From Statements to the Reuss Subcommittee

. . . [C]onsider a distinguished scientist in a particular field who may command research support for his program of several hundred thousands of dollars per year. As an individual, he may command more support than the rest of his department, taken altogether—more than the chairman of his department and, in some cases, even more than the dean of his college. He is in a position to exercise immense leverage because of the funds at his disposal. In many cases he provides funds for most of his own salary. All of his equipment comes from Federal funds, as does the support for six or seven graduate students in the department. He gets his own way and teaches very little. If complaints are made about his activities, he threatens to "pick up his marbles" and go elsewhere.—HOWARD A. SCHNEIDERMAN, *chairman, Department of Biology, Western Reserve University*

If two institutions A and B vie for the same federally supported research project, and if institution A had higher competence than institution B in this research field, it is proper enough that institution A receive the project. But let us suppose that institution B is a developing institution, one which the Nation urgently needs to have take its place up among quality universities of the land. One must now face the fact that the award of the initial grant to institution A places institution B in an even worse competitive position the next time it seeks a project in this field. It is clear that the overall development of a strong university system for the United States is an important consideration, and the promise for future development of a strong scientific program may sometimes be a valid reason for awarding Federal research support to one institution when another may actually at that moment have somewhat higher competence in the same field.—GEORGE E. PAKE, *provost of Washington University*

. . . It is not so much that the "hard science" departments are being supported, but that the "hard" outlooks are being supported within every field, including the humanities. The academic judgments as to what is "research" and the judgments as to what are the appropriate methods for discovery, tend to become stereotyped as the result of the anxieties of young researchers lest they not be pursuing the approved formulas—approved, that is, within their academic subguilds. Throughout American life, and not only in the academic and research world, there is a research for easily grasped standards of performance which avoid the making of difficult qualitative judgments.—DAVID RIESMAN, *Department of Social Relations, Harvard University*

The growth of surrogate instruction stems not only from the reductions in the teaching load of the established faculty, but from the reluctance of the established faculty to add new members to bear that load. Research-centered institutions have high aspirations and august self-images. They cannot and will not make wholesale permanent appointments to match the rapid growth of student bodies. Rather than attenuate the quality of their staff, they would rather attenuate the quality of their instruction. The fact that this strategy is economical makes it even more attractive. . . .—WALTER P. METZGER, *professor of history, Columbia University*

In recent years, especially in hearings before the various congressional committees that have been studying federal support of science, most of these arguments have been suggested or even shouted. The significance of their latest appearance is that they are concisely and powerfully presented in the subcommittee report, rather than strewn among a great deal of other material; also, the subcommittee, which is the House's latest addition to the proliferating science study field, is headed by Representative Henry S. Reuss (D–Wis.), a Harvard-trained lawyer, widely regarded as possessing one of the leading intellects in the House, and respected by his colleagues as a sound and careful student of whatever engages his interest; and, finally, the Reuss report dovetails in time and substance with the recent White House edict for federal agencies to broaden the distribution of research funds (*Science*, 24 September 1965).

Based on public hearings and statements solicited from more than 200 persons associated with universities throughout the country, including a few students, the report acknowledges that the boom in federal support for research has, in fact, produced many benefits. But once having paid its respects to the widely praised credit side of the picture, it goes on to recite some highly illuminating details of what has been happening within the academic world as a presumable consequence of federal largesse, and it accompanies these with some potent complaints about the consequences:

1) Between 1953 and 1964, the number of full-time-equivalent science and nonscience teachers at American universities increased from 177,000 to 324,000. During this period, overall enrollments more than doubled, to 4.7 million. At the same time, the number of full-time-equivalent research staff rose from 23,000 to 71,000—and it is a reasonable assumption that most of these were in the sciences.

2) In 1962, 49 to 82 percent of new Ph.D.'s in field, outside the natural sciences went into teaching as a primary occupation but only 23 to 25 percent did so in psychology and the natural sciences. Of the new Ph.D's in the physical and biological sciences, two-thirds "chose to do paid research or received fellowships which enable them to do research."

3) According to testimony by Fay Ajzenberg-Selove, professor of physics at Haverford College and executive secretary of the Committee on Physics Faculties in Colleges, "600-odd colleges awarding 55 percent of all bachelor's degrees in physics received only 12