

a nation which finds it hard to make ends meet should now squander £200 million, and a large part of its tiny skilled labour force as well, on such a risky venture.

If the British Association really wishes to make a mark on issues like these—and there is every reason why it should—then it must take a leaf out of the old books, and appoint committees to take up these important causes, see that intelligent reports on them are fully discussed in public, and then commit to them such prestige as it can command. There is a host of issues to be taken up. Such a course would often bring the association up against official doctrines, but it need not be afraid of that. Perhaps the greatest of its present troubles is that it has been overtaken by gentility.

The money troubles are subsidiary but dependent. They would vanish overnight if the association abandoned its lecture services and some of its other novel undertakings. So why not then abandon them? This may seem a cruel question when there is undoubted evidence of sound achievement in the recent past, but it should not be dismissed lightly. Everything depends on what kind of organization the association wishes to become. If it sees itself as providing a continuing educational service of a special kind, handling large sums of public money and similar sums from industry and charity as well, then there will be a whole sequence of general treasurers going grey before their time. There should be some way of organizing these educational activities so that they finance themselves. If the lectures, for example, are as much appreciated as the association says, then local education authorities should be easily persuaded to pay more towards them. If, on the other hand, 3s. 9d. is more than the market is prepared to pay for providing a child with a single lecture, it is better to learn that now and not later. With the alternative methods of communicating science to young people, the association should not be surprised that the Department of Education and Science should be reluctant to increase its grant.

All this suggests that the association would be very much happier, and more fully in control of its own affairs, if it came to think of itself as what it used to be—an initiator of new projects, a catalyst of new ideas and a defender of those which are old and cherished. It should be ready to show other organizations how good works may be accomplished, but chary of undertaking too much on its own account. Most of all, it should beware of too much dependence on government departments. The arrangement with the Ministry of Technology by which the association has undertaken to encourage an interest in technical matters among young people is particularly suspect, for it is hard to know precisely how it will be able to earn its keep. And in the long run, of course, the objective should be to find some way of bringing forward from within itself a flow of new and vigorous ideas. There is every reason to believe that such activity would be at least as welcome now as it used to be. It would also be fun, which is not a negligible consideration.

INFORMATION

How best to manage scientific information? Section X of the British Association has had the wit this year to arrange a discussion on this important problem. More than that, it has had the good luck to recruit as speakers people who live with the problem every day—the Director of the National Lending Library, the Head of the Information Division at the National Science Foundation, and a representative from Aslib. Sir James Cook, the Vice-Chancellor of the University of Exeter, is devoting his presidential address to the same cause. No doubt the room in which the section will be meeting will echo for days with the sound of that evocative phrase “the information explosion”. But what really is the problem?

In the first place, there are mechanical issues which have thrust themselves on public attention. The development of devices which simplify the reproduction of printed text has opened up the possibility of unfamiliar means of circulating information. Some people suggest that the most familiar means of communication between people—the printed page—may instead be replaced by an electrical connexion to some central bank of computers, and there is even talk of transferring to the machines not merely the task of storing information, but also the more subtle tasks of digestion and criticism. The first thing to be recognized is that the obvious advantages of speed and comprehensiveness which possibilities like this can offer are accompanied by certain risks. In particular, there is a danger that the machines, which are necessarily better at storing facts than ideas, may oversimplify the traffic in scientific information, and may neglect that function of the scientific literature which is to stimulate as well as to inform. There is also a real danger that some schemes intended to make the circulation of the scientific literature more efficient would, in reality, help to put it out of business. Those who make machines are as aware of these risks as the potential users, but that is not enough!

How to handle the scientific information is, however, comparatively easily decided. There remains the nasty suspicion that all the improvements of efficiency which the machines now seem to offer may merely enable a much greater volume of scientific information to saturate and overwhelm potential users. So many working scientists complain of the problems of assimilating information, and of distinguishing archival material from that which is intended to stimulate further work, that the nature of the scientific literature probably requires careful study. In other words, there is a need to attend to the quality of the literature as well as to its handling. At the very least, there is a need that it should become more pithy, more intelligible, and more effective as a means of intellectual communication within the growing profession of science. As things stand, there are plenty of suggestions for managing the computing machinery more effectively; improving the quality of the literature is unfortunately more difficult.