

Book Reviews

Genetics Under Stalin

The Vavilov Affair. MARK POPOVSKY. Archon (Shoe String), Hamden, Conn., 1984. viii, 216 pp. \$19.50.

When the conflict between the Stalinist state and the Soviet scientific community hardened in the late 1930's, Nikolai Vavilov led the defense on the most critical front, genetics. He was arrested in 1940 and died in prison in early 1943 while his opponent T. D. Lysenko rose to become a dictator in Soviet biological and agricultural science. Vavilov and the stand he took became a symbol and a source of inspiration for Soviet scientists. Alexander Vucinich in his recent history of the Soviet Academy of Sciences, *Empire of Knowledge* (1984), has described their long fight for autonomy through the 1940's and '50's, which ended successfully in the middle of the 1960's when Lysenko was finally dethroned.

Mark Popovsky, who has lived in the West since 1977, collected materials for a biography of Vavilov in the period between Stalin's death and the invasion of Czechoslovakia. It is Popovsky's presentation and analysis of archival material that make this book unique among existing accounts of Vavilov's life and work. This material falls into three parts. The first pertains to Vavilov's family life, the home where he grew up and his two marriages. This glimpse behind the public facade of a man who is alleged to have slept five hours a day and worked the rest makes him more human. The second part is drawn from the archives of scientific institutions and focuses on the relationship between Vavilov and Lysenko. The third part is from the Vavilov file of the secret police and gives us knowledge of who pulled the strings in the campaign against Vavilov and how it was done.

Popovsky's interpretation of the second part of the material was published in Russian in 1966 (*Prostor*, nos. 7 and 8, 5-27 and 99-118) and in German in 1977. Popovsky tells that Vavilov took a positive view of the young Lysenko from the late 1920's to the middle of the 1930's and supported him in various ways that furthered his academic career. Popovsky went so far as to describe Lysenko as

Vavilov's protégé in the early 1930's. This immediately drew sharp criticism from Zhores Medvedev, who pointed out a number of mistakes (*Novyi Mir*, no. 4, 226-234 [1967]). In David Joravsky's standard account, *The Lysenko Affair* (1970), Popovsky's article was mentioned in footnotes, but his claims about Vavilov's support for Lysenko were not taken seriously. Popovsky has corrected some mistakes in this English version but in general upholds his interpretations.

In the opinion of this reviewer Popovsky provides an important correction to the standard view of the relationship between Vavilov and Lysenko that may also improve our general understanding of the interaction of science and politics under Stalin. Lysenko was not merely a pseudoscientist whose regime was imposed on the scientific community by outside political dictate. Some of his physiological work was highly praised even by his strongest critics among the geneticists. And Lysenko's criticism of classical genetics was to a larger or smaller extent supported by prominent Soviet biologists, among them B. A. Keller, B. M. Zavadovsky, and V. L. Komarov. Keller was academician and head of the Academy's Botanical Institute from 1931; Zavadovsky played a central role in discussions of the methodology of biological science from the 1920's onward; Komarov was president of the Academy from 1936 to 1945.

A more discriminating analysis of the scientific issues would have strengthened Popovsky's argument. For instance, he does not distinguish clearly enough between Lysenko's work in plant physiology and his work in genetics. Though Vavilov found much of value in the former, he rejected the latter from the beginning. Lysenko started his career with physiological work. It was only by 1935 that he started publicly to push his genetic ideas, and this was also when Vavilov's attitude to Lysenko started definitively to cool off.

The material from the police archives as presented by Popovsky shows clearly that Vavilov's opposition to Lysenko's biological theories was the cause of his arrest and conviction in a quite direct way. Accusations of "wrecking" activi-

ties, which consisted in obstructing the development and application of Lysenko's agrobiology, appear to have been the central element in the interrogation of the accused as well as in other investigations carried out by the police. Vavilov quickly confessed "wrecking" activities harmful to Soviet agriculture, but he persistently denied any involvement in espionage, according to Popovsky's account.

The interest of Popovsky's story is heightened by his personal engagement with the issues. He gives lively descriptions of his encounters with various people who had been in contact with Vavilov as scientists, medical staff, policemen, and prison inmates. It is also part of the personal atmosphere surrounding this biography of Vavilov that back in the 1940's Popovsky's father wrote a biography of Lysenko as the great hero of Soviet agricultural science. Lysenko was for many Soviet citizens a god that failed rather than a pseudoscientist that Stalin forced them to believe in.

The personal intensity with which this book is written makes it prone to doubtful claims and stretched interpretations, but there is no doubt that it is a very valuable addition to existing literature on the history of Soviet science.

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The Influence of Malthus

Malthus Past and Present. J. DUPÂQUIER, A. FAUVE-CHAMOUX, and E. GREBENIK, Eds. Academic Press, Orlando, Fla., 1983. xx, 416 pp., illus. \$49. Population and Social Structure. From a conference, Paris, May 1980.

T. R. Malthus, avows the first editor of this collection, "seems more than ever alive," and a Unesco conference with 164 papers and 500 participants from 61 countries surely attests to the existence of a scholarly industry. This volume contains nine summaries of sessions and 20 other papers first presented at that meeting.

The expansion of interest in the thought of Malthus in the past several decades derives from his identification of an inherent tendency toward population growth that constrained the possibilities of sustained economic prosperity. The congruence of the intellectual mood of the past decade with that of England during its period of ideological response