

against the petty bureaucracy and intrigue of the British Communist Party. But he was a proud and stubborn man of very strong loyalties, and he seems to have lacked the will or ability to criticize the communist philosophy as a whole and remained a Marxist in a number of important respects, although tending in his later years more and more toward the Hindu philosophy of nonviolence. It is probable that his mind was inherently a dialectical one and that his attachment to dialectical materialism was in part a consequence of this. I strongly suspect that the extreme simplicity of his style (which was frequently close to C. K. Ogden's "Basic English") was part of a syndrome that included an extreme political naiveté.

Deeply erudite classical scholar and philosopher, theoretical geneticist and popular journalist, bloody-minded bomber officer in World War I and humane animal-lover in his later years, supremely objective in his science and subjective in his politics, "in some respects . . . the cleverest man I ever knew" yet "not a profoundly original thinker" (in the words of Sir Peter Medawar), Haldane remains something of an enigma. Clark has painted him faithfully, "warts and all." Not for him the evasions of N. W. Pirie, who has implied (*Biographical Memoirs of Fellows of the Royal Society*, vol. 12, p. 237) that Haldane was *not* frequently rude to people who annoyed him. For a man who seems never to have met Haldane, Clark is (as far as the present reviewer is able to judge) extremely accurate in his facts; the only actual errors noted are in the spelling of a few names—Sir Allen Mawer (p. 150), E. L. Tanner (p. 173), and A. de Zulueta (pp. 134 and 173). Lastly, he has been able to do something that even many of Haldane's admirers were unable to do—appreciate the courage and mental quality of Helen Spurway, the dominant influence in Haldane's later years.

It may be worthwhile to point out that the U.K. edition of this book contains an interesting preface by Sir Peter Medawar, which has been omitted from the American edition [an essay by Medawar based on this preface appeared in the *New York Review of Books*, 10 Oct. 1968—Ed.], and 21 photographic illustrations as compared with 13 in the U.S. edition.

M. J. D. WHITE
Department of Genetics, University
of Melbourne, Parkville,
Victoria 3052, Australia

Aspects of Genetic Research

Genetic Mosaics and Other Essays. CURT STERN. Harvard University Press, Cambridge, Mass., 1968. xiv + 185 pp., illus. \$6.50. John M. Prather Lectures, Harvard University, 1965.

Four essays—covering the evolution of human genetics, mosaics in humans, developmental genetics, and a brief discourse on the philosophy of research—make up this scholarly and elegant book by Curt Stern. The first gives a history of the tortuous development of human genetics as a respectable science, emphasizing paths of inheritance of scientific thought in this area. His intellectual pedigrees are an interesting variation on those devised by Sturtevant in his *A History of Genetics*. Here also the reader will find a fresh account (based on new sources of information) of the events leading to the formulation of the Hardy-Weinberg law.

The second essay deals with mosaics in humans. Student, instructor, and research worker all will profit from Stern's exposition of the various types of human mosaics, including those for sex characteristics, blood groups, and other antigenic properties. The discussion takes an interesting and original turn when it focuses on the immunological implications of mosaics and the concept of mosaicism in antibody-forming cells. The merits of the Russell-Lyon "single active X hypothesis" are critically appraised.

Bristle formation in *Drosophila*, as a function of autonomy of cell action, and the influence of tissue prepatterns (topics which have been the object of his own recent research and that of his associates) provide the author with a golden opportunity to illustrate the successive stages in development of a fruitful biological hypothesis. Appropriate illustrations clarify the argument, and the complexities of the genetics used are sensibly dismissed with simplified explanations. The thrust of this

essay is toward the synthesis of classical embryology and modern *Drosophila* genetics at its best.

The last short section thoughtfully appraises the relationship of the scientist to his work. It takes no great imagination to realize that introspection and autobiography must have fashioned the expressed attitudes. The gentle solicitude expressed for the unproductive or unsuccessful scientist comes as a cool breeze in the harsh, uncompromising desert of Big Science.

The style is pleasant and relaxed. Occasional bits of whimsy—the account of the Lasquet who bears a child, or the tongue-in-cheek suggestion that women must be endowed with greater versatility of genetic functioning than men—lighten the presentation. The text is remarkably free of the embarrassing typographical errors that creep into every first edition (although Tarkowski loses his Polish origin and becomes a Russian at one point). Inevitably the reviewer must differ on some minor points. The suggestion that Morgan was a direct intellectual descendant of Mendel and de Vries hardly squares with Morgan's unrestrained attacks on Mendelism prior to his conversion in 1910 as a result of his own work with *Drosophila*. Similarly I would have preferred to trace the heritage of Beadle and Tatum not directly from Mendel, but through Morgan and Sturtevant, as well as Ephrussi. The book might have profited from a more extensive discussion of the startling work of Tarkowski and Mintz on cell fusion and of Hadorn and his students Gehring and Nöthiger on transdetermination; however, in a slim volume of essays one cannot expect to find a comprehensive survey of the field. Finally, some readers may find it difficult to forgive the author for providing the translation (parenthetically) of "Eureka."

EDWARD NOVITSKI

Department of Biology,
University of Oregon, Eugene

5-Hydroxymethylcytosine and After

Virus-Induced Enzymes. SEYMOUR S. COHEN. Columbia University Press, New York, 1968. xxiv + 320 pp., illus. \$11.50. Columbia Biological Series, No. 24.

Virus-Induced Enzymes is a series of six lectures given in 1967 at Columbia University. As is explained in the introduction, it is the author's intention to illuminate the role played by biochem-

istry in elucidating the events that occur after a phage particle adsorbs to the host bacterium. I can think of no one more qualified to discuss this subject than Cohen, who was certainly responsible for the initial discoveries that were instrumental in proselyting a segment of the biochemical community to exploit the phage-host system. His discovery