plains the Commission's support for the JESSI project (from which Philips has now withdrawn), intended to create substantial European chip-making competence. But the Commission has never made clear what would happen if JESSI proved technically successful but commercially uncompetitive with, say, Intel Inc. of the United States. Would European manufacturers then be protected from competition by even higher tariffs, at the expense of Europe's potential users of information technology and thus of Europe's competitiveness?

As events are now unfolding, and with the prospect of a single European market, what the Commission should most of all be concerned with is that European business should be ready to support technical innovation, even relatively minor innovations, generously and decisively. That has more to do with the behaviour of the banking system and the stock markets than with programmes of direct support of research and development that must, by definition, be 'precompetitive' in some sense not clearly defined. Certainly there can be little good sense in seeking still to encourage transnational collaboration as if it were an end in itself when national economic boundaries will have been swept away. But there is also a need for greater numbers of young Europeans willing to take their chances as innovators, which is why the Commission should be more concerned with higher education and research than its member governments have so far allowed. A reappraisal of the EC's support for information technology should edge it in that direction. □

Copyright unlimited

One of the casualties of the budget wrangle in the US Congress may be a sensible reform of US copyright law.

WHEN is publicly available written material not to be counted as a publication? When it consists of a great personage's private papers deposited in a publicly accessible library, often in return for substantial sums of cash. The issue was dramatized two years ago, when the author J. D. Salinger legally prevented the publication of a biography based on his private correspondence deposited at Austin, Texas. That is one reason why Senator Orrin G. Hatch has been labouring for months, with a committee of the US Senate, to secure an amendment of copyright law. But in the closing weeks of the present Congress, the reform has lapsed for lack of time. One of the issues raised has been the fear of computer manufacturers that unpublished computer codes incorporated in computers put on sale would also be robbed of protection by the planned amendment.

The issue is intricate. Copyright law makes possible the publication of books, journals and other creative works (maps, for example) by giving their publishers a right to prevent others from copying what they put out. Otherwise, authors and their publishers would regularly find their best-sellers pirated. But copyright in written material not formally published (and so not deposited at a copyright library) remains the perpetual property of the author or of his heirs and assigns, and such material may not be published without consent. Those sitting on a sheaf of racy correspondence from, say, a distinguished Nobel prizewinner should not think that they can quickly turn it into a bestseller. That is also as it should be. Private correspondence would otherwise quickly dry up. Yet is there not a case that material voluntarily deposited at a public library by an author or, after death, by relatives, often in return for quite substantial sums of money, should be regarded differently? That was the question underlying the proposed Hatch amendment.

The question demands an answer, one less wooden than in present practice. Great personages' papers are presumably deposited on public access at libraries so that scholars may form a better understanding of a life's work. What sense can it then make that the same scholars should not be able to illustrate what they may write with quotations from the publicly accessible unpublished material? There may be a case for restricting this right during an author's lifetime, and for requiring that those who exercise it should be responsible, for example, for libels against persons still alive even in quotations from authors long since dead. But that would be better than the present arrangement.

Why the computer people should be alarmed is mystifying. Ostensibly, they fear that a relaxation of the rules on written copyright would hazard copyright protection of undeclared software simply because, being binary, it cannot be published in the ordinary sense of the word. In the present climate, in which the United States is slightly paranoid about the theft of US intellectual property, the argument carries weight. But the circumstances are so different from those affecting written materials on library deposit that the distinction can surely be made watertight in law. What else are lawyers for? □

Agony continued

Where will the continuing contraction of the British research enterprise next strike?

LEST it be thought that the contraction of research in Britain has ended — or that there there is no more left to cut — it should be known that a further 61 posts are to be cut from the establishment of the three horticultural research institutes maintained by the Agriculture and Food Research Council (AFRC). The explanation is familiar — a static research council budget, increased costs and a laudable ambition to make more research grants to academics. The AFRC has borne the brunt of contraction in the past ten years, chiefly because of the Treasury opinion that research is pointless when agricultural surpluses are a European embarrassment. Will the Medical Research Council be next to suffer, on the grounds that, with unemployment rising and the British transport system overwhelmed by traffic, there is plainly now also a surplus of people? □