

get. Whether they will then be satisfied is another matter.

Microsoft is hugely successful. Over fifteen years, it has consistently grown more quickly than any other company in the world. Its annual profits now compare with the British government's annual spending on research. Much of its success derives from a classic recipe — a blend of technical flair and good luck. The flair was the design of the operating system for the first generation of IBM's personal computers, now called PCs. The good luck was IBM's liberal approach, in the early 1980s, to the prospect that its own machines might be replicated by others, or 'cloned'; Microsoft's operating system thus became available to other manufacturers and the company's reputation was thereby enhanced.

Since then, Microsoft has successfully launched a more elaborate operating system for PCs that takes much of the wind out of the sails of Apple Computer's products, still the only distinctive alternatives to PCs on the desktop computer market. Now there is concern that Microsoft's purchase of a company called Intuit will give it a commanding lead in off-the-shelf accountancy software, which the Justice Department is looking at. Others in the United States are alarmed that Microsoft's muscle will give its planned electronic network a commercial advantage over existing competitors as well as giving the company itself a captive market for its software. Meanwhile, the company is developing multimedia products as if it were a publisher, selling intellectual content as well as the means by which a person can read the contents of a storage disk, say. At least so far, there has been no sign that Microsoft has faltered in its pursuit of growth.

What will the courts make of all this? Past precedents suggest that the only certainty is that much time will pass. The inquiry in the 1960s into the old Bell System telephone monopoly, which eventually led to the present patchwork of regional telephone companies and AT&T, took three years to complete. In retrospect, the timing could hardly have been worse-judged. Technical developments in communications have since ensured that the old telephone monopoly would have been quickly eroded in any case. But the tendency for court inquiries into the market dominance of a single company to be overtaken by events is most clearly illustrated by that into the affairs of IBM a decade ago; by the time the courts had finished brooding, IBM was fighting for corporate survival. Judge Stanley Sporkin, the source of last week's ruling, will look foolish if Microsoft goes the same way, perhaps because of the distraction of a long court case.

While Microsoft's competitors' essential complaint is that Microsoft is too successful for their comfort, the judge's problem will be to identify legitimate complaints and then to disentangle complaints of illicit business practices from complaints that the technology of the personal computer is changing too quickly for many people's taste. One condition of the Justice Department's settlement with Microsoft last year is that the company should no longer license computer manufacturers to use its operating systems for periods of longer than one year; that may provide would-be competitors with a chance to steal the company's business, perhaps by designing a better or a cheaper system. But that prospect will not keep Mr Gates awake at night; his company's lead

could be challenged only by huge and speculative investments by competitors not yet extant.

Under US law, it will be a more serious business if the complainants can show that Microsoft has been using its influence as a supplier of operating systems to persuade manufacturers to install its own applications programs on the machines they sell, but even that will not be easily adjudicated. The practice of selling computers complete with a bundle of assorted software is now commonplace, but the terms are rarely as apparent to the ultimate purchasers as they should be. But what if Microsoft evades that issue by making applications programs integral parts of its operating system? That is the real threat. And that is the issue, closely linked with that of the copyright protection software enjoys, on which Judge Sporkin is most likely to stub his toe.

Most software manufacturers are open to complaints of this kind. Everybody knows of simple word-processing programs that have been adapted to function with faster chips and at the same time elaborated, so that they can generate graphics, publish books and even (with grammar-checking 'utilities' as they are called) pretend to write them. The price is accordingly enhanced. For the manufacturers, it is a standard marketing technique, that of selling often unwanted 'added-value' to the captive market of those familiar with the basic program. The high cost of these additions is one of the reasons why proper efforts to protect the copyright of commercial software so often seem rapacious. The protection of copyright would be more easily secured if manufacturers were required to make the extra facilities their programs offer separately available. That, of course, is how Microsoft should be dealt with in the present dispute, but Sporkin should make even its competitors live by the same rules. □

Genetic expectations

The search for the genetic roots of antisocial behaviour is now, and may always, be premature.

Is there a gene 'for' assault and battery, or 'for' serial killing, or for driving motor-cars faster than the speed-limit? These are questions provoked by a conference last week at the Ciba Foundation's London headquarters, at which they were also explicitly discussed. As put, the questions are, of course, nonsensical, largely because there is no reason to suppose that a habitual behaviour can be genetically determined. But, political correctness notwithstanding, there is ample evidence that some aspects of human behaviour (sexual behaviour, for example) are indeed genetically determined. In principle, it is even possible that a tendency to violent behaviour may also have genetic antecedents. Thus there is every reason why the question should be discussed from time to time. But the matter is unlikely to be decided even when there is a complete nucleotide sequence of the human genome; a decision is unlikely to be of much assistance in the defence of modern societies against the prevalence of crime; and this is by no means the most urgent issue in the bearing of genetics on modern life. □