

uncertain, while the Secretary of State for Education and Science has made it plain that he would not allow the process of discrimination to go so far as to threaten the existence of weaker institutions. The potential benefit of a UGC reorganized as a council on Croham lines is that it might be willing to take hard decisions of this kind, fighting the government for its right to be discriminatory between the good and the less good if that is what the circumstances require. The obvious danger is that such a council might shoot off in an eccentric direction, the pursuit of what is fashionably called 'relevance', not excellence, for example. On balance, the risks are worth running for the chance that greater autonomy will emerge.

Overlap

None of this will absolve the British government from worrying about higher education. For twenty years there has been an anomalous division of higher education into two sectors, one called the 'private' sector which is supported directly by central government through UGC and one called the 'public' sector because it is supported by central government through local authorities. Especially if universities are compelled by financial pressures to become more diverse in what they do (which would be welcome), and if Mr Kenneth Baker, the Secretary of State for Education and Science, succeeds in detaching the institutions called polytechnics (a large part of the public sector) from the local authorities, there will be even more overlap between the systems than there is at present. Will it then make sense to let them coexist as ostensibly different kinds of institutions? That is one issue to be settled soon. Another is whether it makes sense that UGC should continue to be the conduit for a notional £600 million a year intended for the support of academic research when the research councils, formally responsible for the same causes, are increasingly incapable of supporting projects which, by lapsing, help to drive the iron deeper into the heart of British academic science. Why should not the government settle these issues while deciding how to respond to Croham? That way, there might be a chance of returning the system to good health. □

Choose your timescale

US researchers, under pressure to be more productive, may find fewer benefits in plurality.

ALL governments believe that research, and particularly scientific research, is potentially a prolific source of wealth and, perhaps even more important, of international advantage. Even academic researchers know that. Most governments have also followed their declared precepts in arranging that research should be conducted in an orderly fashion. The most successful framework so far devised is that still in being in the United States, where the bulk of what is spent on what researchers do is spent by agencies which pretend they have a practical interest in the outcome. In reality, of course, the need for the US Department of Energy to know whether there is a *top* quark, a question that may be settled when its next or next-but-one accelerator is working, is no more compelling than the need that NASA should have a more rounded understanding of why the Universe expands. The framework succeeds only because the sponsors are tolerant of their pensioners' enthusiasms. In places such as Japan, where government agencies are required to be less flighty, public sponsorship of research is less catholic and also less productive.

For how long, in circumstances like these, can the casually creative system in the United States survive? There are both pluses and minuses. This week's report (see p. 564) that the US Navy cannot afford the \$400 million-odd that would have been required to build a better sea-surface satellite monitor is a far cry from the days (in the 1950s) when the US Office of Naval Research was investing in molecular biology on the grounds that

nobody could deny the possibility that aircraft — US Navy aircraft, of course — would one day be flown by appropriately coded nucleic acid molecules. Studies of the behaviour of porpoises were at the same time encouraged on equally free-thinking grounds. It is true that liberality of this kind has always gone hand-in-hand with even more generously supported projects of a strictly practical character, but inter-agency competitiveness has been a constant spur to farsightedness. That is another reason why the US Department of Energy's willingness to take the next big particle accelerator under its wing is to be welcomed; the project may do little for the state of the domestic oil-producing states, but it will ensure that some other agency (the National Science Foundation, perhaps?) does not get hold of it. Researchers know well enough the benefits of this lavish plurality.

That is why the events of the past few weeks in the United States are mildly disturbing. The new budget, at the beginning of the year, is above all tidy. The National Science Foundation (NSF) is destined to grow. Other agencies, such as the National Aeronautics and Space Administration (NASA), will get more than last year if only Congress agrees, but will have more of the money tied up in specific tasks (building another shuttle spacecraft, for example). It could easily be that the pluses, especially the more open recognition that NSF should prosper so as to support more and better research, will be offset by the minuses arising from the workaday mould into which the mission-oriented agencies are being forced by the budget problems of the United States. It is far too soon to begin worrying that the condition of research in the United States will soon resemble that in, say, Britain, for the margins for free spending by US agencies are still very broad. But there are unwelcome signals in the single-mindedness of the mission-oriented agencies that could yet force US researchers to follow the short-term conventions common elsewhere. Ironically, if the worst should happen, the damage will have been done in the name of good government. □

What does ABM mean?

The prospect of a transatlantic quarrel over the Anti-Ballistic Missile Treaty cannot be avoided.

It appears that the US administration is drifting towards serious disagreement with Western Europe over the deployment of some elements of the Strategic Defense Initiative (SDI). The difficulty is the wish of many in and just outside the administration to have something of SDI in place before the end of President Reagan's term in office, roughly 22 months from now (see *Nature* 325, 470; 1987). The wish is easily understood, even by those who do not share it. The puzzle (to Western Europeans) is that the United States seems not to understand, let alone to have anticipated, why the issue is so important that even the secretary-general of the North Atlantic Treaty Organization, Lord Carrington, should have written to Washington for an explanation of what is going on.

The origins of the Anti-Ballistic Missile (ABM) Treaty of 1972 refer, then, at the beginning of what turned out to be 70 per cent of a decade of detente, the United States accepted that the Soviet Union had the capacity to defend a few targets (Moscow in particular) against some missiles, that the cost and difficulty of its own development of a high-acceleration missile called SPRINT would not be worth the candle and that there was strength in the general opinion that, to the extent that ABM defences must undermine the now-traditional theories of deterrence by the threat of mutually assured destruction, they are best avoided. President Reagan made a good debating point in March 1983 when he argued that it must be preferable to prepare to defend one's people against attack than to prepare to attack potential attackers. But the issue has never been debated. That is why, late in the day, there must now be an argument. □