

country to another because they will then be able to work in fields which are, to them, more exciting. No doubt the space programme in the United States has served to lure some scientists from Western Europe, though its influence has probably been exaggerated. The plentiful supply of particle accelerators has certainly been a magnet for nuclear physicists. And, of course, a young man wishing to work on aircraft development and construction will be attracted almost irresistibly towards the great aircraft plants of the United States. So does it then follow that smaller countries than the United States must enlarge their space programmes and aircraft industries? Arguments like these are common but invalid. Emigration is often the lesser evil, for there is no reason to believe that the numbers of people attracted away from smaller countries by temptations like these are in any way substantial. The costs of keeping them would usually far outweigh the potential benefits.

In any case, of course, emigration is not the simple and distasteful scourge which it is often supposed to be. For one thing, emigration works in both directions. In Britain, for example, there is probably one Irish doctor working for every Englishman recently flown overseas. Britain is probably making still greater demands on the potential medical resources of India and Pakistan—both of them countries much more in need of doctors. But, in the long run, these transfers of skill and training from one country to another are beneficial and, up to some point, are to be encouraged. For emigration is not always permanent. British medicine has probably as much to gain from a better working knowledge of American practices as India, in the long run, will benefit from the return of a proportion of the Indian doctors now working in Britain. In academic science and in industry, these comings and goings are even more to be welcomed. Moving a person from one place to another is, after all, the most effective way of letting one place know what the other is doing. In this sense, emigration can be the life-blood of scholarship. No country can tolerate indefinitely a steady outward flow of bright young people, but by seeing that the conditions of work for technical people, in universities and elsewhere, are those which the criteria of good management in any case suggest, the inward and outward flows of migrants would be reasonably in balance. That, and not demographic isolation, should be the goal.

PUGWASH AFTER PUGWASH

THE Pugwash organization has long since become familiar and even respectable. It has survived the over-excited ballyhoo which attended its creation a decade ago, and which tended to imply that the goodwill and innocence of a handful of scientists would create sweetness and light throughout the world, and especi-

ally in foreign ministries. If Pugwash is now less ambitious—and less innocent—than it used to be, it is also more useful. There is good reason to think that the meetings which now take place are modestly valuable and informal means of exchanging information on matters related to arms control between the military powers. The only tangible achievement in this field consists of the work of the informal meetings which preceded the signing of the present test-ban treaty in 1962 and 1963, and which were of some value at least to officials in the United States, but there is also continuing value in the opportunities provided by the larger Pugwash meetings for letting nationals of one country learn more about the policies of others on matters of disarmament. In other words, the value—or the potential value—of Pugwash is not that it can make the problems of disarmament melt away, but rather that it can enable its participants to appreciate why even apparently trivial measures of arms control can be exceedingly difficult to implement. Though its participants would not always appreciate this, Pugwash should be as much a means of ventilating disagreement as of winning agreement.

From this point of view, unfortunately, the published statements of the Pugwash meetings are usually a great disappointment. With respectability, Pugwash has also acquired a kind of folk-lore of received doctrines which cloud its judgment on the affairs with which it wishes chiefly to concern itself. The formal communiqué still contains proposals for arms control which have no relevance to contemporary problems—or even to the problems of a decade ago, when they first made their appearance. The non-aggression pacts and the nuclear-free zones which once more make their appearance may sometimes—though not always—be ways in which security might be increased, but they are no longer central problems. The assertion that the main obstacles to a comprehensive ban on nuclear tests are “political rather than technical” has turned up again, though this time it is accompanied by a fuller discussion than usual of how the technical obstacles—by no means unreal—might be overcome. Then there is some wide-eyed complaint about the remoteness of “General and Complete Disarmament” without much evidence that the participants are aware of the size of the windmill at which they are tilting. This is where the proceedings of Pugwash are most open to criticism. Seeking as they do to influence public opinion, the participants in Pugwash would be much more effective if their pronouncements could give the technicalities of disarmament some hard-headed perspective. The Pugwash communiqué, in other words, should aim to convince those who read it that somebody has made a thorough technical examination of the problems, and has hit on what promises to be a practical solution. To ask all this is possibly to ask that Pugwash should give continuing attention to problems in between major conferences, and there is some encouraging news of attempts to set up permanent working groups. Evidently there is still a great deal to be done.