

Should scientists be seen and not heard?

In recent years there has been a marked change in the way the British government is advised about scientific affairs. John Gribbin discusses this change, and the position of science in industrialised society today, in the light of the recent appointment of Dr Robert Press to coordinate the government's scientific advice.

WITH the departure of Sir Alan Cottrell to become Master of Jesus College, Cambridge, the post of Chief Scientific Adviser to the government is not to be filled from the outside world of science. Sir Alan had held his post with a grade of second secretary in the Cabinet Office, and as such ranked above almost all the scientific advisers in the various departments and ministries (the exception being Sir Hermann Bondi at the Ministry of Defence). Responsibility for coordinating scientific advice within the Cabinet Office now rests with Dr Robert Press, who as Deputy Secretary (Science and Technology) holds the same rank as most of his colleagues who are the advisers to the individual departments.

Dr Press will no doubt carry out his new role as well as anyone but the change is bound to be seen by many as a decline in the status of the post; Dr Press has also commented that he will be continuing with his previous work—chiefly concerned with nuclear affairs—so it seems that the post is not regarded as a full time occupation. And the decline of the post of Chief Scientific Adviser to the government cannot even be said to be sudden. Sir Alan himself was in many ways in a less powerful position than his predecessor, Sir Solly (now Lord) Zuckerman, and was never, for example, the Chief of the Scientific Civil Service. The latest move could well be seen as a sign that the previous situation, under Zuckerman, has now been reversed.

This is a new situation which deserves particularly close attention since so few members of the government—or indeed of either House—have any training in scientific or engineering matters. In the past, it has certainly proved possible for an all-powerful Civil Service to advise and persuade governments without taking into account the best scientific considerations; this may not happen now, but it would be much less likely to happen if there was, once again, a man in the centre with the experience and personality to take a firm grip.

No doubt the argument will be put forward from some quarters that there is no suitable man to hold such a position, and that therefore the government has been forced into the present situation. That argument carries some weight; there are always people to be found with forceful personalities and a desire to tell the government what to do about science but alas that is not sufficient qualification. What is needed is someone from the scientific community who is both well informed and respected by that community, but who has the strength of character to deal firmly with the community when necessary.

Another argument which was put forward after the announcement of Dr Press's appointment was that it is in line with the Rothschild proposals for the organisation of

civil science in Britain. Now that there are Chief Scientists in all the essential departments, so the argument runs, there is no need for anything more than a coordinator in the Cabinet Office. That argument, however, seems to rest on a singular interpretation of the Rothschild report.

But outside the immediate issue, the question of the place of science in society is even more disturbing. At present there is an urgent and growing need for science to be used constructively by governments; there is a strong likelihood that the present situation will be no different in practice from the situation with Sir Alan Cottrell as Chief Scientific Adviser, but there is very little chance of changes being made in the required direction. In part, to be sure, the need is for a cleaning up of the mess made by the misuse of science in the past. That, however, makes the present need for correct use of science no less urgent. Yet there seems to be a great public apathy about science, at least in the industrialised nations of the world.

There is a need to provide scientific education in the broadest sense, to get the scientific message across to the general public and to the rank and file Members of Parliament, if not to the government itself. There is at present a bizarre situation in which there is concern at all those levels that the few millions of pounds worth of aid which Britain is providing for drought-stricken regions of Africa may be inadequate, and yet there is no move to provide a few tens of thousands of pounds for research into the causes of such droughts (see *Nature*, 248, 466; 1974). Seldom can there have been a more straightforward example of prevention (if possible at all) being better than cure; there must be many other cases where foresight and the correct application of current scientific knowledge would produce enormous benefits.

Part of the blame for the confusion and apathy in the public mind must be laid at the door of the Press. There were only a few brief paragraphs in the British national papers commenting on the new situation in the Cabinet Office, and at least one responsible newspaper carried an incorrect and misleading account which largely obscured the real significance of the situation. Members of both the Royal Society and the Institution of Mechanical Engineers have recently expressed concern about the failure of scientists to get their message across. If this concern is to be turned into something more constructive, those august bodies might well be advised to investigate ways of encouraging the spread of the scientific message through the journalistic medium.

It is, however, less easy to see an obvious immediate solution to the problem of providing the right kind of scientific advice to the government. If there are serious objections to placing too much scientific authority in the hands of one man, there is one obvious alternative which has been touted, and that is to expand the role and responsibilities of the Advisory Board for the Research Councils (ABRC). This has superficial appeal. Sir Alan was, of course, represented on the ABRC and Dr Press will be too. So the channel of communication is there and might be strengthened into something more without great difficulty.

But government by committee is always undesirable and advice by committee hardly less so. Since the role of Chief Scientific Adviser, which has now disappeared, was largely one of assessing priorities, it is difficult to see how the work could be delegated and shared out. Someone must see everything in order to assess the priorities, and in that case the committee is redundant. There seems no easy solution; but the present situation is far from satisfactory. At a time when the government is faced with questions of greater scientific complexity and urgency than ever before in peacetime it is disturbing to find the scientific community asking: Where is the voice of science and engineering in government?; it is perhaps even more disturbing to guess the likely public response to such a question: We don't know and we don't care.