lection studies were "appropriate and extensive" and that the selected site was "as favorable for the construction of a dam as any of the other sites studied." It added that preliminary investigations gave the designers "adequate knowledge of the site conditions," including the jointed character of the rock. What troubled the panel is that Reclamation, after getting this information, followed design practices it has used for many years without giving sufficient consideration to the difficult conditions at the Teton damsite.

On the day the panel's report was released, the Interior Department and Bureau of Reclamation announced steps to improve dam construction procedures. Interior has entered into discussions with the National Academy of Engineering to conduct a safety review of those dams identified as having "possible deficiencies that could affect their safety." At this point, that includes at least 13 dams. Interior will also hire a consulting firm to review the technology and methods used by Reclamation in its dams program. For its part, Reclamation will expand instrumentation of future dams and be more conservative in the initial filling of reservoirs. It will also obtain "independent technical reviews of the designs of all major future dams." That might help avert another tragedy in which engineers make an error in judgment and there is no one around to second-guess them.—PHILIP M. BOFFEY

The Rockefeller University: No Time for Philosophers

When The Rockefeller University makes the news it is customarily a report of another triumph in the laboratory or a further honor for a faculty member. Last summer, however, the word from Rockefeller was less auspicious; the university had fired its philosophers.

The Rockefeller, a graduate university concentrating heavily in the life sciences, is the evolved form of the Rockefeller Institute for Medical Research, founded in 1901 by John D. Rockefeller. It has been a leading model for medical research in the United States, and its laboratories have been the base for dynasties of distinguished researchers. Sixteen Nobel laureates have been associated with the institution, and seven are still active in research there. Because of Rockefeller's prestige and affluence, the furor over the philosophers attracted attention far beyond the boundaries of the university's 15-acre enclave on the East River in New York City. The incident was regarded as trouble on Olympus, and to the embarrassment of almost everyone involved, even landed on page one of the *New York Times* one Sunday last August.

At the time, the university's action was portrayed as a violation of the tenure principle. In fact, it never came to that. The philosophers were not dismissed, but, as they saw it, the administration invoked economic necessity and depicted the philosophers' future at the university in such bleak terms that they finally accepted a settlement and departed.

The philosophy group was a small one—only four tenured faculty members were involved—and very highly regarded in academia. One qualified observer called it "the most distinguished philosophy department per capita at any American university." Even under the conditions prevailing in the academic job market, all four philosophers received good job offers from good places.* Arrangements between the university and the four philosophers, Donald Davidson, Joel Feinberg, Harry G. Frankfurt, and Saul A. Kripke, varied in details, but in each case the university provided a settlement of 3 years pay to smooth the way.

This is not to say that the parting was easy or particularly amicable. The philosophers all feel that a threat to tenure was used by the administration to exert pressure on them to settle. While the matter did not come to a head until a year ago, serious discussion of whether there was a place for the philosophers at Rockefeller goes back 2 or 3 years.

The philosophers date the buildup of pressure from 1974 when the university vice-president Albert Gold had conversations with each of them. They recall that Gold said he was speaking informally and unofficially but with the knowledge of Rockefeller president Frederick Seitz. Gold observed that a significant number of members of the faculty and of the board of trustees felt that the "experiment" with philosophy at Rockefeller had failed. He said that Seitz was committed to the principle of tenure and would support the philosophers as long as he held his office. Gold noted that Seitz was approaching retirement age and that in view of the prevailing attitudes toward their discipline and future uncertainties, they might wish to think about moving.

During this period, junior faculty in philosophy were not promoted or replaced when their appointments lapsed and for 2 years no graduate students in the subject were accepted. At first the philosophers thought this was due to the austerity measures being taken, but they concluded finally that the administration was making its message to them unmistakable.

The philosophers say that on more than one occasion they were told that their claim on university resources would not be as strong as that of their colleagues in other disciplines, and they say they were left in some doubt about whether they would qualify for cost-of-living increases.

There was discussion by the philosophers of taking legal action, but they decided against it. And there was also some talk of asking the American Association of University Professors to consider censure action on the tenure issue, but apparently no formal overture was ever made. Rather, the philosophers, feeling increasingly isolated and having the option of settling elsewhere in hospitable circumstances, accepted the administration's offer. Kripke was the last to come to terms. In early July, in fact, he had received a letter from Seitz which said that the philosophy program was being terminated and that after another academic year and with the salary payment accepted by his colleagues, Kripke's "appointment will be deemed to expire." Seitz withdrew the letter in the face of faculty reaction, but Kripke

*Donald Davidson has taken up a professorship at the University of Chicago and Harry G. Frankfurt is similarly established at Yale. Joel Feinberg is finishing out this academic year at Rockefeller and will move to a professorship at the University of Arizona at Tucson in September, and Saul A. Kripke is serving out this year as an adjunct professor at Rockefeller and is a visiting professor at Princeton.

shortly afterward decided to settle and this left the issue of tenure somewhat in limbo.

While university president Frederick Seitz and his fellow administrators had little precedent to follow, it appears that they might have avoided personal discomfiture and publicity that was at least mildly embarrassing for the institution if they had been more forthcoming about the rationale for the action and about their specific intentions, especially in the later stages of the negotiations.

Among the rest of the faculty, attitudes on the issues can be described as ambivalent. By and large they do not lament the dismantling of the philosophy program, but many say they became alarmed by the way the matter was handled and feared that what happened to the philosophers could happen to others.

Specifically, there were rumors that groups in mathematics, physics, and logic might be next. The groups in these subjects had been added to the faculty when Rockefeller was converted into a university in the 1950's at the time a Ph.D. program was added. It seemed possible that a Ten-Little-Indians scenario was in the offing. There were also rumors, though of a much lower muzzle velocity, that less productive researchers in the traditional life sciences labs might ultimately be found expendable.

By the end of the summer, with the philosophers gone or going, the place had settled down. What did it primarily was a reassuring statement from the chairman of the Rockefeller board of trustees, Patrick E. Haggerty, now honorary chairman of Texas Instruments, Inc., that, among other things, the university "has not altered and does not contemplate altering the longstanding policy whereby a tenured faculty member is assured the security of his academic position and salary, and the freedom to pursue his scholarly interests whatever they may be." Informally, assurances were given that the jobs of the mathematics, physics, and logic groups were secure.

Another quieting factor was the announcement in June by President Seitz that he would retire when a successor had been found and was ready to take office. The search for a new president is under way, and although the full process could take 2 years to complete, the knowledge that Seitz will be departing has induced a sense of interregnum.

The incident of the philosophers, therefore, becomes a dramatic event in the later stages of the 10-year Seitz era at Rockefeller. To be fairly understood, however, the incident must be viewed in the context of the effort by the Seitz administration and by the board of trustees to come to terms with the financial presures of the past decade and to rethink both the financial and scientific future of the institution.

Outsiders tend to be incredulous that Rockefeller should face a serious need to retrench. Its relatively small size—about 200 regular faculty, 200 postdoctoral fellows, and 100 graduate fellows—its large endowment—roughly $175 million—and its splendid connections would seem to insulate it from hard times. The fact is that practically from the day Seitz took over from his predecessor Detlev W. Bronk in 1967, Rockefeller has shared the fiscal squeeze on universities.

At about the time Seitz became president, the stock market went into decline, federal research and training grants became harder to get, inflation boosted the costs of research, and salaries in nonprofit institutions took off. In addition, a 17-story research "tower" was under construction. It was to cost about $38 million and was financed largely out of endowment funds, the first major invasion of the Rockefeller's endowment in the institution's history. The result of all this is that for several years the university has run a deficit in its operating budget. This deficit peaked at $2.2 million in the year after the Arab oil embargo, but has been reduced steadily, and a balanced budget is seen by 1980.

Seitz and Bronk

As president, Seitz is the obvious candidate for praise and blame in university affairs. Inevitably, the Seitz regime is compared with that of his predecessor, Detlev Bronk who headed Rockefeller for about 15 years. Bronk was, in more than one sense, the architect of the Rockefeller transition from research institute to university. He had chaired the committee which proposed the new design and then been named president to carry it out. In doing so, he seemed to have a hand in everything—for example, hiring faculty and selecting graduate students with the combination of astuteness and impetuosity which was his trademark. And he left a personal mark on the physical university, from building plans to campus plantings, in converting the rather drab institute facilities and grounds into a tranquil and elegant academic island in the city.

Both Bronk and Seitz had been solid establishment figures before coming to Rockefeller—both were presidents of the National Academy of Sciences when they took up the Rockefeller post and both had done distinguished work as scientists before becoming administrators. But Bronk, a pioneer in biophysics, was a life scientist, while Seitz was a physicist and some faculty members never forgave him for that. Others would agree with a senior faculty member who said "Seitz is knowledgeable and a hard worker and by osmosis gained much more than a perfunctory knowledge of biology." Another senior man thinks that in recent years Seitz has displayed a vision of the possibilities and difficulties of the life sciences less narrow than that of many biologists at the university who are blinkered by their specialties.

Certainly there were differences in personality and style between the two men. As one veteran of the Bronk era puts it, "Bronk was a 19th-century romantic. Seitz is a pragmatic man soaked in budget matters. He was forced into it. When money gets short, tempers get short."

Their operating styles are contrasted by another professor who remembers that one might have to wait 3 weeks to get an appointment with Bronk, but then talk with him for 3 hours about anything and everything. Seitz is readily accessible to faculty and fellows, but is likely to deal only with the business at hand.

The philosophers can be said to have represented a significant element in Bronk's vision for the university, particularly for its Ph.D. students. He had worked with Lord Adrian at Cambridge in the 1920's and found the life of the Cambridge colleges appealing and the civilized interchange of the Cambridge combination room intellectually enlivening. At Rockefeller he seems to have hoped to bridge the gap between the two cultures.

As one of the philosophers observed, "Bronk wanted to produce the great scientists of the next generation. He did not want them simply to be technicians working in a completely technical atmosphere." This, at bottom, was the rationale for the inducements to graduate fellows, in the form of generous stipends and elegant surroundings, to widen their social and cultural horizons. And the addition of philosophers, mathematicians, logicians, and physicists was meant, in part at least, to help graduate students broaden their intellectual horizons.

By general assent, the philosophers never managed to fulfill Bronk's hopes. Attempts were made, particularly by Frankfurt, to arrange seminars which would attract graduate students and faculty from the life sciences, but the response was apathetic. And although some of the work done by the philosophers, particularly by Davidson and Kripke in the philosophy of language and

theory of knowledge, was relevant to the life sciences and there were some collaborative efforts, the philosophers never created strong links with researchers in the life sciences or behavioral sciences. The philosophers say they detected no hostility from their peers in other disciplines. But indifference there was. One graduate fellow who has been at Rockefeller for several years made a fairly representative statement when he said, "I wouldn't recognize the philosophers if I fell over them." The philosophers, in other words, graced the university with their reputations, but didn't affect it much.

Some faculty members suggest that there was never any serious attempt made to concentrate work in the philosophy of science or ethics relevant to the sort of problems which attend the application of science in medicine and, if there had been, the fate of philosophy at Rockefeller might have been different.

Critical TVA Scholarship Hard to Come By

The University of Tennessee Press (UTP) has declined to publish a book about Appalachian regional development because of a dispute over a chapter critical of the Tennessee Valley Authority (TVA). It turns out that this is not the first time that authors who write critically about the TVA have had difficulty getting published in the states served by the powerful federal agency created in 1933.

David E. Whisnant, an associate professor of American studies at the University of Maryland, Baltimore County, signed a contract with the UTP to publish his manuscript about private and federal attempts to develop Appalachia. In September 1975, when the contract was signed, UTP wanted Whisnant to add to the manuscript some discussion of TVA, and said so in a letter to him.

Subsequently, Whisnant submitted a chapter on the TVA to the UTP editors and made repeated revisions in it at their request. Finally, he says, he wrote to UTP saying that unless the TVA chapter was included as it stood, he would withdraw the manuscript entirely. The Director of UTP, Louis T. Iglehart, replied in a letter: "We have determined that retention of the TVA chapter will prevent us from publishing *Missionaries, Planners, and Developers in Appalachia*."

Whisnant now charges that the motive behind UTP's accompanying action was the university's close ties to the TVA and an "emotional predisposition" not to criticize the TVA. TVA is headquartered in Knoxville, where the university's main campus and the press are located. Historically, TVA has provided funds for education and research: a university spokesman estimates that it has had several research contracts with the agency in recent years.

On the other hand, UTP director Iglehart counters that he had to refuse to publish the manuscript because of editing problems. Iglehart told *Science* that he could not accept Whisnant's ultimatum that the TVA chapter be accepted without changes, since more revisions needed to be made, within the chapter and elsewhere in the manuscript. (The manuscript since has also been rejected by the University of Illinois Press for marketing reasons, but the TVA chapter has been published by *The Elements*, a newspaper of the Institute for Policy Studies in Washington, D.C.)

Iglehart denies he has any "emotional predisposition" in favor of TVA and he cites as evidence the fact that he recently rejected another book manuscript about TVA because it was "too goody-goody" toward the agency. Iglehart says a good, "balanced" book about TVA needs to be written, but that he has been unable to find such a manuscript.

The incident is reminiscent of another series of events that took place in the 1960's, when another manuscript critical of TVA did not find its way into print. TVA contracted with Milton Henry, a professor at Austin Peay State University in Clarksville, Tennessee, to write a history of the Land Between the Lakes, a region TVA was then developing as a recreational preserve. Henry says he spent several years searching out documentary material, but that after he turned his manuscript over to TVA, the agency declined to publish it. Officially, TVA told him that the book would not sell well enough to justify printing. But Henry adds that he also had a conversation with a TVA administrator concerned with the Land Between the Lakes project, who said that the last chapter, dealing with TVA's displacement of area residents, "displeased him. He wasn't real plain with me. But in my opinion that's why they didn't publish my book." Corinne Whitehead, of Benton, Kentucky, who was herself displaced by TVA at that time, has recently arranged for Henry's book, *The Land Between the Rivers*, to be privately printed.

However, TVA seems to have helped other books, which are favorable to its interests, to be printed. In the 1960's, for example, while Henry was at work under TVA contract, TVA guaranteed the purchase of a certain number of copies of a book, *Land Between The Lakes: Experiment in Recreation*, by Frank Smith, who was then on the board of directors of the agency; the book was published by the University of Kentucky Press in 1971.

More recently, TVA engaged Carson Brewer, a reporter for the Knoxville *News-Sentinel*, to write a book on the Little Tennessee River Valley. While Brewer and his wife held a $10,000 contract with TVA for the book, Brewer was also covering TVA for the paper—a conflict of interest situation that caused considerable stir when it was revealed by another newspaper in 1973. Brewer's book, *Valley So Wild*, has now been published by the East Tennessee Historical Society. It does not discuss the principal, current interest in the Little Tennessee River, namely, that the river is the site of TVA's proposed Tellico Dam project, which local Indians and environmentalists are fighting bitterly.

One result of these incidents, according to Whisnant, is that today there is a dearth of up-to-date scholarly books about TVA. "There is no problem finding good, solid, well-documented articles critical of TVA's recent programs and policies in journal after journal, magazine after magazine, newspaper after newspaper. Such literature also exists as chapters in books which are primarily about other subjects. . . .

"But the scholarly literature on the TVA was produced primarily before 1950. Coincidentally, that's when TVA began to change, so the scholarly literature, such as it is, turns out to be out of date. . . . The problem is to bring together the scholarly literature on TVA with the recent, very critical literature on TVA that exists outside that orbit."—DEBORAH SHAPLEY

Whatever opportunities may have been missed, the departure of the philosophers marks the end of an expansionary period at Rockefeller. The vision of growth into a graduate university in the natural sciences, which seemed not so wild a dream in the 1960's, has evaporated. And the possibility that there might be an extension of serious work into the social sciences and the humanities has been effectively scotched.

The decision indicates a significant change of course for the university. And while Seitz has been the helmsman, so to speak, he has not been alone on the bridge. Rockefeller has traditionally had a high-powered board of trustees. David Rockefeller was chairman of the board for 25 years before stepping aside last year in favor of Haggerty.

In recent years, the board—in close cooperation with the administration—has carried out a series of studies aimed at framing measures to deal both with the short-term problems and with clarifying longer-term goals of the university.

The philosophers were apparently deemed expendable because the board and administration have embraced a principle of fostering disciplines which contribute directly to the central work of the institution—the life sciences.

Although Rockefeller's policy-makers may have been ready to go further in phasing out the "ancillary disciplines," the furor over the philosophers seems to have forestalled such action. As it now stands, the groups not in the mainstream of the life sciences will be protected by a sort of grandfather clause. What claim they will have on resources in the future—how they will fare in replacing senior faculty and in attracting junior faculty, postdocs, and graduate students—remains to be seen.

One effect of the fracas of the philosophers was the rousing of the faculty, which at the Rockefeller has never been particularly well organized or assertive. There was little reason to be, when professors could usually get what they wanted from the central office. From the time of the first director of the institute, Simon Flexner, there had been a tradition of strong central administration. Most professors at Rockefeller were glad to avoid the committee work which burdens faculty at other universities. On policy matters, senior faculty at Rockefeller have been regularly consulted, but the board and the president have tended to make the big decisions without formal faculty participation. Late in the wrangle with the philosophers a panel of senior faculty members was brought into the discussion, and the search committee is taking pains to consult faculty on the subject of a new president; but the extent of faculty involvement in governance remains decidedly limited. In general, the faculty seems to remain satisfied with the arrangement, but if the incident over the philosophers did not make faculty members militant, it made them more vigilant.

Guy Gillette Photo

The Rockefeller University on the East River between East 62 and East 68 streets.

The fate of the philosophers, in fact, seems to be accepted at the Rockefeller as part of the price of the retrenchment forced on the university. Seitz is generally lauded for his performance in steering the university through the financial rapids. This is not to say that the Seitz regime was simply a fiscal holding action. The Rockefeller operating budget rose from $12.6 million in 1966 to $27.5 million in 1976 and, under Seitz's administration, federal grants rose from $4 million to $13 million during the period. Also a systematic fundraising program was instituted for the first time.

Because of inflation, these budget increases shrink radically when expressed in terms of constant dollars, but by dint of tighter management and economics which reduced Rockefeller's notable amenities, the administration was able to control the deficit and to take some initiatives.

Besides completion of the tower, major additions to university facilities were made. A field research station was established on about 1000 acres of land in Dutchess County, which is very important to the behavioral scientists on the faculty. On campus, a new animal facility costing $8 million is being completed. And adjoining the campus is a new apartment building which cost about $11 million and was designed for junior faculty and fellows. Both of the latter were built with long-term, low-interest loans arranged through a state program so that the financial impact is more manageable.

Despite these monuments, the Seitz era is likely to be remembered as a time of retrenchment. However, it has also brought a major decision for "reconcentration" in research policy. Like other universities, in facing up to questions of solvency Rockefeller has found itself pondering the question of its institutional identity.

For much of the 20th century, Rockefeller has stood as a paradigm of medical research in the United States. There is a habit of preeminence at Rockefeller, one might say a sense of Nobelesse oblige. Now there is also a realization that the competition is keener than ever and if Rockefeller is to live up to its self-image, more hard choices will have to be made. And that, as the events of the summer demonstrated, can be very uncomfortable.—JOHN WALSH