

than from others. He censures them harshly for not accepting full responsibility for the effects on society of their work. And his tone when speaking of scientists was often reproachful, as it is in this excerpt from his 1937 book of essays, *Ends and Means*.

"In our institutions of higher learning about ten times as much is spent on the natural sciences as on the sciences of man. All our efforts are directed, as usual, to producing improved means to unimproved ends. Meanwhile intensive specialization tends to reduce each branch of science to a condition almost approaching meaninglessness. There are many men of science who are actually proud of this state of things. Specialized meaninglessness has come to be regarded, in certain circles, as a kind of hall-mark of true science. Those who attempt to relate the small particular results of specialization with human life as a whole and its relation to the universe at large are accused of being bad scientists, charlatans, self-advertisers. The people who make such accusations do so, of course, because they do not wish to take any responsibility for anything, but merely to retire to their cloistered laboratories, and there amuse themselves by performing delightfully interesting researches. Science and art are only too often a superior kind of dope, possessing this advantage over booze and morphia: that they can be indulged in with a good conscience and with the conviction that, in the process of indulging, one is leading the 'higher life.' Up to a point, of course, this is true. The life of the scientist or the artist is a higher life. Unfortunately, when led in an irresponsible, one-sided way, the higher life is probably more harmful for the individual than the lower life of the average sensual man and certainly, in the case of the scientist, much worse for society at large."

—JOHN WALSH

### **Congress: Hearings on Science Advisory Staff Reveals Interest, but No Strong Inside Demand**

Without much fanfare or notice in the daily press, a subcommittee of the House Administration Committee last week held a morning hearing on proposals to give Congress its own science advisory staff.

The House Administration Committee handles housekeeping, staffing, and

budget matters related to the operation of the House which are mundane in the larger legislative sense but are close to the hearts of congressmen. The science advisory hearing was held before the subcommittee on accounts, whose chairman, Representative Samuel N. Friedel, a Maryland Democrat, displayed a measure of unpartisan magnanimity in scheduling the hearing, since both proposals before the committee were introduced by members of the Republican minority.

Under consideration were two bills, different in detail but similar in general provisions—H.R. 6866, sponsored by Representative Abner W. Sibal of Connecticut (*Science*, 21 June), and H.R. 8066, by Representative William B. Widnall of New Jersey. The Widnall bill is a companion measure to one introduced in the Senate by Senator E. L. Bartlett (D-Alaska), who has been perhaps the most insistent advocate of better scientific advice for Congress.

All the witnesses who appeared at the hearings last Wednesday expressed approval of the idea, in varying degrees. Representatives of three associations of professional engineers declared themselves generally in favor, and the witness for the American Psychological Association endorsed the proposal but argued that psychologists should be included among the science advisers.

The witness who went furthest in arguing that defects in the present federal science establishment make science advisory apparatus for Congress essential was John Heller, executive director of the New England Institute for Medical Research, located in Sibal's district. At the hearings Heller demonstrated that he had spent time and effort reviewing federal research agency reports and talking to scientists and administrators involved in research for the government, and also that he is a man with active capacity for feeling outrage. Heller said that while some federal agencies are doing excellent work, others, conspicuously, are not. He cited government literature in which agencies falsely claimed credit for specific pieces of fruitful research, and charged that some agencies are using research not necessarily connected with their missions to build budgets and bureaucratic empires. Heller has had experience as a recipient of federal grants and as an agency consultant, and he gave advice on science to Richard M. Nixon during the last presidential campaign.

Heller did not speak from a prepared statement but said he would submit documentation for his remarks, to be included in the record of the hearing. Friedel announced that the record will be kept open for 2 weeks to permit other interested persons to submit statements. The hearings should be in print and available fairly soon afterward.

Inside Congress, the feeling seems to be spreading that Congress faces two major problems in dealing with science: (i) the present dependence by Congress on the executive branch undermines the legislative branch's constitutional responsibility to exercise judgment independent of the Executive, and (ii) authority for science is scattered over so many committees that it is virtually impossible to develop balanced and coherent scientific programs in many vital fields.

The practical difficulties implied in the operation of a Congressional Office of Science and Technology (COST) such as the Bartlett-Widnall bill suggests were barely intimated in the single-morning session. How a congressional science advisory apparatus can be meshed with the committee structure and where to draw the line between Congress and the Executive on the making of science policy are two posers.

There is unquestionably an upsurge in concern over science in Congress, but at present it is taking an investigatory form.

The hour for action on proposals for a science advisory staff will likely be most propitious when results are in on studies such as that being carried out by the Elliott Committee (see page 1443) and when and if Congress can bring itself to modify its rules and structure.—J.W.

### **Kennedy's Assassination: Study Organized by Social Scientists**

The day after the assassination of President Kennedy, a group of social scientists met informally in Washington to organize a study of how Americans were reacting to the terrible event. The assassination, it was felt, fits into a category of events known to the social psychologists and psychiatrists, as well as to the rest of us, as "disasters"—fires, floods, tornadoes, wars. Study of it, according to one spokesman, could "add to the tradition

### A Correction

Last week in this space it was incorrectly stated that Bennett A. Robin was indicted in connection with the drug Mer/29, a product of the Richardson-Merrell Company. Robin has had no connection with Richardson-Merrell or Mer/29. He was indicted for reporting fictitious tests on five other drugs to their manufacturers, thus "willfully causing the manufacturers of the five drugs to file false case studies with the FDA in support of their applications for FDA approval of the drugs." Richardson-Merrell is currently under investigation by a grand jury in connection with Mer/29 in another respect. The company voluntarily withdrew the drug from the market.

of research on the reactions of normal people under stress."

Two field studies of responses to the news were undertaken immediately. One, under the auspices of the University of Chicago, was nationwide; the other was confined to Washington, D.C. Both studies used the interview technique and were said to have utilized cross sections of the population.

The interviewers were interested in such questions as these: How did people behave during that weekend? What did they do? What kind of emotional reaction did they actually experience—was it grief, or guilt, or panic, or what? What assumptions did Americans make about the "meaning" of the assassination—who did they think did it, and why, and how did their response fit in with their general views about America? How did the institutions of society stand up under the sudden pressure—how did people use their churches, clubs? How did people use the mass media—did they take comfort from its widely commended 24-hour coverage, and why? What social or emotional function did it fulfill?

The initial interviews were completed soon after the event; most of the material, however, remains to be collated, organized, and developed. How fast this can be done, and whether follow-up studies can be undertaken, depends on whether the participating social scientists succeed in attracting a foundation to underwrite them. Lack-

ing this, it will be a spare-time project for those involved. An informal committee—the group that met in Washington—is coordinating the work. The members of that committee are Leonard Duhl, Eric Lindemann, Marc Fried, Peter Rossi, Donald Michael, Robert Leopold, William Soskin, Henry Reicken, and Robert Bower. (Inquiries may be addressed to Robert Bower, Bureau of Social Science Research, 1424 16th Street, NW, Washington, D.C.)

Meanwhile, the politicians are using their own techniques and resources to determine the impact of the assassination of the President, and its meaning for the country. It is an odd occasion for a partisan split, but so far the tendency has been for Republicans to consider the assassin an isolated madman, while the Democrats talk of a social malaise more general and call, as J. William Fulbright (D-Ark.) has done, for "a national self-examination." "It may be," Fulbright said in a speech in Washington on 5 December, "that the cause lies wholly in the tormented brain of the assassin. It may be that the nation as a whole is healthy and strong, and entirely without responsibility for the great misfortune that has befallen it. It would be comforting to think so. I for one," Senator Fulbright continued, "do not think so. I believe that our society, though in most respects decent, civilized, and humane, is not, and has never been, entirely so. Our national life . . . has also been marked by a baleful and incongruous strand of intolerance and violence."

Senator Thruston Morton (R-Ky.) does not agree. "It was not a flaw in the American system or the American character that struck down John Kennedy," he told his fellow senators last week. "It was not the sin of a city or of its citizens. It was not a tragedy that struck from some dark stain of violence on the American system or in the American soil. . . . Let us mourn the terrible event," Morton went on, "but let us not mourn for the American soul—for that soul is stout and lighted by truth and faith."

The House Republican Policy Committee, in a statement issued last weekend, took a position akin to Morton's: "There is guilt," the Republicans said, "but it is not American guilt, but the guilt of the murderer. There is hatred, fanaticism, and bigotry in the world, but America is not its source, or loyal Americans its practioners."—E.L.

### Announcements

Pennsylvania State University plans to open a graduate center for **scientists and engineers** at King of Prussia, Pa. The center, the university's first resident graduate facility located away from the University Park campus, is scheduled to begin its program 9 January, with a curriculum leading to the master of engineering degree. A. Witt Hutchison, chemistry professor at the university, has been named assistant dean of the graduate school, and director of the new center.

The University of Illinois has established a **water resources** center to administer grants and review proposals for support of water research programs. The center will include programs of related departments in the university, along with the engineering and agricultural experiment stations on the campus; it will also work with the Illinois water, geological, and natural history surveys.

### Meeting Notes

The National Society for **Programmed Instruction** has issued the call for papers for its annual convention, scheduled 1-4 April in San Antonio, Texas. The meeting will include papers on theory and experimentation, methodology, training technology, administration, and application of programmed instruction. Abstracts of 300 words are required in triplicate. Deadline: 5 January. (NSPI Program Committee, Trinity University, 715 Stadium Drive, San Antonio, Tex. 78212)

The 1964 national **telemetering** conference is scheduled 2-4 June, in Los Angeles, Calif. Papers are invited on the applications of telemetry in biomedicine, manufacturing, geology, spacecraft, oceanography, and zoology. Deadline for receipt of completed papers: 1 January. (W. S. Pope, Natl. Telemetering Conference 1964, 8420 Quinn St., Downey, Calif.)

### Courses

The school of chemistry at the University of Minnesota is accepting applications for a program in the **physical chemistry of radiation processes**. The