zation to agricultural development in Asian societies. Walker's conclusions indicate that the retention of at least a minimal private sector in agriculture has powerful psychological and economic benefits for the peasantry, casting serious doubts on the wisdom of rapid and total agricultural socialization.

The study consists of three parts. Part One provides a brief summary of the development of rural collectivization up to the formation of the communes in 1958; Part Two discusses the significance of the private sector from both the peasants' and the government's points of view; and Part Three, the most detailed section, analyzes policy changes with respect to private plots from 1956 through 1962. Numerous tables give succinct capitulations of the questions raised. As the author freely acknowledges, data on some points are fragmentary or inconclusive, but his conclusions about the importance of the private plots and the government's reluctant recognition of this fact are convincing.

In the period covered, private plots generally took up less than five percent of China's arable land but accounted for much higher percentages of the peasants' food intake and personal income. Since they are mainly devoted to vegetable-farming and pigraising, the private plots are a source of particularly important dietary supplements and, in addition, provide perhaps the most important source of fertilizer (pig manure) in China.

On two occasions-in 1956 and again in 1958-60-the Chinese Communist regime tried to reduce or eliminate the private plots. In both cases, it was obliged to restore them because of peasant dissatisfaction and economic losses, especially a serious reduction of manure supplies resulting from a decline in the pig population. The restoration of private plots in 1961, however distasteful it may have been to the Chinese leadership for ideological reasons, probably represents a long-term concession, the author suggests, since the private sector will remain crucial until the widespread use of chemical fertilizer reduces peasant worry about food production and eases governmental concern about the availability of animal fertilizer.

Professor Walker's study sheds light on two broader aspects of Chinese politics. One is the conflict between ideological fanaticism and pragmatic experimentation in the outlook of the Chinese leaders. The leaders' assumptions about the superiority of a collectivized economy twice led to attacks on the small remaining private sector despite evidence that the results would be unfavorable; yet in both cases they were eventually willing to backtrack. The other aspect is the problem of translating central directives into concrete and uniform action at the local level. The history of the private plots reveals significant local deviations from the orders and wishes of the central government.

More monographs like this one, offering careful analysis of critical policies and institutions, would be a welcome addition to the growing body of literature on Communist China and would serve to put many commonly asserted but loosely supported generalizations on a firmer basis.

James R. Townsend

YUAN LI-WU: The Economy of Communist China: An Introduction. New York, F. A. Praeger, 1965.

THE PREFACE and flyleaf describe this book variously as a general survey for the beginning student and as a "pioneering study of . . . the broad structure and programs of the Chinese economy." The plan of the book is simple. The first half describes Communist China's national economic goals, the institutional organization, and the strategies governing resource allocation, while the second half examines the success of these plans and mechanisms in the various economic sectors. The outline is admirably adapted either to serve as the framework for a basic survey of the Chinese economy or, through an institutional analysis, to shed light on the recent development of the economy in the face of a blackout of official Chinese data.

The prolific and energetic Dr. Wu has earned much merit in the past by virtue of his great facility for assembling and compiling vast amounts of information on particular industries and sectors of the Chinese economy. Unfortunately, however, this book requires a different approach: namely, the isolation and rigorous interconnecting of the key economic factors. It involves a pruning rather than a compiling task, and for this sort of exercise the author apparently lacks the knack or the necessary patience. Instead, the book offers a potpourri of observations which are not necessarily connected, explained, or analyzed.

The author's survey of the post-1960 course of the economy is particularly confusing. After describing a labored economic recovery in the 1961-65 "readjustment" period under the handicaps of reduced access to foreign technology and unbalanced pre-1960 industrial growth, he presents estimates to show that, after a brief recession in 1961, there was a substantial recovery in industrial output in 1962, when gross domestic investment reportedly rebounded to an extremely high rate of 33 percent. It may be that Dr. Wu believes that over the past four years China has had the paradox of a highinvestment yet stagnant economy, but if so, he sees no obligation to explain its operation.

The same confusion, in reverse, is found in the discussion of farm output. Here the author presents the most dismal grain output estimates this reviewer has seen, showing an almost zero rate of long-term growth, a steadily mounting consumption "deficit" under the impact of population growth, and an astronomical deficit of 67 million tons of grain annually in the 1959-62 period. In spite of this, Dr. Wu's discussion suggests that these estimates do not imply greatly increased personal hardships as reflected in mortality rates, or any significant interference with the rapid recovery of industrial output and investment. Indeed, the author is not sure that Peking is really convinced of the need to shift from an exploitative to a developmental approach towards agriculture. His concluding statement in the chapter on agriculture ("It is entirely conceivable that . . . success in agricultural recovery may become a prerequisite of economic growth in general") suggests that he himself is not fully convinced that farm output is a critical limiting factor at the present time. Possibly Dr. Wu believes that there has been a margin in Chinese farm output which enables Peking to copy Stalin in developing industry without concern for farm output trends, but if so, he has not chosen to identify and argue this view-which would be a unique one.

Having taught a seminar on the Chinese economy, this reviewer is acutely aware of the paucity of basic texts and hence reluctant wholly to condemn this one. The first half of the book is descriptive and reasonably well done, and except for the section on agriculture, the reviewer has few complaints over the author's handling of pre-1960 developments. While the post-1960 material is confusing and sometimes even misleading, the desperate instructor might kill two birds with one stone by assigning as term papers the rewriting of the chapters in the latter half of the book.

Edwin F. Jones

CHENG CHU-YUAN: Scientific and Engineering Manpower in Communist China, 1949-1963. Washington, National Science Foundation, 1965.

ONE OF THE PRIMARY goals of the Chinese Communist regime has been to build a powerful, modern nation, and there is no more important prerequisite for this than the development of a large and competent professional manpower force. When the regime came into being in 1949, it had at its disposal only a small nucleus of professionals and has since then made every effort to swell the size of this group. In 1956, the leadership fixed as its initial goal a force of several million highly-trained specialists by 1967.

Dr. Cheng's book is a detailed study not only of the regime's efforts to train a new body of scientific and engineering specialists, but also of the manner in which it has endeavored to utilize the pre-existing group of older professional men. These older men have clearly presented a special problem for the regime: they are predominantly non-Communists whose political loyalty to the new order is uncertain, but whose skills are vitally needed in every area of development, including the training of a new generation of specialists. While the author concedes that some of these older professionals have been able to do outstanding work under the Communists, he nevertheless paints a bleak overall picture of careers hampered by political harassment and the imposition of manifold extraneous responsibilities. Furthermore, although the older scientists, for example, have been well paid by Chinese standards, they have at times been demoralized and socially degraded, while a new generation of "peasant scientists" has been lauded as the wave of the future.

Nor does Dr. Cheng share the Chinese Communists' optimism regarding

Reviewers

JAMES R. TOWNSEND—Professor of Political Science at the University of California, Berkeley, and student of Chinese Communist affairs.

EDWIN F. JONES—Specialist in Chinese Communist economic affairs; presently engaged in a research project for the Social Science Research Council.

JAMES D. SEYMOUR-An American student of Communist China, currently doing research at the East Asian Institute, Columbia University, New York.

BORIS SCHWARZ--Professor of Music at Queens College, City University of New York. He has written extensively on Soviet music and last appeared in this journal with "The Vicissitudes of Soviet Music" (November-December 1965).

JOSEPH ROTHSCHILD—Presently with the Department of Public Law and Government and the Russian Institute at Columbia University, New York; author of *Communist Eastern Europe* (New York, Walker, 1964).

LEON M. HERMAN—American specialist on Soviet economic affairs and frequent contributor to this as well as other journals.

future prospects. Not only is the top echelon of China's scientific and technical community made up largely of elderly men, but also most of the welltrained middle-aged professionals have chosen not to live in Communist China. As for the new generation of specialists, the author holds that they are undereducated, inexperienced, and less numerous than had been hoped. China's isolation from the West-and recently from Soviet Russia-obviously has not helped the situation, and the country is now forced to rely almost entirely on its own human as well as material resources. Dr. Cheng estimates that it will take Communist China twenty or thirty years to reach the professional manpower goals that were originally set for next year.

Notwithstanding its title, Dr. Cheng's study is by no means limited only to scientists and engineers. Among the other professionals and academic specialists covered, social scientists are given special scrutiny. It is this group, of course, which has had the most difficulty in finding a place in the new China. The author characterizes the fifty thousand "old" social scientists as "a humiliated and disappointed group whose plight continues to decline." He further believes that since the Hundred Flowers débâcle they have "vowed an end to sincere cooperation with the Communist government."

An impressive quantity of hitherto widely-scattered data has been assembled in this volume and summarized in 57 tables, twelve charts, and four appendices. One of the appendices lists 1,200 professional people, giving background information and details of their current status. While the study is admittedly only a beginning, it certainly contributes a great deal toward an understanding of this complex and important field.

James D. Seymour

Music in Russia

FRED K. PRIEBERC: Musik in der Sowjetunion. Köln, Verlag Wissenschaft und Politik, 1965.

FRED K. PRIEBERG is a young West German author whose competence in the field of modern music in general