nature

Asking questions about university research . . .

UNIVERSITY bashing is a popular pastime in the UK at the moment. True, all forms of public expenditure are bound to come under scrutiny when a country is trying to keep control of a serious economic situation, but the universities are rather better than average sitting targets because it is much easier to question the expenditure of several hundred million pounds on them than to justify it in a way that convinces the holders of the purse strings. On a slightly more detailed level, asking a question like: "Why do that particular kind of scientific research?" is easy; answering it is not.

Nobody pretends, of course, that one can find out much about as complex a beast as 'university research' by talking to two, or even ten, people. The Science Subcommittee of the House of Commons Select Committee on Science and Technology, for example, must be truly fed up with asking a question of a witness, only to be told that the query should be addressed to someone else (usually unspecified) because it is outside that witness's brief, remit or responsibility. Equally, 'ologists' of the Select Committee on Science and Technology often feel that key questions are not asked or pursued—often, it must be added in the select committee's defence, because time simply does not permit.

The objections of many of those who carp about the amounts spent on scientific research in universities stem from the supposed antipathy between universities and industry. The stereotyped picture is one in which industry complains that university training in research often does not suit the industrial environment; the universities reply that a major part of their function is to acquire new knowledge and that industry should not expect a model industrial scientist to step off a university production line.

Fortunately things are not nearly as polarised as that, but there certainly are problems, and it is therefore a particularly important event when the select committee talks to industry, be it the Confederation of British Industry (CBI) or individual industrialists, about university research. It so happens that the select committee had the CBI before it last week, and one is therefore prompted to set up a list of some of the more important matters that might be covered in future select committee discussions with industry. Some of these came up at the recent meeting; some did not.

• How can the link between 'research' and 'application' be made less tenuous?

• How can the requirements of industry for, broadly, 'trained' people be squared with the universities' aim of producing 'educated' people?

• To what extent is university research compatible with the goal of much of industrial effort ('improvement' as opposed to 'innovation')?

• In what light do industrialists regard polytechnics? Should they be encouraged at the expense of (some) universities?

... at Cambridge in particular

In the concluding remarks of a paper on 'useful' research carried out at the University of Cambridge (distributed from the University Offices) the late Professor J. W. Linnett said: "I have been surprised at the amount and range of useful research that is being done at Cambridge over a very wide spread of disciplines", when 'usefulness' is judged "in economic and social terms of a simple and direct kind".

This is an important statement for a man who was until a month or so ago Vice-Chancellor of the University of Cambridge to have made, even allowing that he had set out to tackle the problem of bolstering up the public image of universities. Interestingly, the standard university response to critics is also contained in Professor Linnett's paper: "Universities are places where the spirit of unfettered imaginative enquiry should be fostered". Adding his two statements together leads to a very important conclusion—that unfettered imaginative enquiry in a university environment can be of considerable use in a tangible way.