

Outside India, there is also much that can be done. A critical account of science in India (*Nature* 308, 581;1984) provoked a stream of entertaining correspondence with a single theme — how much more Indian scientists (at home and overseas) might do to help India if they had a chance. May not this be a time for them to try a little harder? More to the point, may it not also be a time when the colleagues of Indian scientists, in India and elsewhere, should exert themselves more energetically to help? Nobody would pretend activities such as these would quell communal unrest, making it safe for Sikhs to walk the streets again. But both parts of the now divided community will need to know that their divisions will eventually be submerged in a wider unity. Go give a lecture, send a book, write a letter, is too trite for anything but a personal exhortation. Governments in the West can do more, and should, to help the enterprise along. An intelligent woman's death requires no less. □

## Europe in the sky

*Europe is preparing for adventures beyond the atmosphere, but without much thought.*

ONCE upon a time (in the early 1960s) Great Britain was a disappointed space power (as the saying goes), with a design for a rocket launcher (called *Bluestreak*) whose development it could not afford to finish. So what more natural, Great Britain said to its European neighbours, than that everybody should pool resources and set up a common organization (eventually called ELDO, for European Launcher Development Organization) to rescue something from the frustrated enterprise? Everybody also agreed that space would be expensive, and so agreed that there should be a common effort on research (whence ESRO, for European Space Research Organization). After many adventures (and a great deal of poor management provoked by indecision), the governments of Western Europe decided that one organization would be enough (called ESA, for European Space Agency). But all this time, Great Britain knew it could get what it wanted more cheaply by making a deal with its friends across the Atlantic (or with NASA, for National Aeronautics and Space Administration, an agency of the US government). But then the time came when the US government was also short of money, wanting to spend every penny it could find on other kinds of rockets, so that it started asking its partners to dig in their pockets as well as its own. But poor Great Britain was by this time really poor and had nothing at all to spend. And so NASA flew off with its rich new friends — France, West Germany and Italy. Poor Great Britain had no choice but to set up a committee to ponder what to do.

This is how legend will encapsulate the developments last week, in Britain and on the mainland, in European policy on space. The cause of everybody's difficulty is NASA's request for paying participants in the manned space platform. France, West Germany and Italy have it in mind to reply with a counter-proposal, one likely to satisfy NASA's need to show to Congress that people elsewhere are prepared to help. Britain's trouble is not merely that the Science and Engineering Research Council (SERC) which would normally have an important say in such a project, is just now wondering which parts of basic science should be abandoned, but that the government as a whole is having to decide from which of two or three ministries to extract a further £1,000 million of spending money. The mainland, long since impatient, will be exasperated.

The moral in the tale is, however, simple. The Richmond committee (see page 92) has advised SERC to throw its lot in with ESA because its terms of reference were too narrow to allow a more adventurous proposal. What happens to British space policy in the next ten years is, however, beyond the competence of grant-making agencies. The government, not the council, should now decide what should be done, preferably in concert with its European partners, say what it intends to do and then stick with its decision. Making such a decision would no doubt be hard, but not making one will have even more serious consequences. □

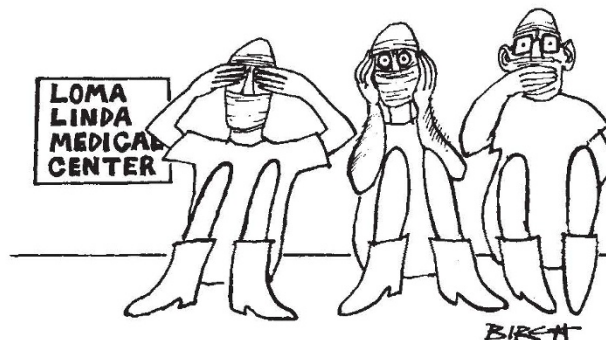
## Grandstand medicine

*Baboon's hearts are not taboo for people, but medicine which is not essential is wrong.*

THE baboon-heart transplant performed on a critically ill infant at Loma Linda Medical Center in California is disquieting. As a medical milestone, to be sure, it is a remarkable accomplishment. Conceivably, it will someday even be a genuine treatment for the 1 in 3,000 infants born with hypoplastic left heart syndrome, the uniformly fatal defect from which the infant in California suffered. Moreover, it is important that the causes of disquiet should not be misrepresented. The need to sacrifice a healthy baboon so that a human infant might live is simply not the ethical dilemma that animal rightists, with an unflinching nose for the sensational, are pretending. A society that overwhelmingly approves of eating animals (other than people) would be even more astonishingly illogical than usual in its reaction to special cases if it were to deny the propriety of using a lower animal to save a human life. And the mere fact that an animal organ is being inserted in a human is an ethical issue only to those whose residue of mythological sentiment overpowers their capacity for rational thought; is there strictly a difference between the use of pig insulin and baboon hearts to make good deficiencies in human beings?

The serious difficulty over the operation carried out in California is that it may have catered to the researchers' needs first and to the patient's only second. Over the past seven years, Dr Leonard Bailey, the surgeon heading the transplant team, has performed 150 such transplants on animals. There can be no doubt that the team was more than eager to try out its technique on a human. Dr Bailey's sincerity and his commitment to helping infants born with this and other tragic birth defects is above reproach. But it is fair to ask if this was the time to extend what Dr Bailey himself calls a "highly experimental" operation to humans.

It is not reassuring that the Loma Linda hospital did not even check with the California Regional Organ Procurement Agency to find out if a suitable human heart was available. (As it turned out, one was; it is not known whether it would have proved



compatible.) It is less reassuring that hospital spokesmen first said they had not known that a human heart was available, and then claimed that in any event it would have taken five days to match the tissues of donor and recipient. (According to researchers at Stanford University, a major centre for heart transplants, the procedure takes only eight hours.) Bailey then acknowledged that a human donor had not been sought because, simply, the purpose of his experiment was to see if the baboon heart would work.

Bailey has been given approval and has been promised support from Loma Linda to perform five more baboon-heart transplants on human subjects. One can only hope that before the next operation, the hospital will agree to release its protocols for the operation and copies of the informed consent forms that parents are asked to sign; so far the hospital has refused to do so. This is not nitpicking; although the research is privately supported, Loma Linda should feel an obligation to the scientific community if not to the public as a whole to provide reassurance. Otherwise suspicions will arise that its researchers are playing to the grandstands. □