

seasonal fluctuation, he finds that the two countries have much the same degree of seasonal fluctuation; moreover, they seem to have a similar pattern as between quarters of the year. This strengthens your reviewer's impression from Hutchings's study that Soviet planning has had no great independent effect here.

Much of the literature concerning Soviet planning has emphasized the phenomenon of "storming" at the end of a plan period, with a reduction in output at the beginning of the next. This analysis leads to the hypothesis that the fourth quarter should represent the seasonal peak and that the first quarter should be the low. Hutchings's data do not allow us to test this hypothesis, but we can test a weaker form of it. Using 443 years of data for 63 subbranches, only 51 percent of those showing a seasonal increase or decrease in the fourth quarter displayed the predicted increase. More support is available for the hypothesis in the data for the first quarter, where the comparable figure is 61 percent. Thus these data provide very weak support for the storming thesis.

But two other pieces of evidence which Hutchings presents are relevant here. One is that the "typical" Canadian seasonal pattern is the same as the Soviet, although the storming phenomenon would not be predicted to apply nearly as strongly. Second, the same seasonal pattern existed in Soviet industry during 1925-27, even though October-December was then the first instead of the fourth quarter of the planning year. Moreover, the degree of seasonal difference in movement between October-December and January-March was no greater in the one available year of the 1930s than in these earlier years. To sum up, Hutchings's seasonal data provide no support for the storming thesis. This reviewer must confess that he finds this result surprising, but it seems to represent the first time that the storming thesis in Soviet industry has been tested with aggregative data.

Hutchings's study has been carried out competently and quite painstakingly, but the only general result which this reviewer finds interesting is the implied one that the nature of the Soviet Union's economic system has not had a great effect upon seasonality.

DAVID GRANICK
University of Wisconsin, Madison

ALIENATION AND THE SOVIET ECONOMY: TOWARD A GENERAL THEORY OF MARXIAN ALIENATION, ORGANIZATIONAL PRINCIPLES, AND THE SOVIET ECONOMY. By *Paul Craig Roberts*. Albuquerque: University of New Mexico Press, 1971. xi, 121 pp. \$6.00.

In this book Professor Roberts presents us with his answers to two of the "big questions" about the Soviet economy: What is it? Why is it what it is? His answers on both points depart substantially from what he considers to be the standard interpretations. Specifically he contends that the Soviet economy is not centrally planned, but polycentric in its organization and structure, and that its peculiarities are best understood as a direct outcome of the impact on the system of the original aspirations of Marxian socialism.

Chief among these aspirations was the elimination of alienation via the abolition of commodity production. (The author belongs to that school of Marxology which sees alienation not as a passing preoccupation of the young Marx but as a pervasive theme underlying all of his mature work.) As orthodox Marxists, then, Lenin and his comrades could envision their economic tasks in no other terms. In

one of his most convincing sections the author argues that the policies of "war communism" amounted to an attempt to put theory into practice. Later the Stalinist economic organization renewed the attempt, although it was never carried to the same extreme.

At this point the other main theme of the book is introduced—that since true central planning of a system as complex as a national economy is a theoretical and organizational impossibility, the ideologically motivated attempts to introduce it failed. Recalcitrant reality responded by evolving into a polycentric system, in which the initiative in resource allocation rests with individual producers, as it does in a market economy. But the difference is that individual initiatives are guided by "signals" that are woefully irrational compared to those of a price system.

In this reviewer's opinion, the greatest value of the work lies in its insistence that studies of the Soviet economy which focus on the process of central planning are detached from reality, and they obscure rather than advance our understanding of the system and its evolution. Fortunately an increasing amount of research is being devoted to the development of models of the Soviet economy that are explicitly or implicitly polycentric and are based on analyses of individual decision-making behavior. As it progresses this work will increasingly vindicate Roberts's insights into the nature of the system.

EDWIN G. DOLAN
University of Chicago

SURVEY OF A THOUSAND YEARS OF BEEKEEPING IN RUSSIA. By
Dorothy Galton. Introduction by *Eva Crane*. Foreword by *R. E. F. Smith*.
London: Bee Research Association, 1971. 90 pp. and insert. Paper.

Beekeeping is an industry little understood by the general public and of marginal significance to the world's economy. However, as Dorothy Galton emphasizes, it was of major importance in Russia and elsewhere in Europe before cane and beet sugar entered commerce. She also emphasizes that the decline in its importance after the time of Peter the Great was general and not confined to Russia.

The book's factual information on beekeeping procedures, techniques, and statistics is well presented and should be of interest to students of the Russian agricultural economy, whether modern or historical. It is difficult, however, to evaluate Miss Galton's book by the usual criteria. She has combined a presentation of excellent and detailed information on the technical aspects of beekeeping with a discussion of the derivation and interpretation of a number of Russian words—an admittedly speculative philological treatment, and one on which this reviewer must defer to others who are more suitably qualified. One ventures to suggest that few readers will be adequately proficient in both of the topics dealt with in this small volume. It seems unfortunate that the linguistic discussion could not have been treated separately, perhaps at greater length, in an appropriate journal. Its inclusion here mars an otherwise useful presentation of this specialized topic.

Presbyopic readers will be distressed by the book's tiny print.

EARL R. LENG
University of Illinois, Urbana