Anglo-US concern

Both countries want industry to be more competitive, but differ in their recipes for using science and technology.

Do US president Bill Clinton and British prime minister John Major have more in common than would have been guessed from their brief meeting earlier this month? Each is dusting off schemes for supporting innovative industry. The Clinton administration is said to be looking again at the tangible objectives underlying the federal government's support for research (see page 776), while the British government, in the shape of the Department of Trade and Industry, is seeking a more direct (if a more avuncular than the American) role in fostering industrial competitiveness. What can they hope to achieve?

These are occasions when warnings that civil servants are poor at 'picking winners' are again in order, misanthropic though their utterance may appear. Even those with relatively short memories in either country should be aware of that. In the 1960s, for example, the US administration was captivated by the doctrine of Research Applied to National Needs (or 'Rann'), the most tangible benefit of which was the improvement of building standards for earthquake resistance. (A decade later, the Pentagon's support for the large-scale integration of circuits on silicon surfaces almost surreptitiously created a new industry.) In Britain a little earlier, Mr Harold Wilson's advocacy of "white-hot technology" bequeathed to the country four uneconomic aluminium smelters.

There is a particular danger in the US inclination to regard the $14 billion a year the federal government now spends on basic research as a package of goal-directed programmes. It has come to seem like that only by accident. Recognizing that, when several agencies have a finger in the pie of, say, biotechnology, it is prudent that there should be a committee to coordinate their spending, the committee's budget then becomes an identifiable object in itself, to be judged against what may be called 'results'. The difficulty, of course, is that agencies' spending covers a diversity of objectives, from the practical to the basic. Direct identification of benefits is difficult, but the substantial advantage to US industry is the small army of people skilled in the techniques of biomolecular manipulation that research produces. If the administration now seeks a coherent shopping-list of objectives, it had better find a way of accounting for these hidden benefits. Otherwise, not merely investigator-led research, but US industry as well, will be the losers.

British ambitions are mercifully less concrete. Mr Michael Hesletine, the Secretary of State for Trade and Industry, seems to have determined on informed exhortation rather than explicit research support. On the face of things, he has luck on his side. There is some evidence that the long recession is ending early in Britain, while the Confederation of British Industry says that companies have begun spending more on innovation even when funds have been squeezed. But, with Britain now ranked eighteenth among members of the Organization for Economic Cooperation and Development (OECD), he will need all the luck that he can get. □

Too costly software?

Software piracy is wrong, but more flexible policies for selling it would help combat the crime.

STEALING software by illicit copying is wrong, of course, and in many places is a crime. So it should be. Like piracy of the copyright in any kind of work, theft deprives the originators of the rewards to which they are entitled. But the software houses (as, a little pretentiously, they like to be called) are not quite the innocents they pretend. In particular, they differ from those who sell other kinds of copyrighted products, book publishers for example, in their inflexibility over price.

Take, for example, the purchase of a wordprocessing program for a personal computer. In the past decade, the market leaders in the field have been made enormously more sophisticated. Some are almost indistinguishable from desktop publishing systems. So what happens if a purchaser claims that he wishes to acquire only the basic wordprocessing part of the sophisticated package, perhaps because he or she wishes the output to be compatible with a machine on which all the bells and whistles have been legitimately installed? Usually there is no legitimate solution. Buy the whole package, or do without is what the salesman says.

Book publishers, many of whose products are topical, have a solution to this problem: first they sell a hardback edition and then, when the cream of the market has been satisfied, they sell a paperback at a fraction of the cost. The analogy with computer software is not, of course, exact. A computer program (like a dictionary) is a tool that may be repeatedly in use. Even so, the idea that the only versions of the tool available for sale should be more elaborate (end expensive) than many users need is a restraint of trade. In the long run, it may even hurt the owners of the copyright by making illicit copying seem more acceptable.

If software programs were covered by patent rather than copyright legislation, there would be ways round these difficulties. The owner of a patent does not have the unfettered right to make an invention available only on onerous terms. Rather, a patent is an agreement between an inventor and a government that the former shall enjoy the exclusive right of exploitation of an invention for a prescribed period while the community at large shall have access to its benefits. If the inventor of a novel mousetrap then decided that he would offer it for sale only when installed in a purpose-built house for which extra would be charged, most patents courts would probably be prepared to grant compulsory licences to those willing to sell the mousetrap without the house.

Copyright protection is, by contrast, absolute. Even so, it is a question whether the interests of the software houses themselves would be better served if they submitted, perhaps voluntarily, to the unpackaging of their expensive packages (against payment of a royalty). None of this says that software theft should be made legitimate. □