

BOOK REVIEWS

LIFE AND DEATH

Social and Genetic Influences on Life and Death

Edited by Lord Platt and A. S. Parkes. (A Symposium held by the Eugenics Society in September 1966.) Pp. ix + 222. (Edinburgh and London: Oliver and Boyd, 1967.) 63s.

THE first Eugenics Society symposium was held in 1964 under the title of "Biological Aspects of Social Problems", and was followed a year later by "Genetics and Environmental Factors in Human Ability". Now we have the record of the third symposium, held in 1966, on an equally broad if not even broader subject and marked, as were its two predecessors, by the same width of interest and expertise that is evident in the papers from which it is built up. As Lord Platt points out in his introduction, this third symposium has a more medical flavour than the others, but this is not to imply that it is entirely medical in either its interest or its contributors.

The symposium included fifteen papers divided among four sessions, the first concerned with conception, pregnancy and birth; the second with somatic illness; the third with psychological illness and the last with ageing. Such a range of subjects must surely defy the ability of any single reviewer to bring an equal perception and understanding to bear on all the contributions. I hope, therefore, that I shall be understood—and forgiven—if I devote most of my space to those points which are of special interest to me. For me, the third session, on psychological illness, was the least rewarding, though the subject is obviously one of great and growing importance to society. Nor could one fail to be attracted by Leighton's suggestion that the disorganization of social systems generates psychiatric disorders, or to be interested in Rawnsley's correlation of psychiatric and somatic disorders both in the Ministry of Pensions figures and in observations made on the Tristan da Cunha islanders when they were temporarily evacuated to this country.

Many will, I am sure, share my gratitude to Morris for his survey of the incidence and cost of coronary thrombosis and to Fletcher for his presentation of the relationship between smoking and lung cancer in the session on somatic illness. In this same session Spicer discusses recent trends in mortality and points out that improvement in death rates is slowing down. Of special interest, however, is his point that the suicide rate is rising in both sexes between 25 and 34. One is left pondering the implications of his observation that this rise has been marked in the "affluent" period of the past decade or so.

It is encouraging to find a session devoted to the causes and consequences of ageing for, as Backett points out in his introduction to the session, medical interest has been understandably less in the quality of life that was saved than in the prevention of death, especially premature death. The study of old age is, again as Backett says, the meeting point of many disciplines, and Roth re-emphasizes this when he sees neuroses of the old as the result of interaction between social, familial and genetic factors rather than the outcome of any one of them—a thought which is to be commended to those enthusiasts, from whatever discipline, who over-simplify by claiming a unique importance for their own approach. Roth further brings out the widespread incidence of psychiatric disorders in the aged and points to the need for greater help in the community for older people, especially at the earlier stages of their upsets. In his account of the changing age structure of the population and the sociologi-

cal problems of age Cox makes the point that so long as old people can help themselves we should pay particular attention to advising them on how best they can do so. The importance of the genetic element in ageing is brought out by both R. D. Clarke and Hollingsworth; but they bring out the importance of other factors too, and we are left with no doubt about the great need for more information on this subject, both from observation on man and experiment on other species.

In a brief, but very well presented, contribution to the session on conception, pregnancy and birth, C. A. Clarke gives an account of what I may perhaps call the "Liver-pool" treatment for circumventing *Rhesus* disease of the new-born. I commend this paper to anyone interested in the application of biological science to medical problems, and no less because he points to what we do not yet know as well as glancing at the implication of his results for the wider problems of transplant control. Illsley looks at the variation of that uniquely significant character, intelligence, with family size, parity and maternal age. He makes the point that certain disturbances of pregnancy give I.Q. test scores higher or lower than normal, but like all such studies the results are far from easy to interpret. In discussing foetal and infant deaths McKeown brings out the fact that some 20 per cent of conceptions end in death before the age of fifteen. He points to the need for wider knowledge of the social, economic and psychological reasons for unwanted pregnancies and of the aetiology of spontaneous abortion. He sees half the deaths between the twenty-eighth week of gestation and age fourteen as potentially avoidable, by prevention of maternal illness, by improved obstetric care and by prevention of infection, accident and violence after birth. He also regards prenatal deaths as largely non-genetic, but I do not see how such a view can be sustained in the face of the data that Polani provides in the first paper of the symposium. Chromosome abnormalities are very much higher among spontaneous abortions than among live births and the later the conceptions are lost the lower the frequency of recognizable abnormality. Clearly the chromosomal, and hence the genetic, constitution is significant for successful foetal life. Clearly, too, natural selection has not just acted to delay the expression of genetical upset into postreproductive life, as is so often pointed out: it has also brought forward the expression of other upsets into early foetal life, or at least has failed to settle with upsets that express themselves early enough. Polani makes one further point that will intrigue many geneticists—that triploidy in man is incompatible with postnatal existence. In all other respects the effects of chromosome upsets in man reflect the effects that they were established (some thirty or forty years ago) as having in other species. Yet triploidy, while producing sterility, appears not to lead in general to serious somatic upsets in other species ranging from plants to vertebrates. Why is triploidy in man aberrant in this respect?

It would be invidious to attempt comparison between this third symposium and its predecessors in their quality and interest. Rather it should be seen as their continuation in bringing a wide range of approaches and points of view to the discussion of human affairs. As such it helps to consolidate the success of the "new-look" eugenics. Can we doubt that Francis Galton would have appreciated it and approved?

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DIFFERENTIATION

The Evolution of Differentiation

By William S. Bullough. Pp. vi + 206. (London and New York: Academic Press, 1967.) 45s.; \$8.

In this remarkable book William S. Bullough, Birkbeck College, University of London, presents himself as candidate for the role created by F. Jacob and J. Monod