

Scientists don't move

DESCRIBING the British scientific system as positively arthritic, Sir Hermann Bondi introduced a report last week on "Interchange of Scientists" (available free from the Civil Service Department) which is a cautious first step towards easing the joints. It is small comfort that if anything Italy and Germany are even more fixed in their ways.

The report is necessary reading for anyone who worries that the British scientific scene is not so free-flowing and vigorous as its American counterpart, although most who feel that way (and clearly Sir Hermann's Task Force did) must hope that there is more to come and that the group will stay together even just as a continual stimulus to the body scientific and arthritic.

Mobility in the United States is much admired by those who live a trans-Atlantic existence, and with good cause. Scientists and engineers move regularly in pursuit either of greater job satisfaction or more dollars, and few would hazard a guess that they would be doing the same job in five years time. Movement into and out of the civil service, particularly to spend a time in Washington administering a programme they understand well, is something which many excellent scientists do and which gets them much credit in the community. But then 'the community' in the United States much more naturally includes industry and the civil service as well as the universities. Further there is a much greater freedom, it seems, to pay competitive salaries and in particular not to expect a bright young man to wait until he is forty before he begins to profit financially by being a scientist. Thus the problem with stimulating mobility in Britain is ultimately not so much one of improving administrative arrangements and making the physical move less disagreeable as of changing ways of thinking.

The central proposal of the task force (which the government has already promised to implement) is that within the civil service a small unit should be established to facilitate secondment between the civil service on the one hand and industry and universities on the other. Flow should be in both directions. The third side of the triangle—movement between industry and universities—could not be handled by the same unit, but there is an obvious need for an organisation to stimulate interchanges there too. The ever-cautious scientist, scared of venturing into the unknown, will generally be urged out of his shell by the existence of a return ticket to his first employer after a period of, say, two to four years.

The apparent obstacles to mobility which the task force report make stunning reading. The difficulty of moving house, problems with pensions (the university scheme is a particularly difficult one from which to transfer), inadequate allowances for transfer—all testify to feeble-mindedness among scientists and a lack of social responsiveness from employers. It is scarcely believable

that housing is sufficient of an obstacle that the task force has to recommend that "whenever possible, interchanges should be within the same geographical area to avoid moving house". Clearly a spirit of boldness in pushing back intellectual frontiers does not necessarily extend to much else. Not that employers are blameless—"to a large extent, those taking up permanent posts either in the civil service, or elsewhere, are not paid removal expenses". This medieval attitude must surely go.

One of the problems with stimulating mobility is that the potential mover must perceive other areas as attractive. This most certainly is not true at present, indeed the low regard that the three 'wings' of science often hold for each other must often dampen the enthusiasm of even the most willing mover. Furthermore the restraints on recruitment that the civil service has imposed on it ensured that in 1972, for instance, the Principal Scientific Officer grade, which numbers 2,000, comprised only ten who had been recruited from outside the service during the year. And all the signs are that mobility is on the decline. In 1958 half of all university chemists had outside experience. Now less than a third do, and one department of 33 has nobody with external experience!

There is no simple solution to this deplorable situation. The new unit will at least allow a few more temporary exchanges. But ultimately the whole question of the deployment of scientific manpower and the narrowness of institutional and individual attitudes needs penetrating examination. Maybe somewhere along that route the idea of allowing scientists to keep a year of their education in abeyance until their thirties would merit an airing. And it would be good to see more practising scientists in Whitehall.

100 years ago



THE tenacity of life of popular errors is well exhibited in the following extract from the *Californian Horticulturist*:—"The influence of forests in drawing moisture from the heavens may be seen from the experience of San Diego, California. Previous to 1863 there was yearly a rainy season, which made the soil nourishing and productive. In 1863 a destructive fire swept over the greater part of the country, destroying the forest and blackening the hills. Since then there has been no rainy season at San Diego." When will public writers learn that forests influence the climate by drawing water, not from the air, but from the soil?

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