university engineering faculty are motivated by a need for engineering students to fill their classrooms and that industry managers want a heavy flow of graduate engineers to keep competition for jobs sharp and salaries low. He is identified with proposals to restrict training of engineering manpower, although he insists what he favors is a "quality filter."

Tensions between those who espouse the traditional technical functions of the institute and others concerned with the newer professional lobbying activities became acute in the late 1960's when recession conditions, particularly the decline in federal R & D spending on space and military electronics, caused a sharp rise in unemployment and a squeeze on salaries among electrical and electronics engineers.

These recession pressures led to demands from lower and middle-level engineers that IEEE become active in behalf of engineers' economic interests. A proposal for a constitutional amendment put on the ballot by petition in 1971 would, in effect, have converted IEEE to an organization largely devoted to professional activities. This was narrowly defeated and the next year board-backed amendments gave professional activities parity with technical and educational purposes in the IEEE constitution. These were passed overwhelmingly.

To carry out the mandate, the IEEE levied a special assessment for professional activities on its U.S. members. IEEE is an international organization with 180,000 members, 150,000 of them in the United States. Basic dues are $35 a year with U.S. members paying an added $10 assessment, so over $1 million a year is available for professional activities.

IEEE's professional activities are carried out mainly through a U.S. Activities Board (USAB) made up of IEEE members and by a Washington office with a

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Professors, Politics, and Palaver

The American Enterprise Institute, a conservative think tank, recently held a symposium on "professors, politicians and public policy" in hopes of casting some light on the effect of the increasing numbers of academics in government.

The panel, moderated by former ABC news executive John Daly, featured four heavy hitters in the cerebral department: Senator Daniel Patrick Moynihan (D–N.Y.), Senator S. I. Hayakawa (R–Calif.), former solicitor general Robert Bork, and political theorist Irving Kristol.

Hayakawa, who has a reputation for dozing off during boring meetings, testified to the vim of the proceedings by remaining alert throughout, as the four professors traded quips and quotes from Shaw, Wilde, Orwell, Popper, Schumpeter, and such.

Moynihan packed two cracks into his opening breath: he corrected Daly's pronunciation of "academia" to "academia, as in academia nuts," and went on, inexplicably, to quote Oscar Wilde's evaluation of Niagara Falls: "It would be more impressive if it flowed the other way."

Touching briefly on substantive matters, the panelists agreed that the professoriat in recent years have infiltrated government to a significant extent. Moynihan recalled there had been six professors in President Ford's Cabinet (including himself as U.N. ambassador), a signal of the "big change from the long hegemony of lawyers in American political life." Bork agreed that "professors are probably the single most influential group in public policy in the U.S."

Kristol ventured as explanation his view that "professors, along with their satellite group, the media," are sought for their expertise because they're the only people who are not looked upon as a special interest group. And academics embrace this role, he said—in the past they philosophized and moralized in their ivory towers, but "now all professors think they should be sought out."

The panel went on to mull over how well suited those whose trade is words are to running things. Hayakawa the semanticist thought the takeover by the "verbalists" was an unfortunate trend. The "symbol handlers"—those for example who deal in grain futures but never

Richard Pellici

tilled the sod—"have no checkpoints in the nonverbal world," he said, unlike the "thing handlers," pastry chefs for example, whose concepts "are validated in nonverbal events" such as puffy pastries.

Kristol was sympathetic to this view. "Government is a practical, not a theoretical, art," he asserted.

Wrong! cried Moynihan. "Government is ALTOGETHER a theoretical art. It is fundamentally a matter of manipulation of symbols."

Uh-uh, said Hayakawa. "You have a theory of housing for the poor. That's why we still have a housing problem for the poor."

Moynihan swept that aside. "In the end, the important things you are going to have to ask the professors. The really serious questions—not housing for the poor—but questions like what is the difference between a dog dying and a fetus dying? These are the important questions. These are not answerable. You have to resort to symbols."

That topic dispatched, the panel took a quick excursion through capitalism and utopianism and finally arrived at a conclusion on which all agreed: Chicago Mayor Richard Daley was the best mayor in America.

Unlike politicians who have been conditioned to look to the "experts," Daley ran on common sense, said Kristol. "Mayor Daley would have made a great Secretary of State. He knew how to get along with people, he was shrewd, he knew who to stab in the back. It didn't matter that he didn't know where half the countries in the world were."

But, said Hayakawa, "men of words don't understand men like Daley."

Wrong again! from Moynihan. He had discussed Daley with colleagues at the Center for Urban Studies at Harvard and "we all agreed Daley was the best mayor in America. And he would make a Hell of a secretary of state."

Moynihan emerged from the symposium as the unqualified advocate for the range and resourcefulness of the academic mind. Hawakaya displayed a democratic resentment toward the privacy of the "verbalists"; Bork shared his reservations, mainly on the basis that "the professoriat have distinct policy biases that tend to be left liberal" which he thought might have "long-term serious implications." Kristol wound up with an observation on the media's contribution to the elevation of intellectuals. "Professors do tend to be a lot more articulate than busi-

full-time staff. The Washington office conducts a lobbying and information program which focuses mainly on economic issues. During the recession, many engineers lost pension rights when they were laid off or forced to change jobs, and a good deal of IEEE effort has been put into working for pension rights for professionals in an industry with somewhat transitory employment patterns. Currently, considerable attention is centered on what is called "salary busting." Engineers who work for firms performing service contracts for the government have faced special problems when these contracts expired. In many cases their firms have had to enter lower bids in order to win contract renewal and, consequently, they have cut employees' pay. In a tight job market, engineers, particularly those over 40 who had nowhere else to go, had no option but to accept the cuts. IEEE has been lobbying to win extension to professionals of the federal Service Contract Act, which provides protection of the pay of blue-collar workers on federal contracts.

Protection of the interests of inventors whose employers' claim patent rights is another aim of the professional activities program. In addition, surveys to indicate changes in employment and other engineering manpower indicators are taken and made available. Attitudes of members are also polled to give guidance to the USAB and the board on policy.

Critics of the institute's professional activities say that the IEEE is taking policy stands on too many controversial issues which have little to do directly with engineers' interests. Most often cited is the IEEE position opposing the California initiative for strict control of nuclear power development in the state. The IEEE action was protested vigorously and led to an internal debate over official policy-making which was aired in the IEEE's monthly journal, *Spectrum*. The

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nessmen or bankers. They survive on TV. Businessmen do terribly on TV."

But do professors make the government run better? Put four of them onto that question and the answer is an admirably puffy, but not necessarily edible, pastry.

Court Rules Against Woman Biochemist

Sharon Johnson, a biochemist at the University of Pittsburgh, has lost a 5-year battle to prove that the university's refusal to grant her tenure was a case of discrimination based on sex.

On 2 August, a federal district judge ruled that the decision was "legitimate and nondiscriminatory" and based on the "ineffectiveness of her teaching and lack of relevancy of her research."

Johnson was refused tenure in 1971. Although her teaching contract was not renewed in 1973 she obtained an injunction from the district judge, William L. Knox, that prevented the university from dismissing her. Her case has been financed by the National Organization for Women (NOW).

In his opinion, Knox said the evidence showed that Johnson's teaching performance was poor and that many of her first-year medical students found her incomprehensible. He cited the claim that over half the students had resorted to attending a supplemental evening course covering the same material.

Johnson's NOW lawyer, Sylvia Roberts, said Johnson was not the only lecturer students complained about. As for Johnson's research on enzyme mechanisms, which the professors in the biochemistry department termed "remote" from the department's concerns, Roberts said one eminent biochemist (not at the university) found it outstanding. (Upon being contacted by *Science*, though, this biochemist agreed that the research was "very remote.")

Whatever the merits of Johnson's charges, the trial—which lasted 74 days and produced 12,085 pages of testimony—illustrated the difficulties of proving or disproving charges of sex discrimination, particularly in academe.

Roberts said NOW took the case because it was "strongest on its facts of any that we know of." She said there that at least two men with inferior qualifications had been promoted over Johnson, and that the biochemistry department had never had a tenured woman. To Roberts, the case proved that the courts require nothing less than a blatant admission of sex discrimination on the part of the defendants. She also noted that "there has never been a decision in this country which takes on peer review" in higher education.

As for Johnson, the injunction keeping her at her post has been dissolved and no one is saying whether or not she will be kept on. Lawyer Roberts says no decision has been made on what to do next. She says Johnson has sent out 400 job applications in the past 2 years but hasn't had any offers.

Curbs on Strippers Celebrated

"Coal has always cursed the land in which it lies," wrote Harry Caudill in his Appalachian classic, *Night Comes to the Cumberlands*.

It almost seemed the curse was being dissipated in the warm night over the Potomac in Washington as hundreds of revelers, including people from the coal lands of Appalachia and the West, gathered to celebrate on the eve of the signing of the new national strip-mine law.

Although there were few if any members of the coal industry present, the party, held in a boathouse by the river, had an air of national unity. There were assembled representatives from dozens of environmental groups, as well as bureaucrats, babies, mountain folk, and sundry others. People drank beer stashed in an ice-filled canoe, danced to the twangings of a bluegrass group, and filled the air with acronym-studded Washington talk.

The party was put on by the Environmental Policy Center, a Washington-based lobby that has been pushing hard for a national strip-mine law since its formation in 1971. At the door welcoming guests was EPC's coal expert Louise Dunlap, looking radiant as any bride, as people congratulated her for her unremitting labors. "Louise won't admit it, but she's done more than any other individual to get this thing through," said one guest.

She was rewarded with a presidential smooch the next day, 2 August, in the Rose Garden where another large group assembled to witness Carter fulfilling his campaign promise to sign the bill.

The bill, the Surface Mining Control and Reclamation Act of 1977, for the first time establishes national standards for leasing, mining, and reclaiming strip-mined land. It has undergone many adventures and hundreds of amendments since Illinois Senator Everett Dirksen introduced the first national strip-mine bill 37 years ago. It was finally passed by both houses twice in the last Congress but was vetoed twice by President Ford.

Constance Holden