

NEWS & NOTES

● HUMANITIES APPROPRIATIONS:

President Nixon requested \$72.5 million in appropriations for the National Endowment for the Humanities and an equal amount for the arts endowment for fiscal 1974. This sum nearly doubles the amount requested for the humanities endowment for fiscal 1973, which was \$39 million. Most of the \$72.5 million (\$65 million) is for supporting ongoing programs and starting new ones, and the remaining \$7.5 million is for matching private donations to the endowment. A portion of the appropriations will be earmarked for bicentennial programs, but how much is undetermined until Congress acts on the appropriations request.

● LIMITS TO GROWTH OR NO?:

The Department of Health, Education, and Welfare has issued a two-part study on possible government action in response to *The Limits to Growth* (*Science*, 10 March 1972). The study, initiated by Elliot L. Richardson, then Secretary of HEW, was done to determine the possibility of assessing whether the quality of life is improving, how changes in one area relate to changes in another, and the effect of government programs on the quality of life. "The Implications for Government Action of *The Limits to Growth*," written by Walton J. Francis, a program analyst in HEW's Office of Planning and Evaluation, concludes that there is no immediate prospect of a breakthrough in measuring the quality of life and that there is no need for drastic government action to curtail growth to prevent ecological catastrophe. Richardson called the papers "tentative and exploratory," and HEW acknowledged that they do not present an official HEW position and are being circulated for discussion purposes. The study is available from the HEW Office of Public Affairs, Room 5541, North Building, 330 Independence Avenue, SW, Washington, D.C. 20201.

● **R & D FORECAST:** The annual R & D forecast of the Battelle Columbus Laboratories predicts that research and development expenditures in the United States will reach \$30.1 billion in 1973. American industry, which performs about 69 percent of all research, is cited as the fastest growing source of R & D support.

membered their violent acts and felt remorse about them, and who were capable of understanding and deciding whether they wanted to undergo the treatment.

The first subject chosen was a 36-year-old man, known as a criminal sexual psychopath, who had been in Ionia State Hospital for 18 years since he murdered and raped a nurse (in that order). The subject and his parents have both signed the consent form, and he is said to be very eager to have the operation, although he was fully informed of possible undesirable side-effects, including death. With the concurrence of two committees, one to review candidate selection, the other to guard the patient's interests, the operation was scheduled for 15 January.

Then Gabe Kaimowitz, a Michigan Legal Services lawyer and member of the Medical Committee for Human Rights, found out about it, and the matter blew up in the press. Kaimowitz asked for court review of the matter, claiming that the patient is being detained under a now-obsolete law, that the circumstances (the subject wants the operation so he can get out) make informed consent impossible, and that the use of public funds for the project is inappropriate.

One likely outcome of the case—to be decided by a three-judge panel of the Wayne County Circuit Court—could be a ruling that this type of surgery should not be performed on involuntarily institutionalized patients. It has focused a good deal of public attention on the matter and has drawn the attention of public interest groups, including Washington's Center for Law and Social Policy. "The case will establish an important precedent for efforts to impose social control on the uses of psychosurgery," says Charles Halpern of the center.

"Psychosurgery," says Ayub K. Ommaya of NINDS, "is a failure of medicine." Far more research needs to be done before guidelines for its appropriate use can be formulated. On the other hand, he points out, there are rare instances—intractable pain or *anorexia nervosa* (self-induced starvation), for example—where a brain operation appears to be the only answer.

There now appears to be a gradually coagulating body of "responsible opinion." One possible move, proposed at the symposium on behavior control at the last AAAS meeting, would be for the government to establish regulations

that would surround the use of an experimental surgical procedure with the same kind of safeguards the Food and Drug Administration applies to new pharmaceutical procedures. Protocols might be set up to govern the selection of patients—requiring the approval of various review committees, assuring that all alternatives have been exhausted, and defining "informed consent." The last is particularly difficult, for, as Gaylin says, "The damaged organ is the organ of consent."

Operations on institutionalized individuals might be banned, as might surgery for controlling violence, because of the political implications and the rudimentary state of knowledge about the connection between violence and brain disease.

So far, professional organizations such as the American Medical Association have had little to say. Exceptions are the American Orthopsychiatric Association, which is filing an *amicus curiae* brief in the Detroit case, and the Society for Neuroscience, which has made psychosurgery its theme for the year.

The federal health establishment is taking an increasingly visible interest in the questions surrounding psychosurgery. Bertram Brown, director of NIMH, made the strongest public declaration by a high government official to date when he said at the Kennedy hearings that he believes there is not enough known about the brain to supply clear justification for such operations. Meanwhile, NIMH and NINDS have set up an "inter-institute work group" to define problems surrounding psychosurgery and make recommendations, due next June, on future priorities in brain research.

A lot of defining needs to be done. Broadly speaking, "psychosurgery" could include electroshock therapy, prolonged drug therapy, and the insertion of electrodes for diagnostic purposes, since all of these can make permanent alterations in brain tissue.

Some people think the psychosurgery issue is getting more attention than it deserves. It is really at the extreme end of a massive spectrum of increasingly sophisticated ways people are learning to manipulate each other. But as such, it may spur people to find ways of assessing how new behavioral technologies encroach on individual freedom and to decide on the extent to which they are desirable.—CONSTANCE HOLDEN