

mathematical Programming and Tolerances in Planning," *Economic Computation and Economic Cybernetics Studies and Research* [Bucharest], 1976, no. 1, pp. 3-14).

This treatise offers an abstract framework to contain the diverse realities of the economic systems around us. The challenge now is to fill the intervening space, working up from empirical detail and down from strict theory, to build a tested body of understanding. Contributions to the effort may well appear in the new *Journal of Comparative Economics* whose editor, not surprisingly, is John Michael Montias.

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TRENDS IN THE SOVIET OIL AND GAS INDUSTRY. By *Robert W. Campbell*. A Resources for the Future Book. Baltimore and London: The Johns Hopkins University Press, 1976. xvi, 125 pp. Tables. Figures. \$10.00.

This compact, succinct little book is a useful companion to the author's *Economics of Soviet Oil and Gas* (1968). It admirably fulfills the stated intentions of updating the data base of the earlier work and reviewing the most important developments since 1965. Separate chapters deal with Soviet energy policy, exploration, drilling, oil production, oil transport, oil refining, the gas industry, the economic reform in oil and gas, and Soviet participation in world energy markets (as buyer and seller). In cogent summaries that bracket the more detailed discussion, Professor Campbell argues that Soviet oil and gas planners now face problems different from those of the 1950s and 1960s, and that their success in dealing with these problems will determine both the level and structure of future Soviet energy development. As usual, careful scholarship routs glib generalizations—for example, the undue pessimism about a Soviet "energy crisis," and the undue optimism that the USSR can bail the West out of its own energy crisis with massive energy exports.

Professor Campbell attributes many of the problems Soviet energy planners face to difficulties in meeting technological challenges—in drilling, oil refining, pipeline construction and operation, and the production of both oil and gas. This line of argument is backed up by a wealth of technical detail. Insightful (if tantalizingly brief) discussions deal with refinery mixes and product quality, the utilization of natural gas, the export of crude oil versus refined products, and planning methods (especially the attempts to apply optimizing models). In view of the apparent space constraints, Soviet oil purchases in the Middle East receive overmuch attention, with perhaps the least satisfying results. (Arms sales and Comecon debt instruments are stressed, to the relative neglect of the desire to minimize transport costs, given fixed commitments to Communist allies—to the reviewer, the best explanation of those purchases.) Unfortunate publication delays have left the data series two or three years out of date, in a situation subject to rapid change.

Not to carp, however—this is a valuable book for serious students of Soviet energy policy and more general readers alike.

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THE CLIMATES OF THE SOVIET UNION. By *Paul E. Lydolph*. World Survey of Climatology, vol. 7. Amsterdam and New York: Elsevier Scientific Publishing Company, 1977. xii, 443 pp. Illus. Dfl. 200. \$81.75.

Dr. Lydolph has performed a valuable and long overdue service in compiling a comprehensive reference on climatic factors in the Soviet Union. His stated intent "is to present general climatic information that can be used as a basis for other studies which

deal in depth with applied climatology and climatic change." I feel that he has accomplished his goal.

Approximately half of the book consists of maps and charts which cover a diverse range of subjects from the general locations of weather fronts to mean annual scattered radiation on a horizontal surface. Where possible, Dr. Lydolph has presented variability and chance of occurrence of phenomena to give a depth of understanding that the average values cannot give by themselves. These charts and maps contain nearly all the information that readers familiar with the subject need to know. Most of the figures are collected from a large number of Soviet sources, some of which are not widely circulated. The collection and organization of the figures themselves make the book worthwhile, not only to climatologists but to economists, political scientists, and agronomists who deal with events controlled by and related to climate.

The first half of the book consists of detailed descriptions of regional synoptic climatology. Dr. Lydolph has divided the Soviet Union into five broad regions: European USSR and Western Siberia, Eastern Siberia, the Far East, Central Asia, and the Caucasus. These chapters suffer at times from tedious descriptions of data already presented in charts and maps. Although the generalized descriptions, which are most useful to readers who are unfamiliar with the subject matter, are presented clearly and concisely in these same chapters, they are not separated from the more detailed descriptions. The result is that this portion of the book is sometimes difficult to follow.

The second half of the book describes major climatic factors for the entire Soviet Union. Heat, moisture, and wind, as well as climate description and classification schemes, are treated separately. In these chapters the text complements the many excellent figures and provides one of the best overviews of the factors influencing Soviet climate that I have seen.

Monthly climate data for 126 Soviet stations are included as an appendix. The spatial coverage of these stations is excellent, providing a small, homogeneous data base that can be used by the reader who requires analysis in greater depth.

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CORDON SANITAIRE OR BARRIÈRE DE L'EST?: THE EMERGENCE OF THE NEW FRENCH EASTERN EUROPEAN ALLIANCE POLICY 1917-1919. By *Kalervo Hovi*. Turun Yliopiston Julkaisuja, Annales Universitatis Turkuensis, series B, vol. 135. Turku, Finland: Turun Yliopisto, 1975. 244 pp. Paper.

One of the outstanding merits of this monograph by historian Kalervo Hovi is its utilization of many previously unavailable archival documents. The author collected data for the volume in the archives of more than ten countries. The material from the French archives is especially significant, because it only recently was made accessible to researchers. In addition to his archival research, the author takes into account the literature on the subject to date. This enables him to give a more complex and more diversified picture than those authors who have relied chiefly on English and American sources when writing about the new federal policy of France. Hovi's book is the first historical work to so widely describe France's Eastern policy. It analyzes the objectives of the policy and summarizes its changes and the reasons for the changes.

In the introduction the author notes the importance of the subject, summarizes the findings of previous researchers, and refers to the limitations imposed on them by the inaccessibility of the French sources. This lack of original source material generally caused historical works on the Eastern policy of France to follow one of the two traditional interpretations: the "barrière de l'est" or the "cordon sanitaire." Hovi refers to the origins of these concepts, analyzes their meanings, and discusses their