cies, as well as special efforts in the fields of education, health care, housing, and sanitation. The agricultural program reflects the dual nature of the Venezuelan farm economy, which contains a commercialized sector absorbing one-third of the farms side by side with a subsistence sector made up of the two-thirds of the farm families which operate less than five hectares. Measures suitable for the stimulation of production in the commercial sector offer little help to the subsistence sector. As there are large areas of publicly owned land which are undeveloped but suitable for agricultural use, help to the subsistence farmers might be forthcoming in the form of a resettlement program with adequate guidance and capital equipment for the new settlers. These and related matters are discussed in considerable detail in this workmanlike and thought-provoking study.

HENRY WILLIAM SPIEGEL Professor of Economics Catholic University of America

C. K. YEARLY, JR. Enterprise and Anthracite: Economics and Democracy in Schuylkill County, 1820–1875. (The Johns Hopkins University Studies in History and Political Science, Series LXXIX, No. 1.) Pp. 254, ix. Baltimore: Johns Hopkins Press, 1961. \$5.00.

This is a study of the evolution of the coal industry and the development by unincorporated, individual enterprises of the anthracite coal fields of Schuylkill County, Pennsylvania, during the first half of the nineteenth century. The construction of canals and railroads opened these coal fields to exploitation. From 1827 to 1857, the bountiful seams of the Schuylkill coal fields yielded more than half of the nation's total anthracite tonnage, and until 1867 more anthracite coal was produced from this county than from any similar coal county.

But even more important than its productivity was the fact that the anthracite coal fields of Schuylkill County were developed by small proprietors of private coal-mining. They refused to incorporate and clung tenaciously to their beliefs of

democracy and the ideal of individual entrepreneurship. For nearly five decades the land proprietors and miners championed these forms of business enterprise while elsewhere the coal industry was controlled by incorporated mining or minecarrying companies. But as deep mining developed, more capital was required for improved machinery, fortunes declined, and labor grew restless as wages dropped. Finally in the dark days of the middle seventies, the coal lands of the Schuylkill were bought up by the Philadelphia and Reading Railroad and came under corporate control.

The author has analyzed carefully, on the basis of research in manuscript and federal and state public documents, the factors which caused the decline and ultimate disappearance of this "way of life." There are good chapters on the impact of the development of the science of geology and on how mining methods depended upon a knowledge of the coal strata. But the speculative environment in Schuvlkill: the tenacity of custom, ignorance, and indifference; and a shortage of capital worked against the usefulness of this information. The ineffective search of the operators for solutions to their problems and the organization of trade unions are analyzed. The author claims that the Molly Maguires were not as violent as history has made them out and claims that the reforms which might have been achieved were probably precluded less by economic factors than by the social attitude of the region toward corporate organization. This is an important study for students of economic and social history.

REGINALD C. McGrane Emeritus Professor of History University of Cincinnati

PHILOSOPHY AND RELIGION

RUTH GRUBER (Ed.). Science and the New Nations: Proceedings of the International Conference on Science in the Advancement of New States at Rehoveth, Israel. Pp. xv, 314. New York: Basic Books, 1961. \$6.50. This volume carries the subtitle "Proceedings of the International Conference on Science in the Advancement of New States at Rehovoth, Israel." The conference opened on August 15, 1960 and was attended by delegates from fourteen African states, nine Asiatic states, and three South American states, as well as a bevy of experts of various sorts from the United States, Israel, and European countries. The Communist states were notably absent except for a representative from Yugoslavia.

The proceedings of any conference are apt to be an undigested and undigestible mixture of ingredients, of little interest to anyone except the participants. The present volume is an exception, probably partly because of the nature of the materials, but also surely because of the editorial skill of Ruth Gruber and the sponsors of the conference in arranging the material and in reducing the discussion to meaningful comment. The book remains an undigested hodgepodge-but therein lies its Within its covers are the brave hopes and plans of political leaders of the new states, the glittering technical promises for the future by some of the high priests of scientific progress, sober accounts of experiences by experts who have succeeded, and by some who have failed, cold appraisals of difficulties, and dreaming ignorance of realities.

Early in the book, P. M. S. Blackett of London underlines the difference between the \$1000 and the \$100 per-capita-income countries. This theme recurs again and again in looking at problems of energy, food, natural resources, water, health, economics, and education. Problems of population density and population growth are also a recurring theme and are the stated topic of one short section of the book. Education naturally gets attention at many points, especially in relation to the question of whether a new and poor state should try to develop "basic science" or should concentrate on training technicians to apply knowledge already avail-

Many wise things are said by the conference participants. I particularly liked a short but clear and thoughtful essay by Arthur Lewis of University College, Jamaica, on the relations among science, men, and money in the problems of the new states. And toward the end of the book, Rolando Garcia of the University of Buenos Aires aptly cautions the leaders of the new states that the experience of Latin America shows that independence and progress do not necessarily have a cause-effect relationship. In general, the reader is impressed with the clear thinking of the contributors, which is encouraging. Yet I ended the book with a feeling of discouragement: partly because the size and complexity of the problems emerge so clearly, but partly also because the discussion was necessarily in terms of relations among nation-states and in terms of national aspirations. Politics, science, and nationalism form an unstable alliance, and one cannot help but wonder whether Africa will find the resolution of this easier than has Latin America.

MARSTON BATES

Department of Zoology University of Michigan

MICHAEL BANTON (Ed.). Darwinism and the Study of Society: A Centenary Symposium. Pp. xx, 191. Chicago: Quadrangle Books, 1961. \$5.00.

Compared with the three-volume symposium on Darwinism organized by the University of Chicago, this is a rather small work, but it is more interesting for a sociologist. The editor and contributors express the hope that sociologists may benefit "from a consideration of the lessons learned and the theories developed by their biological colleagues."

The theme of the essays is stated by J. Bronowski in the Introduction, namely, that the important issue raised by Darwin was not primarily natural selection—which the Social Darwinists assumed was manifest in such social phenomena as race and class struggle and on which they based their theories—but the question of the appearance of variations within a species. Werner Stark indicates in an essay entitled "Natural and Social Selection" that