

resembles that of a private corporation, with a chairman (responsible for strategy) and a chief executive (tactically inclined). It will be easier to guess whether these structures will work (in the sense of being free from personal animosities) when the two missing executives have been identified. But even then it will not be clear whether the new arrangement will be good or bad for research.

Much will depend on Cadogan, whose role (on the corporate analogy) is not clear. Will he stand in relation to the research council chairmen as would the chairman of a holding company to the chairmen of its subsidiaries? Or will he be the equivalent of the principal (and only) shareholder in each of the research council corporations, free to demand an audience with the chairman if he believes funds are being misused or to abuse the chief executive if he considers that too much is being spent frivolously, say on Christmas parties for the staff? On those questions, the government has not been clear; indeed, it appears to have overlooked them altogether. Beyond the duration of his appointment, Cadogan will determine the balance between basic and applied research in Britain. It would be comforting if his undoubted eloquence were matched by more explicit evidence of reflectiveness.

For now-tiny Britain, what will matter most in the years ahead is how literally the rubric of 'wealth creation' (and its extension to 'environment' and 'quality of life') will be understood. Astronomers, of course, will still be free to ask (the PPARC) for, say, funds 'to see whether there are microsecond pulsars', but what will happen to the grant application from a person who believes he is within an ace of understanding the mechanism of cell division? Will prudence require a few thousand extra words about the link between uncontrolled cell division and cancer? And will continuation grants then be turned down if there are no obvious therapeutic applications? And what will happen to palaeontology (except of oil-bearing strata) that cannot masquerade as relevant to biodiversity? We shall not know the answers until the new system is in place next year. The best hope is that DGRC and his fellow chairmen are by then persuaded that they should follow a learning curve of some sort, which is certainly the case.

Meanwhile, the British government has blotted its copy-book on at least one score — the independence (or, rather, the opposite) of its new advisory council, the Council for Science and Technology. No doubt by accident rather than design, two of the new research council chairmen are also members of the advisory committee. Their four fellow-chairmen (and rivals in the inevitable competition for shares of the annual budget) are not. Does that mean that the new council will never discuss the distribution of funds between the research councils? Or that the government will add the four missing chairmen to its membership, in which case it will have recreated the Advisory Board for the Research Councils, abolished only in the summer, but with the difference that the chairman is a minister? Either way, the new council is not constituted to be the sounding board for the opinions of the research community that Britain has for too long lacked. □

White House science

Reinventing science advisory apparatus in the White House should be good for science.

EVER since Jerome Wiesner (now president-emeritus of MIT) was an effective science adviser to President John F. Kennedy, the US scientific community has paid keen attention to the state of science-advising in the White House. Of particular concern is whether the president himself actually listens to his science adviser, as Kennedy plainly did. In the intervening years, there have been good times as well as lean.

Now, President Bill Clinton has taken the first step towards fulfilling his promise to take science seriously. He has announced the formation of two potentially significant advisory bodies (see page 393). The first is a cabinet-level National Science and Technology Council to "coordinate" science, space and technology policy. The president himself will chair the council, whose members will include the scientifically literate vice-president, Al Gore, and the head of the White House science policy office, John Gibbons.

Whether Clinton's attempts to coordinate activities will facilitate collaboration among agencies strapped for money or (let us hope not) prove to be nothing more than restrictive supervision remains to be seen.

In addition, the president has warmed the hearts of US science policy makers by recreating PCAST — the President's Committee of Advisors on Science and Technology, which will consist not of government officials but of independent scientists from academic institutions and industry. The blend is meant to foster what Clinton calls "public/private" partnerships which are considered vital to the national economy but full of conflict-of-interest peril to research universities. The latter are spending increasing amounts of time trying to figure out ways to take industry's money without selling their academic souls.

In the Kennedy era, PCAST was viewed with respect because it represented the voice of academic research and served a role in protecting science from too much of what is today called 'targeted' or 'strategic research'.

It is generally held that devotion to basic science is out of place in today's scientific marketplace, where there is greater emphasis than ever on things like meeting national goals (which means helping to increase national revenues). The new PCAST probably must accept the current jargon but it does not necessarily follow that its members (when appointed) will fail to appreciate the importance of basic science.

It is sheer folly to believe that people engaged in basic work are the equivalent of research airheads with no scientifically sensible goal to their experiments. The leap from basic to targeted research may in some measure lie in language rather than reality. The other thing to say is that budget constraints are real. So the challenge will be to understand that basic science does further national goals. It will be up to science adviser Gibbons, who like Wiesner is in the inner circle, to convince the president of that. □