

least one Party chief, Miliutin, who stated: "We are adopting—for the first time in history, I dare say—a philosophical resolution. It will be, so to speak, a definite platform in regard to dialectical materialism and a formulation of all the work that will be done in this field."

Soviet Marxism vis-à-vis Natural Science

Deborin's was, however, a Pyrrhic victory (chapters 16 to 19). The year 1929 was the year of the "Great Break," of the start of collectivization of agriculture and of the Five Year Plans. The non-Party scientists and philosophers were to be replaced with all haste by Party men or to be reduced to abject submission. Heads soon began to fall, metaphorically and literally. In 1930 Deborin was declared heretic, together with all those who only a short time before had accepted his officially endorsed true philosophy. His successor, Mitin, declared it was not the academic philosophy but the "masterful application of dialectics that our Party carries out enters into the development of philosophical communist thought as the most important component element." And thus, says Joravsky, "A new phase of the interaction of Soviet Marxism and natural science had begun. . . . now only Stalin and his compliant Central Committee had the requisite world-sweeping vision; lesser philosophers would wait to be told when experience required the Marxist Weltanschauung to be developed further."

Yet not all science was consumed in the revolutionary conflagration. Physics, for example, revived and prospered; much of biology, especially genetics, succumbed. But this story belongs to the period after 1932, and one hopes that Joravsky will extend his study to that period. He hints at an answer in the following lines: "If Lenin had not set the precedent of sharply dividing the scientific from the epistemological in his study of the 'crisis' in physics; if physics had been a less ancient and solidly established science, less rigorous and less prolific in theoretical and practical triumphs; if, accordingly, there had been significant blocks of physicists strongly opposed to each other on basic scientific issues; if, eyeing such a turmoil within physics and anxious for the ideological condition of scientists, the Bolshevik authorities had become involved in a crisis of production so desperate as to nurture feverish dreams of rescue by scientific miracles—then the

Soviet Marxist discussions of the twenties and early thirties might well have produced a genuine crisis in physics rather than talk of a crisis on its ideological outskirts. But then, physics would have been biology."

Soviet Science and the Communist Party

Far from having followed consistently some cunning master plan, the relationships between the Communist Party and science in the Soviet Union have involved many capricious turns and have been punctuated by blunders. Joravsky may well write still another book, to discover why science nevertheless developed there as well as it did. I know of nobody better qualified to undertake the task. Having been a witness to some of the events described in this book, I can only admire Joravsky's accuracy and his unbiased presentation. Although any book dealing with Soviet affairs is likely to elicit conflicting opinions, Joravsky's will do so perhaps less than any other. Being a product of sound scholarship, it contains an abundance of documentation which speaks for itself and which absolves the author from inculcation of bias.

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The Rickettsial Diseases. P. F. Zdrodovskii and H. M. Golinevich. Translated from the Russian by B. Haigh. Pergamon, New York, 1960 (ed. 2, Moscow, 1956). xii + 629 pp. Illus. \$17.50.

A valuable characteristic of this book, which makes available in English a great deal of Russian literature and experience, is the authors' willingness to augment published material with discussions of their own investigations. While there are observations with which others may disagree, it is reassuring to know the authors are drawing from firsthand experience based on laboratory work.

The book is divided into general and special sections. The first deals with classification, general characteristics of rickettsiae, the rickettsioses, characteristics of experimental infections in animals, variation, serology, and laboratory methods. The special section consists of a complete presentation of each disease group. Clinical features, epidemiology, immunology, diagnosis, prophylaxis, and treatment are dealt

with. Valuable guidance is provided throughout for those working with rickettsiae in the laboratory. The comparison of pathology and other characteristics among the different rickettsioses is very complete. However, this attempt at completeness results in some repetition.

The authors' proposed compromise classification for rickettsiae and the accompanying discussion constitute one of the worst sections in the book. They state: "At the present time we cannot speak of a complete and generally accepted classification of the rickettsiae and rickettsial diseases, since it is far from complete, particularly in foreign countries, in the study of the antigenic structure of the rickettsiae, a knowledge of which is fundamental for their qualitative differentiation and rational subdivision." This would have been a good point at which to drop the subject. However, they continue to use obsolete names and propose ill-considered new ones. This serves only to cast a cloud over our present ignorance.

In contrast to the preceding, the following proposed grouping of rickettsial diseases serves a useful purpose. I: Typhus fever group. II: Tick-borne spotted fever group; (a) New World subgroup; (b) Old World subgroup; (c) Subgroup of gamasid rickettsioses. III: Mite-borne fever group. IV: Pneumotropic group of rickettsioses. V: Paroxysmal group of rickettsioses. VI: Group of rickettsiae and rickettsial diseases of domestic animals. Although North Asian tick rickettsiosis may belong in IIa rather than in IIb and North Australian tick typhus may fall into IIc rather than IIb, the general plan is sound.

There has been a need for this translation and this book, for rickettsial diseases, too often treated as exotic conditions in books on viruses, here achieve full stature. In our own experience, the discussion of allergic diagnosis in Q fever makes a point. During 1959 we applied intradermal tests in epidemiological investigations of Q fever. Some of the observations of Russian workers from 1951 to 1954 recorded here may have been unnecessarily repeated. Although this book may be essential for the experienced worker, it isn't particularly recommended for the beginner because insight is required to evaluate properly some of the Russian claims.

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