

GAUCHER DISEASE: A CENTURY OF DELINEATION AND RESEARCH. Editors Robert J. Desnick, Shimon Gatt and Gregory A. Grabowski. Alan R. Liss, Inc. Pp. 740.

In 1882 Gaucher, in France, described the disease now bearing his name. In view of the large and apparently tumorous spleen he regarded it as neoplastic. At about the same time Tay described the characteristic cherry-red spot of the disorder now known by his name coupled with that of Sachs. In fact the cherry red spot is an island of normality in a sea of retina laden with fat, just as the spleen in Gaucher's disease contains normal cells bloated by fatty material.

Both these conditions are now known to be manifestations of distinct failures of breakdown enzymes, and both compete for being the commonest recessive among the Ashkenazi. To add to the mystery these manifestations of failure of distinct enzymes coded at distinct sites must have originated at similar times and places in the late middle-ages, or later, beyond the Pale in the Lithuanian area.

This book, produced photostatically from typed pages, with microphotographs on the verge of adequacy, provides a good summary of this common, but usually not unduly severe, disorder. Two distinct, but more severe disorders, one of which is of similar age and restricted to Swedes, and one older and not clearly restricted to anyone, are also discussed. Both bear his name. The Gaucher mouse, a somewhat confusing title, since it is not the mouse, but the treatment to which it is subjected, which leads to the disorder, and the Gaucher dog, a more genuine homologue complete the book.

As such it is essential reading for those working on this condition, which is rare outside areas with substantial Jewish populations, and deserves a place in libraries aiming to cover metabolic disorders, and to hospitals serving Jewish communities. Geneticists are better served by "Genetic Disorders among the Jewish People", by Goodman (Johns Hopkins, 1979).

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PERSPECTIVES ON EVOLUTION. R. Milkman (Ed.) Sinauer Associates, 1982, Pp. xii + 242. Price: £18.50 (cloth), £9.80 (paper).

Apart from one chapter, this book is based on talks given at a symposium held in Iowa City in 1981. Chapters range from the orthodox (*e.g.*, Selander on phylogeny, Ayala on the genetic structure of species) via the unconventional (Gould on the meaning of punctuated equilibrium) to the altogether surprising (Campbell on autonomy in evolution). Campbell states: "I believe that the number of genes with some capacity to inscribe into the germ line the changes induced in the soma could be substantial" and suggests, apparently in all seriousness, that a gene might change its structure in anticipation of an external condition. Recent work in molecular biology (introns, functional domains, multigene families, transposable elements) is described in a chapter by Hunkapiller *et al.*, who make a gallant attempt to assess the impact of this work on evolutionary theory; here, as in some other recent conferences devoted to this fascinating topic, one feels the need for a quantitative treatment before even a provisional assessment can be made.

The authors who hold unorthodox views present rather a problem. No meeting of minds seems possible. What, for example, can Gould mean by the statement: "with too many organisms and too much panmixia, rare and favourable variations cannot readily spread and accumulate"? Consider also Campbell's (admittedly rather muted) sympathy for Lamarckian mechanisms as one agent in evolution. When a given result is claimed, but other workers are unable to repeat that result, it is usual to conclude that the worker who obtained that result made a mistake; it is difficult to see how science could progress otherwise. To use the phrase "not without controversy" in reference to the work of Gorczynski and Steele is therefore either very misleading or implies an attitude so remote from the normal as to make communication very difficult. Despite the occasional harsh references to neodarwinism in this book, the neodarwinist will probably prefer to follow Belloc's advice to a child:

"And always keep a-hold of Nurse  
For fear of finding something worse".

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