

operate a system by which local validation of individuals' fitness to travel abroad will determine who turns up at what conferences. That is a nonsense because it diminishes the correlation between those free from boycott and the interest of what they may have to say. It also threatens the integrity of professional life by transferring responsibility elsewhere. And it is a recipe by which intellectual life would be dangerously politicized. Who would allow that participation in next year's meeting of the Federation of Experimental Biology Societies in the United States should be open only to supporters of the Strategic Defense Initiative (or sceptics thereof)?

Nobody can seriously wish to see intellectual life evolve in such a way. The trouble is, that is how it is likely to go if nothing else is done. But must the professional community outside South Africa necessarily be so passive, wringing its hands about the state of affairs it sees, but supposing that there is nothing it can do to help to change it? It is easy to complain that South African academics should do more to change the probably tragic course of events ahead of them, but if they and their institutions are indeed overwhelmed in the years ahead, will their fellows elsewhere be able to wash their hands of the affair and say there is nothing they could have done? On the other side of the coin that says that intellectual life transcends frontiers is the legend that no part of it can be forgotten. So why not instead make common cause with the recognizable outposts of rationality in the knowledge that, then, there would soon be more of them? □

## Do there go I?

*For those with a sense of history, last week's report on US engineering is a chilling read.*

THE National Science Foundation probably had an inkling of what the outcome would be when it asked the National Academy of Sciences to say what changes should be brought about to make US engineering industry more internationally competitive. Even so, practising engineers will not be as pleased with last week's panel report (see page 5), with its firm declaration that US engineers must learn to do what their colleagues elsewhere have been attempting in the decades since the Second World War — to set themselves international standards of design and performance.

A little reflection will nevertheless show that neglect of this precept is part of what has gone wrong with the US economy in recent years. US exports of high-technology products languish because their quality is not as good as that of the Japanese and because they cost more than the Europeans collectively produce. A partial explanation is that the United States has for so long been a self-contained market that people find it hard to change the patterns of their thought. And while the old flair for fixing things survives, vaunting ambition is now unhappily constrained by too much disappointment, on the launch-pad and in the market-place.

A few historical reflections should chase away that thin excuse. In the decade from 1945, the British government busily sought to improve the competitiveness of its industries by arranging for comparisons with more efficient industries elsewhere, then mostly in the United States. The Anglo-American Productivity Council, one of the chief vehicles of this work, produced a much longer string of rude reports than the United States has yet seen. The central message was that British industry should learn to compete in design, efficiency and price with that of the United States. In the present comparison between the United States and (mostly) Japan, the gap in performance is less, although the faltering of US engineering education is comparable with that in Britain in the 1950s. After a lag of thirty years or so, people in Britain seem willing to learn the lesson, although the mechanisms have still to be put in place. Will as much time have to pass in the United States? □

## Phoenix emergent?

*The British Association talked bravely last week about saving British science. What might it do?*

REPORTS (see page 7) that the British Association is about to do something for the advancement of science should not be too quickly discounted. Some of those at Belfast last week may have forgotten that the association came into being (in the year of the optimistic Great Reform Bill of 1832) when British science was also in a poor state. A century after Newton, the most venerable scientific institution of the time, the Royal Society, seemed to have run out of steam, and could certainly not compare in influence with the engineering and agricultural institutions or in the excitement of its proceedings with the Royal Institution (where Faraday was at work). The British Association remained an important influence in British public life for the remainder of the nineteenth century, until science was professionalized and disciplinary societies became the obvious means of communication. But latterly, the association has lost its way, not quite knowing what it has been for, and has been roundly criticized on that account — even, sadly, by *Nature*.

Could that now change? To be fair, the association by itself cannot solve its own dilemma. As when it began, people's expectations of what it might accomplish are more important than its officers' resolutions. At the outset, the crying need was for a means of informing an interested, educated and curious public about science and its applications. That remains the association's objective, even though other more efficient means (such as television) have emerged. Now, in Britain, the crying need is to defend the research enterprise against external pressures, financial (tightening budgets), ideological (the abolition of university tenure) and doctrinal (the involvement of industry). How could an open-membership organization help towards that end?

The urgent need is factional, of course. The research community is only a small part of British professional life and a smaller part of the British population. But, just as the British Association cannot be sufficient to itself, so the research community cannot hope for a successful defence of its interests without carrying its case to the wider community. Much of its weakness now stems from its loss, by a decade ago, of the popular understanding and enthusiasm that helped the British Association along in the first few years of its existence. Is there now a chance that the interests of those in research and those outside it can again coincide?

That is the sense in which last week's Belfast meeting could be an interesting starting-point for helpful innovation. During the past decade and more of near-stagnation, British researchers have fallen into the habit of complaining to each other, but quietly, as if fearful of being overheard. Now that it seems as if the government intends to act, and as if nobody's interest will be untouched, there are the strongest reasons why people should speak out with constructive criticism of what may be planned (see *Nature* 328, 745; 1987). That may account for some of last week's outspokenness. But, on its own, that will not suffice. If the British research community is to reassert its interests, it must build a constituency of support. Is it too much to hope that the British Association might be a means of doing that? Only if researchers are more ready than has been their habit to turn up to tell the world at large why what they are doing is interesting, even important. Then it would also be necessary that the association's stiff procedures should be changed so as to allow it to speak out as a representative organization, with all the risks that entails. The association could do worse than provide the low-pressure pressure group Save British Science with the organization it badly needs. It will be interesting to see whether the association has been able to grasp some of these nettles by the time of next year's meeting, which is at Oxford. That could be an even better meeting. □