Tumour as parasite

P.B. Medawar

The Interaction of Cancer and Host: Its Therapeutic Significance. By Michael F.A. Woodruff. Pp.467. ISBN 0-8089-1265-8. (Grune & Stratton/Academic: 1980.) \$46.50, £26.20.

SIR Michael Woodruff, FRS, is one of a small and important group of surgeons that was brought into being by transplantation therapy: a man equally at home in ward and laboratory who has contributed to both the science and the arts of transplantation. The range of topics under discussion here and the depth of their treatment are such as we normally associate with symposium proceedings or multiauthor volumes. Neither is a satisfactory genre for scientific communication, for multi-author works usually have a rootless and untidy character because each author busies himself with the part of the business entrusted to himself, often to the neglect of more general considerations.

The volume under review is open to no such reproaches. It is the work of a single mind — and a very good mind it is too: spaciously well informed, critical where criticism is called for (witness Woodruff's treatment of the so-called "autonomy" of tumours and the discussion of the notion of the immunological surveillance), but sanguine too in its appraisal of the contribution laboratory science may make to the prophylaxis or treatment of tumours.

A majestic list of references citing titles and first and last page numbers occupies pp.289-419. Over a long period of time such reference lists repay their authors for some of the time and trouble that goes into them but we readers are beneficiaries right away.

In the preparation of a work of this scale and unified structure the time must be set when copy is all packed up and sent to press: no useful purpose is served by delaying publication in the hope that someone will come forward with a revelation without which the book would be incomplete. Woodruff's work is conceptually up to date and its character is such that it matters not the least that it does not include every contribution to tumour biology up to the date of publication of this issue of Nature. No reference is made, for example, to the anti-tumour action of retinoids nor to recent epidemiological evidence pointing to the complicity of vitamin A in resistance to tumours. These very recent advances were known only as premonitory rumblings to those who were listening for them.

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IQ: the environmentalist position

Richard Lynn

Race, IQ, and Jensen. By James R. Flynn. Pp.313. ISBN 0-7100-0651-9. (Routledge & Kegan Paul: 1980.) £10.50, \$27.50.

HITHERTO, the environmentalist case on the race and IQ issue has been characterized more by emotion and ideology than by reasoning and science. This deficiency is to some degree remedied by the present volume in which Dr Flynn gives a cogent and reasoned exposition of the environmentalist position.

The author recognizes that the chief problem for the environmentalist is to find an environmental factor capable of depressing the mean Negro IQ by one standard deviation or 15 IQ points. He recognizes also that many of the possible candidates frequently advanced by environmentalists do not begin to stand up to examination. This is particularly true of both poverty and discrimination. Among other problems these possibilities collapse in the light of the experience in the United States of the Jews and the Chinese. Both of these ethnic groups arrived as penniless immigrants and suffered initially from the handicaps of poverty and discrimination. Yet both minorities have mean IQs at least as high as those of Caucasians of northwest European descent.

It remains possible, however, that there is a more subtle environmental factor depressing the Negro IO, or perhaps a set of factors each exerting a relatively small effect. The author proposes low parental IQ, poor nutrition during the mother's pregnancy, lack of stimulation in early childhood, family dislocation, low selfimage and poor education. Taken together the author argues that these could be sufficient to account for the phenomenon. The difficulties with these arguments are twofold. First, as the posited deleterious effects are small they are hard to detect. Second, there is a chicken and egg problem in so far as the proposed factors are mainly functions of low IQ in Negro parents.

While there are manifest weaknesses in the environmentalist position, there are also problems in the genetic hypothesis. Two of these are particularly important. In the first place, the genetic hypothesis requires that in individuals of mixed Negro and Caucasian ancestry the IO should be positively related to the proportion of Caucasian genes. There is contradictory evidence on this point and it is certainly by no means clear that this is the case. Secondly, there is a study of the children of German mothers and American Negro servicemen, in which it was found that the IQ of these children differed little from the mean of the German population.

It is a pity that the author has largely confined his discussion to the American data. The results of intelligence testing of racial and ethnic populations in other parts of the world are an important dimension of the problem and should be considered in any comprehensive discussion. Thus, for instance, if there were a Negro population somewhere in the world with a mean IO of 100 the environmentalist case would be considerably strengthened. There is a substantial amount of evidence on this question from Negro populations in London, Jamaica and a number of countries in Africa, but in all cases their mean IO is either about the same as that of American Negroes or else lower. These results cannot be readily explained in terms of test bias, because Mongoloid populations in Japan, Singapore, Taiwan and Hong Kong obtain about the same mean IQ as those of Caucasians in the United States, north-west Europe, Australia and New Zealand. This consistency of intelligence levels across many different nations would appear to suggest a significant genetic determination.

While the present volume is limited in so far as it does not come to terms with this important set of data, it has to be welcomed as a scholarly and informed presentation of the environmentalist position.

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