Parasite physiology

Biochemistry and Physiology of Endoparasites. By Theodor von Brand. Pp. 447. (Elsevier/North Holland/Biomedical: Amsterdam; New York and Amsterdam, 1979.) \$87.75; Dfl.180.

THEODOR VON BRAND died in 1978 and parasitology lost the man who had pioneered the study of the physiology and biochemistry of parasites and whose name had become synonymous with the subject for almost forty years. von Brand was probably the best person to be able to overview the whole of this area of study and fortunately he managed to complete the text of this book before his death. This remarkable synthesis of a massive amount of information will remain as a tribute to the man himself and will join his previous works, *Chemical Physiology of Endoparasitic Animals and Biochemistry of Parasites*, two of the most influential books ever written on parasitology.

Biochemistry and Physiology of Endoparasites is an updated version of *Parasitenphysiologie* published in German in 1972. There are ten chapters each with between 170 and 550 references mainly from the 1960s and 1970s. The chapters include the obvious ones on nutrition, respiration composition, synthetic processes, degradation processes, and sensory, nervous, muscular and locomotory physiology, and less obvious ones on parasitic habitats, hormones, pathophysiology and the physiological basis of chemotherapy. There is therefore something of interest for everyone. Von Brand wrote beautifully and was also a master of synthesis: the essentials of whole papers are expertly digested and summarised in a few words so carefully chosen that anyone can understand them. This is a book for casual reading and for reference but it is as the former that it will be most useful. The committed parasite physiologist will have access to specialist reviews and literature retrieval facilities but even he should be able to use this book to put his work into some sort of general context.

A book of this kind cannot, of course, please everybody and it is stronger on helminthology than protozoology, physiology than biochemistry, and physiology proper than the rather newer fields of pathology, immunology and chemotherapy. This uneven coverage is inevitable and probably reflects real differences in our depth of knowledge of various aspects of parasitology.

It is customary today to criticise the price of books and in this case the publishers have done a considerable disservice to parasitology, which by its very nature is a subject of particular importance in the poorer parts of the world. The price will

limit the purchase of this book to specialists who, for reasons given above, will learn least from it. This is a pity because this book summarises the state of the art; and as this subject is expanding so rapidly the preparation of a revised edition will be an impossible task. It is to be hoped that the publishers will find it possible to produce a cheap version for parasitologists in the tropics and students.

Had this been a cheap book the mistakes in it could have been forgiven but there are too many of them and they do mar the book and reduce its value as a work of reference. For example, there are inconsistencies in the spelling of names (Bernstein and Baernstein, Buelbring and Bülbring); the sources of figures and diagrams are given but do not appear

among the references (Smyth (1969) on page 196 and Ryley (1967) pages 184-185); the names of parasites are not given in the captions to some of the figures (Figs. 41 and 49); and worst of all, and proof that these mistakes are not those of von Brand himself, his name appears under the Bs in the references to chapters 1 and 2 and the Vs elsewhere.

These shortcomings, however, are trivial compared with the importance of this book as a whole. No-one else will ever write a book of this kind and no parasitologist should fail to read it.

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Reichenbach's writings

Selected Writings, 1909-1953. Two volumes. By Hans Reichenbach. Principal translations by Elizabeth Hughes Schneewind. Edited by M. Reichenbach and R. S. Cohen. Pp. 500 + 435. (D. Reidel: Dordrecht, The Netherlands, Boston, and London, 1979.) Vol. 1: hardback Dfl. 145, \$64.50; paperback Dfl.60, \$27; Vol. 2: Dfl. 130, \$59 and Dfl.60, \$27.

HAD Hans Reichenbach (1891-1953) not died unexpectedly at the age of 62, a volume on him in the Library of Living Philosophers would have certainly gone beyond the stage of preliminary planning. According to the structure of volumes in that Library, an autobiography of Reichenbach would have been followed by a series of essays by other philosophers on the various aspects of his thought and a reply by him in addition to a list of his publications. This two-volume set contains such a list and starts with an autobiographical sketch followed by over thirty reminiscences by members of his family, friends, colleagues, and students which cover his childhood, university years, his first teaching post in Stuttgart's Technische Hochschule, his tenure at the University of Berlin, his stay from 1933 until 1938 at the University of Istanbul, and finally his years as a widely acclaimed professor of philosophy at the University of California in Los Angeles and a chief spokesman of logical positivism in the United States.

These reminiscences are full of illuminating gems about Reichenbach's life, work, thought, and personality which only the eyes of admirers could discern and retain for posterity. Anyone nurturing the notion that the Vienna Circle, of which Reichenbach was a prime mover as the founder of its organ, *Erkenntnis*, was given entirely to abstractions, can now learn

from a most reliable source that Reichenbach considered himself a crusader. On hearing himself described as one whose sole interest was logic and epistemology, he reacted angrily: "But no! That is not true! The whole movement of scientific philosophy is a crusade . . . what I am doing aims as directly at social consequences as the programs of those who call themselves social reformers". The hitherto untranslated or no longer in-print publications of Reichenbach, which make up the bulk of these two volumes, have as their first group eight essays on social problems, written before and during World War I, with a strongly Socialist though not Marxist accent.

Equally instructive is Reichenbach's characterisation of the indispensability of philosophers: they (he means above all himself — witness his *The Rise of Scientific Philosophy* in which the modern part is largely limited to his own philosophy) are alone capable of articulating what the scientists, more often than not, brilliantly do but clumsily say. Reichenbach was a master of articulating not only the most abstract scientific notions and procedures (he had his own programme at the State Radio in Berlin), but also of handling down-to-earth matters. An engineer by training (he did not want to become an engineer "who can do nothing but calculate") he was competent in household repairs. He could deliver impromptu speeches on most obtruse topics, had touching sensitivity for others' needs, did pioneering work in interdisciplinary teaching, but, as stated in one of the reminiscences, was possessed "like most philosophers . . . of a strong sense of vanity".

The pride and centre of Reichenbach's philosophy was the probability theory of existence. He came to it partly through his early fascination with the kinetic theory of gases, partly under the impact of quantum theory, and partly because he took Einstein's relativity as a proof that questions about reality as such were meaningless. It was through Einstein's