## **Book Reviews**

In the name of Eugenics: Genetics and the uses of human heredity. Daniel J. Kevles. Penguin Books Ltd, London. 1986. Pp. x+426. Price £4.95. ISBN 0 14 022698 2.

All geneticists would benefit from reading this excellent book. While giving an historical and richly documented account of the Eugenics movements in the U.K. and U.S.A. it also provides an extremely well written narrative of the history and progress of genetics with many flashes of insight. One of the attractive features of this work is the many fascinating glimpses of the lives and attributes of notable geneticists which it portrays. It is not just the scientific voyeur who may be entertained by these but also the much larger number who wish to understand how the development of scientific thought and theory is influenced by the personalities and idiosyncrasies of individuals particularly when these happen to be influential.

It is not immediately obvious what the description of Francis Galton clad in hunting pink and mounted on an ox carrying the rule of British Law into the tribal areas of Namibia tells us about Galton's attitude to Eugenics but it may not be irrelevant. However, the spartan attitude of Lionel Penrose as exemplified in the passage below is not out of keeping with his generally sceptical scientific nature on the one hand and his Quaker upbringing on the other: "Visitors to the Penrose household in midwinter would find the coal fires out and the family wearing overcoats against the chill. According to various familial explanations, he disliked burning excessive amounts of coal either because it overburdened the miners or because the warmth symbolised the comfort of the rich".

Kelves is an historian and an earlier book on U.S. Physicists won for him the National Historical Society Prize for 1979. In general his understanding of science as set out in the Eugenics volume is manifestly excellent (though the genetical explanations are, in places, slightly cumbersome). He writes with élan, sharply and yet with a concern for balance so important in an area so fraught with emotive opinion as eugenics. As inevitably the case in a book so rich in detail there are a few, (but very few) factual errors.

The eccentricities and errors of early human genetics and eugenics are well brought out in this book. Davenport's identification of the character of "inate eroticism" in wayward girls (which he thought to be caused by a dominant gene) and the character of "thalassophilia" in naval offices (allegedly determined by a sex-linked recessive) are typical examples. Likewise the extent to which, at least in the U.S.A., eugenic thinking penetrated into many unrelated segments of society is well brought out. Thus, Scott Fitzgerald, better known for many other writings, composed while an undergraduate at Princeton, a song entitled "Love or Eugenics" while in the 1920s "Fitter families" competitions were frequently featured in the programme of numerous state fairs in the U.S.A.

Some discussions of the eugenics movement have tended to suggest it has been driven by those on the right of the political spectrum. Views such as that expressed by R. A. Fisher "... opponents of Eugenics have been almost always Communists or fellow travellers..." may have helped to shape such attitudes. Kelves' account, however, shows clearly that in the heyday of the Eugenics movement concern for the biologically influential aspects of the quality of life was expressed by individuals from a very wide spectrum of political and religious views including Harold Laski and Bernard Shaw. He also points out that the Eugenics movement in Britain was, at its height in the thirties, concerned with environmental as well as with genetic quality.

The penultimate and final chapters, provocatively entitled "Varieties of Presumptuousness" and "Songs of Deicide" respectively, discuss the recent and contemporary context of eugenics. These chapters bring out very clearly the considerable shifts in thought that have taken place. Increasing knowledge of genetic diseases, their causes and methods for their detection has led, in many countries, to a significant level of selective abortion. Some see the advent of the availability of prenatal diagnosis as enabling the removal of zygotes with burdensome or distressing handicaps, others see it as a challenge in helping those so identified to lead a fuller life. The difficulties posed by advances in knowledge are summed up in a telling phrase: "the more masterful the genetic sciences have become, the more they have corroded the authority of moral custom in medical and reproductive behaviour".

The work of those with interests with eugenics is today wiser, more holistic and more concerned with understanding than in earlier days but the problem of defining what Kevles calls an "ethics of the use for ... genetical knowledge and biotechnical power" remains, as ever, an immensely challenging task.

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Introducing genetics. R. N. Jones and A. Karp. John Murray, London. 1986. Pp. x+325. Price £8.95 PB.

This is the kind of book the authors were "always looking for as sixth form students but were never able to find"; they have "tried to confine the amount of material to a minimum and to avoid overloading the student with an excess of information which is either too detailed or