds are examples of the types of issues it plans to treat. Once a working party has analyzed an issue, its report will be published—whether the council approves or not—and will serve to prompt public awareness.

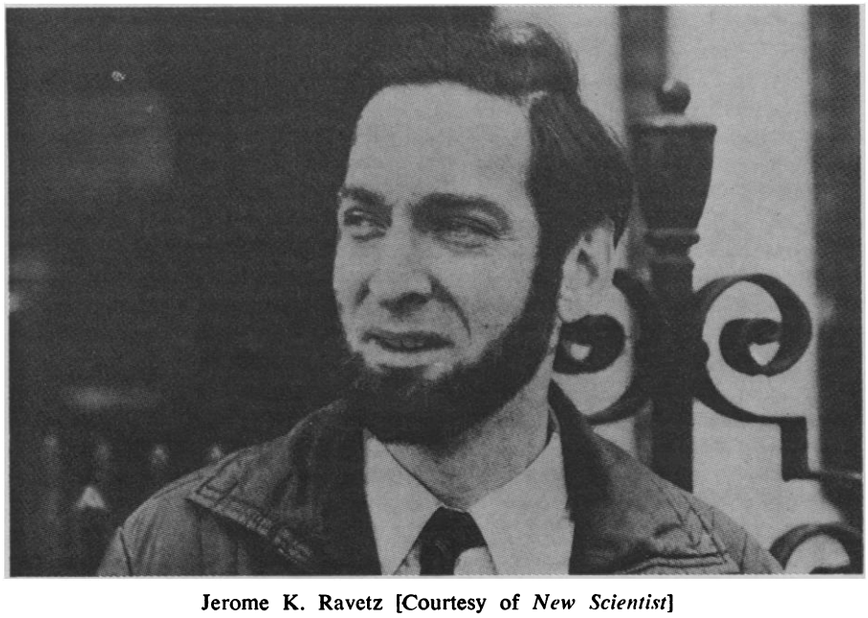
Such reports seem sure of a hearing, if only because of the heterogeneous but illustrious membership of the council. The 33-man group, most of whom are scientists, includes Nobel prize-winners Maurice H. F. Wilkins and Denis Gabor; astronomer Sir Bernard Lovell; psychiatrist Anthony Storr; geneticist C. H. Waddington; the poet and gerontologist Alexander Comfort; and E. H. S. Burhop, physicist and winner of the Lenin Peace Prize. Chairman of the council is Sir Michael Swann, a biologist who is the principal (meaning president) of Edinburgh University and chairman of the BBC. The executive secretary and only paid member is Jerome K. Ravetz, a senior lecturer in the philosophy of science at Leeds University and author of the concept of "critical science." The council's first 3 years of existence are guaranteed by a $200,000 grant from the Leverhulme Trust.

The idea of the council was proposed in an article in *Nature* (1 September 1972) by Paul Sieghart, a retired lawyer who served on a recent British government inquiry into computer privacy. In the article Sieghart reported the conclusions of an interdisciplinary working party that had spent 2 years trying to devise a practical means by which scientists might discharge their special obligations to society. Rejecting the ideas of a Hippocratic oath (platitudinous), the leaving of all decisions to scientists themselves (dangerous), and a radical reform of the whole social system (beyond the group's competence), the working party came up with the idea of a council, organized by the scientific community and charged with informing the public about the possible consequences of socially important pieces of scientific research. A primary intent of the council would be to identify problems at an early stage and increase the response time available to society for devising solutions.

What is perhaps the most interesting feature of the new council is its implicit assumption that members of the establishment and radical critics of the social order can usefully get round the same table. Both Ravetz and Wilkins, for example, have played leading roles in the British Society for Social Responsibility in Science (BSSRS), an activist group which now seems likely to be overshadowed by the new council. Ravetz, who as secretary will have a major role in shaping the council's activities, occupies a rather different part of the political spectrum from Sir Michael Swann, the committee's chairman. Ravetz is a mathematician turned philosopher who came to England as a Fulbright scholar. During the McCarthy period the U.S. government withdrew, and later returned, his American passport. In his recent book *Scientific Knowledge and its Social Problems*,* an extensive disquisition on the nature of scientific inquiry, Ravetz envisaged the development of schools of "critical science" in which scientists concerned about the impact of research on society would resort to "reason, argument and a mixture of political tactics to arouse a public concern on matters of human welfare."

In view of his new position on the Council for Science and Society, it is interesting that Ravetz notes in his book that the presence of an effective critical science is "naturally an embarrassment to the leadership of the responsible, industrialized, tame scientific establishment"; however, as critical science grows in strength, some accommodation may be expected between the critics and the criticized: "We can even expect to see critical research being supported, critical slogans being echoed, and leaders of critical science being rewarded, by institutions whose basic destructive policies are still unchanged."

In a telephone conversation from



Jerome K. Ravetz [Courtesy of *New Scientist*]

* Oxford Univ. Press, 1971. £5.

Leeds, Ravetz explained that the "hard polarity" of this passage was too crude and was largely based on his perception of science and society in the United States. In England, he has found, there is a continuous dialogue between the establishment and its critics, and it is known for people to change their minds. He describes the council as being "right next to and partly inside the establishment," though denies any intimate knowledge about the way the establishment works—"I have only once been inside a London club."

Swann, by contrast, is very much of the establishment. "I don't want to be too permissive or too authoritarian," he announced on being appointed chairman of the BBC. Nor will the Council for Science and Society go overboard one way or the other as long as he is chairman of that. "We will not make off-the-cuff pronouncements on hot issues," Swann says. "Although the BSSRS started off with a wide spectrum of people it became more activist. The council will not be political."

Members of the council, whatever their differences, share a common interest in weighing the consequences of scientific advance. Swann, for example, chaired a government inquiry into the use of antibiotics in animal feedstuffs; his committee's report led to severe restrictions on their use. As Ravetz sees it, the council's aim will be to warn of the dangers of new scientific advances before commercial interests or institutional battle lines are formed. Ravetz hopes that "in the calm and settled conditions of this older culture it will be possible to set up a study of a problem early enough and calmly enough so as to develop a consensus on it before we have to resort to adversary science."

Sir Michael Swann

The English art of compromise consists of the conjoining of antagonists so extreme that outsiders then doubt if either could have been sincere in his original position. Lenin, for example, on being shown a photograph of English workers playing football with policemen during a strike, ordered the Soviet subvention to the British Communist party to be reduced on the grounds that the nation clearly did not take its politics seriously. The Council for Science and Society brings together people who differ strongly in their views of society and science's role therein. Even if nothing subversive emerges from its deliberations, it promises at least to avoid dullness.

—NICHOLAS WADE

Science Policy: Committee Wants Adviser to Use Active Voice

When National Science Foundation director H. Guyford Stever made his first official appearance on Capitol Hill as the Administration's top science adviser on 17 July, the discussion touched on just about everything, including sunshine (solar energy) and motherhood (control of experimentation on the human fetus). Stever's reception by members of the House Committee on Science and Astronautics was cordial, but the congressmen sought unmistakably to extract a pledge from Stever to take the initiative in advising the President when Stever sees that things are going amiss.

Stever did not make any major revelations. Committee members seemed interested primarily in getting Stever's views and intentions on the record; presumably he will be reminded of them later.

The occasion was the opening day of hearings called by science committee chairman Olin E. Teague (D.-Tex.) to undertake a "comprehensive inquiry into Federal policy, plans and organization for the support and utilization of science and technology" (see box). With Stever the first witness, the committee focused on *Reorganization Plan #1 of 1973*, by which President Nixon abolished the science advisory apparatus in the White House and transferred its functions to NSF.

At the hearings' opening session Stever was asked a series of fairly hard questions, but was not pressed very hard for answers. A certain discontinuity in the proceedings was caused by the comings and goings of the members to vote on the floor. More to the point, committee members of both parties are obviously friendly to Stever. He is very good at holding up his end of the sort of colloquy with which congressmen feel comfortable, and in his role as director of the National Science Foundation it is evident that he has accumulated a considerable balance of goodwill on which he will be able to draw as science adviser. Furthermore, he had held the science adviser's job for a bare 2 weeks and could not reasonably be called to account for things done or left undone.

If Stever was the star of the first hearings, as the roster of witnesses shows, the committee does not consider that science policy begins and ends with the science adviser's operation, whether it be in the White House or NSF. Appearing on the second day of hearings on 19 July was William O. Baker, president of Bell Telephone Laboratories, the most prominent and probably most influential member of an informal group of scientists and engineers which for a time at least was touted as a potential scientific kitchen cabinet. Also on the schedule was John C. Sawhill, associate director for Natural Resources, Energy, and Science of the Office of Management and Budget (OMB), but time ran out be-