

## Making headway for science

*The president of the Royal Society has spoken out publicly in protest at what is happening to British science. The hope must be that his modest demands are granted — and that it is not too late.*

SIR George Porter, president of the Royal Society, is not a particularly subversive man. He has not, so far as is known, marched through the streets of London in protest at a government decision or joined a mass lobby at the House of Commons in the hope of getting some policy changed. For all that the world knows (and if it were relevant), he may even be among the British government's most loyal supporters when its periodic elections come around. It is therefore all the more pleasing that he should have used the occasion of the BBC's annual Dimpleby lecture last weekend to tell the British government in plain language what must be done to put some stuffing back into British science. The message should be all the more memorable (in the minds of those prepared to listen) for being barbed as well as amusing.

The essence of the case, spelled out more soberly in last November's anniversary address to the Royal Society and elsewhere, is that there is nothing wrong with the wishes of governments to turn science into prosperity, but that the British government does the job badly because it does not collectively understand that scientific discovery is the product of able people's personal curiosity or appreciate the distinction between research and technological innovation. A telling object lesson will be found below. (Porter has obviously found civil servants even more insensitive than ministers; he took a previous permanent secretary at the Treasury explicitly to task for telling a House of Lords committee that "the national source of science and technology is less important than the ability to assimilate . . . ideas whatever their origin".)

Few will dissent from the ingredients of the argument. The precise degree to which the British research enterprise has been damaged in the past few years may be disputed, but there is no denying that "once a base of knowledge and skill has been removed . . . it is virtually impossible to catch up with the uninterrupted competition". While acknowledging the need that governments should "take care of the pennies", Porter is surely on firm ground in complaining at the government's failure to recognize the importance of the scientific enterprise: ". . . we hear frequent speeches emphasizing the importance of exploiting science", but support for science itself elicits "the enthusiasm of an atheist supporting the church".

The distinction between research and technological innovation is well put (with the help of the definition of the Royal Society's own purpose as "the improvement of natural knowledge"); the pursuit of knowledge and its useful application are indeed distinct, although not antithetical, activities. Research does depend on young people (which does not mean older colleagues have no part to play), the support the able among can command and the freedom they are given to satisfy their own curiosity. Porter is right to emphasize the importance, in present-day Britain, of the difficulties faced by young people seeking support for their research. (See, for example, the story on page 578.)

Exploitation needs different skills (among which a knowledge of the market and of a company's strategy may be crucial) and entails the spending of money by industry (on a scale probably larger than that to which British industry is accustomed). Porter

rightly ridicules the British government's standard misconception that, if British industry has historically failed to capitalize on British science, the fault must lie with the academic partners. He is also right (and courageous as well) to point to the irony that, in a Britain in which people clamour for the application of science, Members of Parliament will later this year have a free vote on the government's modest proposals for embryo research, hedged about though they are with regulations and restrictions of the kind suggested by the Warnock Committee set up to look into this issue some years ago. How, Porter's question goes, can you hope profitably to exploit new knowledge if those who would gather it are impeded from doing so by the law as well as the lack of funds?

The argument is compelling and, curiously, may make some headway for having been made on television. But it is also plain that the British have worked themselves into a mess about science and public support for it. It is difficult to tell whether the government's inflexibility stems from an erroneous theory of the relationship between science and technology or from simple animus towards academics and academic institutions. The best hope is that changing circumstances will allow people to change their views without appearing to suffer defeat. There are signs of change — not just the occasional words of approval that ministers drop at scientific occasions. The most promising is the improvement of the British economy — the improvement not merely of the government's finances but also of companies' capacity to invest in the future (which may yet allow them to hire more technical people or even to pay those they have more sensibly). Porter last weekend asked for a gesture of good faith — £25 million for equipment grants to able people whose applications have been refused, and £2 million a year to make research grants too small for the research councils' administration. It is a modest demand, but one that the government can hardly refuse. □

## Exploitation gone awry

*British efforts to turn information technology into prosperity have not come to much.*

ALL governments seek ways of turning science into prosperity, but only two have had much success; that of France, which over three decades has been sustained in that cause by the tendency to wrap technology in the tricolour, and that of Japan, whose Ministry of International Trade and Industry (better known as MITI) has the good sense to be the perpetual chairman of a committee of market-driven manufacturers, not a puffed-up strategist. The British government has a conspicuously poor record in the field: the then Mr Harold Wilson's Labour government earned so little credit for its promise in 1964 of a "white-hot technological revolution" that its successors have mostly (and wisely) said it is their job merely to create the circumstances in which innovation can flourish. But the old interventionist Adam, it seems, is not easily restrained.

In 1982, throwing its own principles to the winds, the British government embarked on a £350-million five-year programme