

science does not employ the adversary process, nor does it do so in its political affairs. The structure of the science-and-government relationship is based on the assumption that wisdom emerges from harmony, not from conflict. Thus, Seitz sits on PSAC and chairs the Defense Science Board. Bronk was virtually everywhere in the science and government structure during his presidency.

When the progenitors of the Mohole Project sought an administrative base, they were accorded a place as a formally constituted committee of the Academy, of which Bronk was president. And they got their money from NSF, whose top advisory board was chaired by Bronk. No collusion was involved; if anything, Mohole came about without Bronk or his associates paying very much attention to what was then a minor operation with commendable scientific objectives. In the best tradition, it was all very harmonious, and no one considered it his task to ask hard questions.

The late Hugh Dryden served as Home Secretary of the Academy and deputy administrator of NASA, for which the Academy's Space Science Board is the principal scientific adviser. And, as it turns out, most members of the Board were doing research with NASA funds, which was only natural, since NASA pays for most of this country's space research and it makes sense to have space researchers on the Space Science Board. There is no doubt that these arrangements involve well-intentioned, honorable people, volunteering large amounts of uncompensated time to work on difficult problems of national importance. At question, however, is not the virtue of the people but the wisdom of the system.

Tradition and caution permeate the halls of the nation's most prestigious scientific society. But the science and technology that produces its illustrious membership is neither traditional nor cautious, nor necessarily humane. There is a spirit of change at the Academy, but there is also timidity and a membership that is largely indifferent to the affairs of their institution.

This series of articles opened with the account of an incident in which an influential Senator asked, "What is the National Academy?" The truth of the matter is that, at this point, the Academy itself is not certain of the answer.—D. S. GREENBERG

## NEWS IN BRIEF

### ● GOVERNMENT SOCIAL RESEARCH:

Federally sponsored research in the social sciences, according to a new study, has tended to be too small-scale and academically oriented to make any major contribution toward solving the nation's social problems. In the staff study, released by the Research and Technical Programs subcommittee of the House Committee on Government Operations, federal agencies and university social scientists were said to be more interested in the pursuit of knowledge for its own sake. The study, Representative Henry S. Reuss (D-Wis.), subcommittee chairman, said, will be used as a basis for hearings on social science research. Dr. Harold Orlans, a sociologist on leave from the Brookings Institution, conducted the study which resulted in a four-volume omnibus report. Questionnaires mailed to leading scientists throughout the country revealed that a majority favors the calling of a White House conference on the status of social sciences, but opposes the establishment of a National Social Science Foundation (*Science*, 17 February). Critical comments in the report include: federally financed research is often trivial or irrelevant, and if usable, goes unused; too much emphasis is placed on small projects, rather than large coordinated efforts directed at a specific objective; and federal agencies tend to withhold findings critical of their programs or policies. Copies of the study, *The Use of Social Research in Federal Domestic Programs*, are available from the Superintendent of Documents, Government Printing Office, 710 North Capitol Street, Washington, D.C. 20402.

● "CHICKEN TRIAL": The six members of the New Jersey Supreme Court have upheld last year's lower court ruling endorsing experimentation on living animals by high school students. (*Science*, 22 April 1966). The test case involved an East Orange, N.J., high school boy who injected Rous sarcoma virus into four live chickens as part of a cancer research project. After the two surviving chickens, together with details of the experiment, were exhibited in a Newark Science Fair, the experiment came to the attention of the New Jersey Society for the Prevention of Cruelty to Animals. The SPCA brought the East Orange Board of Edu-

cation to court, charging that for technical as well as substantive reasons, the research violated the state's anticruelty statutes. Fearing a threat to animal experimentation in general, the National Society for Medical Research entered the case as a codefendant, and mobilized support from the scientists associated with the Biological Sciences Curriculum Studies, several of whose representatives testified at the trial about the importance to students of early introduction to work with living animals. Charles S. Barrett, the county judge, supported the scientists' case in all particulars, concluding that the experiment did not involve "unnecessary cruelty" and had substantial educational value. The Supreme Court simply adopted Barrett's opinion.

### ● FISH PROTEIN CONCENTRATE:

In order to get a head start on its research on fish protein concentrate, the Department of the Interior's Bureau of Commercial Fisheries has been awarded a \$200,000 grant from the Agency for International Development (AID). The funds will go for expansion of the Beltsville, Md., pilot plant for food technology studies, and for predesign engineering on a new plant. The bureau expects to receive its own funds for expansion of its pilot plants in its 1968 budget which takes effect 1 July, but the AID grant will enable it to begin the work immediately.

### ● STONY BROOK APPOINTS OMBUDSMEN:

The faculty, staff, and student body at the State University of New York, Stony Brook, now have three special emissaries to listen to their complaints and suggestions, investigate them if they are worthy, and possibly bring them to the attention of the University president. In response to a suggestion at a recent faculty meeting, President John S. Toll appointed three ombudsmen. The position, which originated in Sweden, traditionally has no specific administrative responsibility, but broad independent authority to investigate problems brought out by members of the community. The Stony Brook ombudsmen are Homer Goldberg, English department, and Theodore Goldfarb, chemistry department, for the entire University, and Robert Weinberg, physics department, for the residential colleges.