sociologist Risto Alapuro and the political scientist David Arter might have been considered. There is also a clear distinction between what Finns perceived to be their fatherland and what they wanted their fatherland to be. Hamalainen is aware of this but has not pursued the point.

In spite of these criticisms, it must be said that this is an honest study which does not claim to find all-embracing theories or answers to problems and which attempts to get beneath the surface of the language debate. Hamalainen raises a number of questions on what the ethnolinguistic issue meant to the ordinary Finn, questions which should be asked even if there is probably no answer to them.

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Proletarian Science? The Case of Lysenko. By Dominique Lecourt. Translated by Ben Brewster.

New York: Humanities Press, 1978. Pp. 170. \$11.50.

Dominique Lecourt, a professor of philosophy at the University of Paris, produces no new evidence on the Lysenko affair in this English translation of a work originally published in French during 1976. Instead he attempts a new interpretation of that controversial episode in Soviet history. Though short, his book is a complex, multifaceted essay—at times historical interpretation, at times philosophical critique, at times political tract. Relying essentially on the evidence of previous studies, particularly those of Zhores Medvedev, David Joravsky, and others (it is not clear from his footnotes whether he reads Russian himself and there is no bibliography), Lecourt takes strong issue with what he considers the anti-Marxist and non-Marxist approaches to the subject taken by his predecessors and the almost total official silence on the subject in the Soviet Union. Instead, in the spirit of a Charles Bettleheim, who he at times cites, or a Louis Althusser, who has written the introduction, he attempts to both explain and critique Lysenkoism from the standpoint of a Marxist-Leninist who is critical of the Soviet Union. His work may be viewed in part as an attempt to exorcise the ghost of Lysenko and Lysenkoism from French political and intellectual life. In doing so, for example, he attacks the work of the French scientist, Jacques Monod, and others who have used Lysenkoism to attack Marxism per se. Lecourt writes that "these arguments [about Lysenkoism] give Monod's positions force and an audience. Not to answer them is to allow real and not imaginary motives for scientists' persistent distrust of Marxist philosophy to survive intact" (p. 101).

His attempt here is not entirely successful, however, since Lecourt never really asks the crucial question: whether there may be something in the Marxist-Leninist world view and approach to social organization that tends to favor monopolitically-oriented groups of scientists and other thinkers who claim to be following the "correct" political line and that enforces a high degree of intellectual conformity, justifying the use of state power to back up such intellectual monopolies. The political point of his book is a popular one in the West: that an error made in the past, to be rectified, must be openly discussed, debated, and understood (p. 120). But this particular book begs the question concerning how such free debate can take place in a

society where power and property are monopolized by a single party and a highly centralized state. It is not enough to say that Lenin and real "Leninists" would have done things differently than the adherents of Stalin, as Lecourt seems to imply.

Aside from its contemporary political interest, however, the value of Lecourt's book for a historian of modern Europe is his attempt to analyze the social roots and social base of Lysenkoism. Here I think he is on firmer ground and has contributed something useful to our understanding of this phenomenon. His analysis is based on the assumption that Lysenkoism derives from the particular social conditions of the USSR in a period of rapid industrialization and social change. Lysenko, in Lecourt's view, was not simply a fanatical charlatan who gained the support of an equally fanatical dictator but someone who represented the interests of an entire stratum of practically oriented plant and animal breeders. These were people who may have lacked the formal education and theoretical sophistication of their scientific opponents like N. I. Vavilov and others but who, like the Luther Burbanks and Lucien Daniels of the West, produced some early successes using trial-and-error, empirical methods easily understood by peasants and party bosses. Though not original with Lysenko, some of these methods had validity—in particular vernalization, the summer planting of potatoes and "vegetative hybridization." Over a period of years several early successes with such methods attracted the attention of Stalinists, impatient with the work of geneticists and more "highbrow" scientists whose difficult theories and cautious methods seemed to produce less spectacular results than those claimed by the self-touting Lysenko and his

In addition to their appeal to Stalinist "technicism," which sought a rapid, economic payoff in scientific research, the Lysenkoites after 1935 formed an alliance with Stalinist philosophers like I. I. Prezent who claimed that their views represented true "proletarian science" and was the only approach to biology and agronomy based on a correct understanding of dialectical materialism.

This combination of a social base among the so-called practicals and the intellectual patina given their work by Stalinist philosophers who sought to be the only interpreters of dialectical materialism helps to explain a great deal, if not everything, about the rise of Lysenko and his followers to the position of dictatorship they enjoyed between 1948 and 1952. Lecourt's interpretation might have benefited from a realization that Lysenkoism was a symptom of a broader phenomenon: the struggle within the Soviet intelligentsia over a period of many decades between the "practicals" (praktiki, who due to labor shortages came to occupy positions as specialists, without the requisite formal education) and the more highly educated and theoretically grounded specialists who generally had dominated the Academy of Sciences, higher educational institutions, and many scientific research institutes prior to the late 1920s. Lecourt is even less successful in understanding the deeper, more systemic and historical causes to be found in an informed understanding of Russian history and a critique of the particular biases of a Marxist-Leninist movement. Here his own political commitment as an activist and one of the editors of Cahiers Marxistes-Leninistes may have shuttered what he was able to perceive.

He is even less successful in understanding the reasons for the decline of

Lysenkoism after 1952 than he is for its rise. Here he would have benefited from reading Mark Adam's Harvard dissertation on the history of Soviet genetics, in which the protection given genetics and some of its practitioners by other prominent Soviet scientists in the post-1948 period is well documented. In all, however, Lecourt's argument is an interesting one, representing a viewpoint not previously applied to this subject; and it helps to advance our understanding of the significance of Lysenkoism for modern history.

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Technology and Society under Lenin and Stalin: Origins of the Soviet Technical Intelligentsia, 1917–1941. By Kendall E. Bailes. Studies of the Russian Institute, Columbia University.

Princeton, N.J. Princeton University Press, 1978. Pp. xiv+469. \$30.00 (cloth); \$12.50 (paper).

In its modern usage, technology is a general term for scientific knowledge, political imperatives, cultural values, and economic principles united in the performance of specific functions in the social division of labor. To study the history of modern technology is to study the most dynamic and most revolutionary aspects of modern society. Professor Bailes's book deals with the social history of Soviet technology during the pre-Stalin and Stalin eras. In essence, it is a book about Soviet engineers—their place in the dynamics of social stratification and configuration of political power. It attempts "to assess not only the political role of this group, but also the significance of its social origin, education, role in the economy and its relationship with other important groups in Soviet society in the process of social change" (p. 6).

The author's aim has been to offer a historical description of the unique features of the Soviet technostructure and to cast his analysis within a sociological model that calls for a parallel study of the sources of social integration (or social solidarity, in Durkheimian terminology) and social conflict. In the past, Western scholars have shown primary interest in the sources of conflict in Soviet society, while Soviet scholars have concentrated primarily on the forces of social and political integration. With his theoretical framework, the author found little difficulty in combining the qualitative data of case histories with the quantitative data provided by a computer analysis of "the social origin, composition, career patterns and social status" of 1,100 representatives of the Soviet technical elite.

Although the study is replete with generalizations of sociological import, it relies more on the method of historical reconstruction of significant events than on an ordered analysis of logical categories as parts of a general theoretical schema. The result is a smoothly flowing, richly documented, and carefully generalized interpretation of the formative period of the sociopolitical structure of the Soviet technical intelligentsia. The study achieves a skillful and exemplary combination of Western and Soviet literature; it also relies on an organic combination of archival and published source materials.