gather should be registered with some central but impartial body. Such a paradigm for arms control, distasteful though it would be to United Nations professionals, would serve well even in conventional near-wars. Who will give that a try?

Over-anxious politicians

A House of Commons committee complains that biotechnology has been neglected

For the past three years, British politicians have been unusually excited about an emerging technology, biotechnology as it is known. Now, rumour has it, the House of Commons Select Committee on Education and Science is about to castigate the British government for failing to do its duty and to provide sufficient encouragement for this new way of making protein materials with commercial value. The argument is that unless the British government does something from its central position and with its taxpayers' money, a golden opportunity will be lost forever. It is to be hoped that the committee (whose report is not yet published) will have a chance to think again before it puts its reputation behind this dubious proposition.

Ever since the Asilomar conference called in 1975 to argue out the hazards of recombinant DNA research, it has been plain that the new techniques would have great commercial potential. With the recognition that the hypothetical risks of the research are less than at first supposed, there has been a torrent of attempts to make profits from the new techniques. In many ways this new industry differs from others in the past, the development of the steam engine for example, in not seeming on the face of things to be capital-intensive: a few micrograms of restriction enzyme in the hands of a talented person might mean a new product almost overnight. This is no doubt the reason why the past few years have also seen the mushrooming of corporations built around a few talented people with venture capital from some commercial source and dedicated to the notion that it is possible to turn ideas into gold. By comparison with what has happened elsewhere, however, new companies of this kind have been almost conspicuous by their absence in the United Kingdom.

Trendily, politicians and others prefer not to be left out of such excitement. In Britain, especially, it is always possible to raise a wave of patriotism with a simple calculation of how much foreign currency would have been earned in the 1950s if only penicillin had been patented when it had been identified. This is spirit in which a distinguished committee under the late Sir Alfred Spinks was convened three years ago. That committee's report, in April 1980, was, however, more level-headed, acknowledging that university research in molecular biology could with advantage be spread outside the centres in which it was already strong, and that a modest public investment in a few commercial enterprises would probably be worthwhile. Since then, the University Grants Committee has made an extra £800,000 available in earmarked grants to universities (called "chicken-feed" by some) while the National Research Development Corporation (now the British Technology Group) has invested £5 million in the company called Celltech.

The politicians, however, seem still to be dissatisfied. There are several reasons why they should contain themselves in patience. First, the long-term potential of biotechnology is beyond dispute but, as the experience of newly established corporations has recently shown, discovery may be easy but development is likely to be painfully slow (and expensive). Second, there is no strong reason to suppose that established companies are failing to take up the challenge of the new techniques even if their commercial interests dictate silence rather than the opposite. Third, even if a rash of new companies is a sign of health and a guarantee of successful exploitation, the fact that such a rash has not happened spontaneously is more significant than anything the government could do centrally to redress the balance. Instead of complaining that biotechnology is being neglected in Britain, the politicians would better advised to understand why innovation as such is too much neglected and then to correct that failure.

Sinking Law of the Sea

The United States says it will not sign the treaty on the Law of the Sea. It should have said so earlier.

The Law of the Sea is in trouble again. After eight years of negotiation, the United States Administration has now said that it will not sign the draft treaty produced in New York last month. The issue that has stuck in the Administration's throat is predictably that of sea-bed mining, the rules under which the exploitation of metalliferous nodules on the sea-bed will in future be permitted. The circumstances that have now arisen thus resemble those after the First World War, when the United States took a leading part in negotiating the constitution of the League of Nations, the predecessor of the United Nations, but then laconically declared that it would not itself be joining. There is also, however, a parallel between the present Administration's distaste for the Law of the Sea treaty and its pre-election repudiation of President Carter's second instalment of the Salt treaties, negotiated with the Soviet Union and signed but never put to the test of ratification in the United States Senate. The ideological change in Washington at the beginning of 1981 was plainly every bit as sharp as had been advertised in advance.

The delay is above all a shocking illustration of the Reagan Administration's way of conducting international business. The shabby tail is all too well known. For the past several years, grumbling by commercial mining companies in the United States has been growing about the draft proposals in the draft treaty concerning the exploitation of minerals beyond the 200-mile limits in which nation states have an overriding economic interest. The grumblings have not been mere selfishness, but have included many cogent objections to the proposed regime. How can a mining company embarking on the exploitation of a particular patch of sea-bed promise to find an "equivalent" patch to be exploited for the benefit of developing countries? And how is it then to arrange the obligatory "transfer of technology"? If the Reagan Administration had said at the beginning that these proposals were unrealistic, there would no doubt have been a row, but its right to say so could not have been challenged. The Administration will not be as easily forgiven for having taken part in the final negotiating session in New York this year without having said what it now claims it had meant all along to say — that the proposals on sea-bed mining were unacceptable.

What happens next is in the lap of the gods. The ceremony at which the treaty will be signed has already been arranged at Caracas in December (but the government of Venezuela voted against the draft treaty on the grounds that it does not resolve the long-standing dispute with Colombia about maritime rights). Between now and then, the draft treaty can be amended by correspondence. So why not accommodate the United States by excising from the treaty the proposals that give offence, leaving the whole question of deep-ocean mining to some future conference? Unfortunately, the draft treaty on the Law of the Sea, like other international treaties, is a package that cannot easily be unwrapped. Indeed, the proposals on sea-bed mining have so far been a political cement by which maritime and developed countries of the world have traded the right to sail unimpeded through the Straits of Malacca (between Malaysia and Sumatra, part of Indonesia) and similar stretches of water for an understanding that they will return benefits in kind, some sharing of the hypothetical wealth scattered on the deep ocean floor. The notion that such a promise could engender agreement about the international use of the high seas was probably mistaken even when it was first raised more than a decade ago; now that the technology is more nearly usable, it is altogether too contentious for anybody's comfort. The best course now would be that the United Nations should bite the unpalatable bullet with which it has been presented, postpone the signing ceremony and reconvene the conference. But even that course will not be possible unless the United States can promise that it would say what is on its mind. On recent form, that is improbable.

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