

REVIEWS

HEREDITY AND EYE DEFECTS

UNTERSUCHUNGEN ÜBER DIE HEREDITÄT DES STRABISMUS CONCOMITANS (Investigations concerning strabismus concomitans). Dr Susanne Richter. Georg Thieme, Leipzig. 1967. 88 pp.+17 figs.

The investigation mainly concerns 697 squinting children 4 to 7 years of age who first visited the eye clinic of the Charité in East Berlin between 1.8.63 and 31.1.65. These unrelated propositi and 3123 of their relatives were thoroughly tested for their ocular functions. In addition among 3398 Berlin pupils, born in 1953, 179 children, about 4 per cent. with strabismus concomitans were found, providing further propositi for the investigation of siblings and parents. In another control group, comprising people of various ages, the condition occurred in 2.7 per cent. of the individuals.

Statistical scrutiny excluded both simple autosomal or recessive inheritance and makes multifactorial determination the most probable. This hypothesis is additionally supported by observations concerning familial and genetically determined sensory and motor defects as well as heterophorias which though they may occur without strabism clearly are components of the condition. A comparison between MZ and DZ twins showed concordance of 91.4 per cent. and 25.9 per cent. respectively. Refractory errors affect the strabism to some extent but exogenous factors play only a small part in its causation. Some of the statistics of the paper are rather primitive, but do not invalidate the main conclusions. There is a useful bibliography.

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MENDEL IN TRANSLATION

THE ORIGIN OF GENETICS: A MENDEL SOURCE BOOK. Edited by C. Stern and E. R. Sherwood. Freeman & Co. Ltd., San Francisco and London. 1967. Pp. xvi+179. 36s. cloth; 18s. paper.

In May 1900 William Bateson gave the first account in English of Mendel's paper on peas. The occasion was a meeting of the Royal Horticultural Society. One year later the translation of the whole paper which the Society commissioned was published in its journal. From that time until the present it has been reprinted time and time again, for Eva Sherwood's translation is its first competitor. This indicates either that the RHS translation is an excellent one or that geneticists have taken a long time to perceive its faults. A comparison of the two versions shows that the faults are few but not unimportant. It was Dr Alan Robertson in Edinburgh who in 1965 noted some possible inaccuracies and set off the chain of events which led to this new translation. *Origins of Genetics* consists of a collection of papers and letters on Mendel and his work, some translated for this book, others reprinted from previous publications. I will examine first the translations and second the selection of material.

Sherwood's translation of Mendel's paper on peas is closer to Mendel's German than the RHS translation. This has meant that there are many slight differences between the two versions. For instance, "seed-dealers" instead of "seedsmen", "estimable" instead of "valuable", "trait" instead of "character". Such exactitudes could surely have been sacrificed so that the two versions would not differ more than is absolutely necessary for the *sense* of the original. Where the sense has been lost Sherwood has restored it, as in the important conclusion to the section "The Second Generation from Hybrids". She has also avoided confusing wrinkled (*runzlig*) with angular (*kantig*); though how wise it was to alter so well known a term may be open to question, especially since both are due to the same cause, *i.e.* type and amount of starch grains. These examples show that her translation has been prepared with great care and expertise, is thoroughly reliable, but in numerous places its departure from the RHS translation is trivial.

The excellent translations of Mendel's letters to Nägeli and the "rediscovery" papers which the Piternicks prepared for *Genetics* in 1950 are fortunately included in this volume. Stern and Sherwood have also translated the passages from Focke's book, *Die Pflanzenmischlinge*, which refer to Mendel, and Evelyn Stern has translated de Vries' report of 1900 to the German Botanical Society. As the first published translation the latter is particularly welcome.

This collection of papers and letters gives a balanced view of Mendel's work and of its rediscovery. The choice of de Vries' German report in place of his much shorter French report is to be commended. Welcome too is Sewell Wright's criticism of Fisher's analysis of Mendel's experiments. In preparing this book Stern and Sherwood have performed a valuable service, for hitherto this material has been available only in scattered sources and some of it only in German.

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THE EXPLOITATION OF PUBLIC RECORDS

MONOGRAPHS IN HUMAN GENETICS. Vol. 3: GENETICS OF INTERRACIAL CROSSES IN HAWAII. Newton E. Morton, Chin S. Chung, and Ming-Pi Mi. S. Karger Ag Basel, New York. 1967. Pp. viii+42+5 figs. sFR. 39.50.

In human genetics we are now faced with the situation in which, due to genetic variability in man usually being expressed either very strongly, or weakly, two fundamentally different approaches in data collection and analysis are needed. Strong effects are being adequately studied by the aid of simple genetic models in agglutination tubes, electrophoretic gels, and hospital wards. However, the greater part of human variability, both in health and disease, appears to be due to the weak effects which seem invulnerable to the erratic collections of ancestral data which, for want of better, are often recommended in the study of common disorders, particularly those affecting the foetus, and which are now being widely collected in various genetic clinics which are being set up on the assumption that manually collected pedigrees are necessarily useful.

To attack these more confusing problems of common variation which