ministrative action. But the Food, Drug, and Cosmetic Act of 1938 says that, when administrative action is completed, a company may carry a grievance to a court of appeals; how, then, could a lower court in Kalamazoo take jurisdiction?

The judge met this situation with a finding that Upjohn was entitled to the extraordinary relief of a preliminary injunction. This finding, in turn, required the company to show that it probably would prevail in the administrative process or on the merits in a judicial review. However, the judge held that the company did *not* have to show a strong likelihood of success in an administrative process. The basis for this holding was the statement he made repeatedly to counsel, when the case was argued on 29 June, that he was not at all concerned with the issues of safety and efficacy, only with the legal issues. Thus, as the FDA summed up Judge Kent's ruling in a brief filed later in another injunction case, he "refused to recognize" that Upjohn "had been wholly unable to produce" adequate and well-controlled studies to demonstrate the efficacy of a potent drug it had sold for 13 years, and that his injunction would allow the firm to continue to make claims of efficacy which it had not documented. While ignoring the commissioner's explicit finding that Panalba created an unwarranted hazard, and the documentation of unnecessary fatalities in the affidavits, the court was able to hold that an injunction would in no way seriously threaten the public health—but was necessary to avert irreparable injury to Upjohn. Upjohn, the judge said, was entitled to interim relief because it had been placed in "an extremely awkward position" by the refusal of the FDA to divulge the names of the NAS–NRC panelists—"faceless judges," Upjohn lawyer Stanley Temko had called them. The judge rejected the FDA's explanation that NAS–NRC had insisted on anonymity "so as to avoid pressures from commercial sources" (8 July, in its final report, NAS–NRC listed the 180 members of all 30 panels). He also said that the commissioner had placed complete reliance on the anonymous NAS–NRC panelists—even though the commissioner said the panel reports were advisory and the final decisions were his alone.

On challenged, intricate legal grounds, a federal judge in Upjohn's home city assumed jurisdiction and allowed the company to go on for more than 3 months selling a product that the NAS–NRC and the FDA found to be a serious hazard and ineffective. In mid-August, it was disclosed that the judge is the unpaid chairman of the Kalamazoo Science Foundation, a charitable organization, half of whose trustees are connected with Upjohn.

It will be recalled that the commissioner, Dr. Herbert L. Ley, Jr., said the conflict over the combination antibiotics was "between commercial and therapeutic goals." If he is correct, the Panalba case reaches a great question of our time: In a struggle between public interest and special interest in which the stakes are needless exploitation, injury, and even death to helpless patients, can American institutions function reliably to protect the public?

—MORTON MINTZ

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Open University: Britain's New Venture in Higher Education

London. Adult education classes, TV and radio instruction, correspondence courses, home experimental kits—all of these are to be found in many countries today, usually as low-ranking appendages of traditional institutions of higher education. Britain is now planning to pull together all these techniques, plus some others, in an ambitious and long-planned effort to create an autonomous, high-quality university that will enable adults throughout the United Kingdom to work part time for undergraduate as well as graduate degrees.

Known as the Open University, the new institution comes up against the stigma of dubious quality often associated with after-hours instruction. But the Open University, scheduled to accept its first students in January 1971, is aiming for standards of performance that will compare well with any in this land of academic snobbery. For this purpose, its creators have gone far beyond the usual concepts of adult education and have formulated an institution that is attracting the scrutiny of educators throughout the world. Although it will operate on a national basis, the Open University will have its own central campus in a new city, Milton Keynes, about 50 miles from London. It will have a full-time faculty, initially of about 100, half of whom have now been hired from among more than 1000 applicants who already hold academic posts. (In the sciences, there were nearly 400 applicants, 72 of them at the professorial level.) The campus, now under construction, will include laboratory, computer, and library facilities, and will be the center of a fairly broad spectrum of research programs involving graduate and postdoctoral students. Tied into the campus will be several hundred local centers throughout the country, where students will meet with tutors—these will be "moonlighters" drawn from nearby educational institutions. At these centers, students will be able to listen to or borrow tape-recorded lectures, and eventually the centers will be equipped with video tape equipment. Keyed to the course of work, most of which will be embodied in correspondence materials, will be regular lectures and demonstrations on TV and radio. The correspondence materials are being specially prepared by the teaching staff and various outside groups, and work is in progress on laboratory kits that can be sent through the mail. In an effort to escape the aridity that often characterizes broadcast instruction, some 30 academics have been detailed to the BBC to study TV and radio production. Each student will be required to take 2 weeks of full-time instruction per summer at classroom and laboratory facilities that the Open University will borrow at schools throughout the country. Finally, though many staff members are equivocal about the value of

Harry Hess Dies

Harry H. Hess, chairman of the National Academy of Sciences' Space Science Board since 1962, died of a heart attack on 25 August. Hess, 63, suffered the attack while at Woods Hole, Massachusetts, attending the board's summer study of the scientific objectives of lunar exploration. The board advises the National Aeronautics and Space Administration (NASA) on scientific priorities and strategies.

Hess, Blair professor of geology at Princeton, was a past president of the Mineralogical Society of America and of the Geological Society of America. He has been an adviser to other federal agencies as well as to NASA. For example, he once chaired the Atomic Energy Commission's advisory committee on disposal of radioactive wastes and was chairman of the site-selection committee for the National Science Foundation's Project Mohole.

examinations as a measure of performance, they see a need for the Open University to establish the quality of its degrees, and consequently examinations will be held for degree credits. Since the university feels surrounded by doubters, it is likely that these examinations will be as rigorous as any in Britain, but there is nothing to stop nonmatriculating "eavesdroppers" from obtaining the necessary materials and taking the courses.

As far as admission requirements are concerned, the Open University will indeed be open. There will be no academic prerequisites for enrollment, though several criteria for admissions have been set up following a survey that indicated that there would be at least 100,000 applicants for the 25,000 places that the university expects to have available in its first year. Sometimes referred to as "the university of the second chance," the Open University first of all conceives of itself as a "rescue operation" for adults who, for whatever reason, did not go to a university. Thus, applications are invited from anyone over standard university age who wants to go. But, since the national government, which is the sole source of finance, is pressing higher education to pay more attention to Britain's economic and social problems, "national needs" will be considered in admitting students. In this connection, high priority will be given to applicants from among the 250,000 school teachers whose education did not go beyond the teaching certificate level. A third criterion is "likelihood of success," though the university's planners acknowledge that this is a delicate matter, since emphasis on it can boost the university's academic record at the price of restricting its openness.

Although few if any of the Open University's techniques are unique, their incorporation into a centrally administered, nationwide system at university-degree level is regarded as a pioneering venture. But, in the British context, there is still another aspect of pioneering, for, in its course structure, the Open University will sharply depart from the narrow specialization that characterizes higher education here and follow the nonspecialist programs commonplace in American higher education. Thus, all students will be required to take two "foundation" courses, each a year long, in mathematics, science, the arts, or sociology. These and all other courses will carry one credit. Six will be required for an ordinary undergraduate degree, and eight for an honors degree. The Open University's academic year will be 35 weeks, compared with 25 to 30 in most British universities, and, on the basis of each course requiring about 10 hours' work per week, it is expected that the average student will qualify for an ordinary degree in 4 or 5 years. (Three years is the standard undergraduate course in British universities.) Though all the details are yet to be worked out, graduate programs will probably require more concentrated work, but by using research facilities at other institutions on weekends and evenings, it is expected that a good deal of flexibility can be achieved.

Because of Britain's economic troubles, one of the most attractive aspects of the Open University is the likelihood that it will be relatively inexpensive. The capital costs are expected to be no more than $12 million, and the annual operating costs somewhere around $7.5 million. The charges for students have not been decided upon, but according to Michael J. Pentz, director of studies for science, there will be a registration fee of about $25, plus a similar charge for each course. Pentz, a physicist who came to the Open University after 12 years at the European Organization for Nuclear Research (CERN), said that it is planned to let a student take a course for 3 months before he has to decide whether to pay for the materials and continue.

The genesis of the Open University is attributed to the sociologist Michael Young, with a strong assist from Harold Wilson, who gave the idea its first public airing in a speech in 1963. Eventually it evolved into a proposal for a University of the Air, meaning a system that would be heavily reliant on television and radio. But once the matter was brought under close study by a planning committee drawn mainly from the upper administrative levels of some of Britain's top universities, it was decided that broadcasting should have only a part, and not the central role in the new university. As things now stand, only about 10 percent of the instruction will be over the air waves, but qualitatively this could be of major importance, since the Open University will be free to go beyond its own faculty and invite anyone it chooses to participate in the broadcast part of its curriculum. An interesting thought is that when both radio and TV lectures go out to the country, students at conventional universities will have their first opportunity to apply some comparison to the instruction they receive.

The chief executive of the Open University is Walter L. Perry, a pharmacologist who was director of the Department of Biological Standards at the National Institute of Medical Research from 1952 to 1958, and later professor of pharmacology and vice principal of Edinburgh University. The university is operating under a tight schedule in preparation for the beginning of instruction in less than 18 months. On 23 July, it received its charter in a ceremony at the Royal Society. In ample attendance were the heads of most of Britain's major universities, which was interpreted as a sign that they wished to lay to rest reports that established institutions were not keen about a new arrival seeking to share Britain's tightly stretched budget for higher education. No doubt they are not keen, but the Open University, at relatively low cost, will take some enrollment pressure off the regular universities. At the beginning of next year, applications will be accepted from students. And a year later, school begins.

—D. S. GREENBERG