Book Reviews

Population and Progress in the Far East. Warren S. Thompson. University of Chicago Press, Chicago, Ill., 1959. 443 pp. $7.50.

In this book, Warren Thompson, the distinguished and well-known population expert, writes of Asian economic, sociocultural, and population problems with knowledge, understanding, and sympathy. In a sense, the book dates back to 1929 when Thompson brought out his prophetic *Danger Spots in World Population,* wherein he pointed out the relationship between population pressure and wars and pleaded for some understanding of the economic problems of overcrowded countries. In 1946 he undertook a revision of that book but brought out what was really a new book, *Population and Peace in the Pacific,* the first competent and objective demographic survey of the region. Now Thompson has revised this and written what is in many ways another new book, *Population and Progress in the Far East.*

The title is apt, for here the author notes and evaluates the remarkable political, cultural, economic, and social changes (and their interrelationship with basic demographic factors) that have occurred in the region since the termination of World War II. Today, except for a few minor areas, Asia is politically free and has overthrown the discredited and unwanted European imperialism. (The British quit voluntarily and gracefully; the Dutch and the French, not so gracefully.) Economically, Asia is undergoing belated agricultural and industrial revolutions. More land is being brought under cultivation, land which through the centuries has been considered second-rate and uncultivable. Production per unit under cultivation is increasing, through the use of modern agricultural techniques. Despite limitations of raw materials, capital resources, and technological "know-how," every country in the region has embarked on heavy and large-scale industrialization, thanks to the assistance of the United Nations and its specialized agencies, to economic aid from the United States, to the Colombo Plan, and to other assistance. The Asian countries hope that industrialization will help to siphon surplus population from overcrowded agricultural regions into urban manufacturing areas.

The emancipation of women has begun, and Asian women today occupy responsible positions and are gaining political, legal, and economic equality with men. What is more, Asia is trying to lift up the segments of its population which, through social and religious tradition, have been submerged and discriminated against. The hard cake of custom that offers resistance to change is being broken in Asia. Planned changes as well as involuntary changes in response to newly introduced technological innovations are taking place. Asia is trying to move from the bullock-cart stage to the jet age in one incredible leap.

Perhaps the most important change is in the economic-political structure of government and society. Every Asian country is witnessing a struggle between conflicting ideologies—between individual freedom, democracy and free enterprise, and all that is best in the Western liberal tradition on the one hand and totalitarianism, regimentation, "democratic dictatorship," and communization on the other. In the race for rapid economic development the conflict is symbolized by India and China—the one with its freedom, democracy, and mixed economy and the other with its Communist controls and regimentation.

Herein also lies the basic controversy between Malthus and Marx. Are huge populations an asset or a liability in an underdeveloped country attempting to raise its living standards? Japan and India are dedicated to an official policy of planned parenthood, whereas in China today the policy is pronatalist. Although for nearly 3 years the People's Republic of China embarked on a vigorous campaign for birth control, last year the policy was reversed in favor of the Marxian view of the population question. And if China's communist economy is able to deliver the goods despite her teeming numbers and her alarming rate of growth (the net annual increase today is more than 20 million), the people of India may begin to wonder why their numbers must be reduced to facilitate quick economic progress. On the other hand, China might use her massive numbers as an excuse for expansion in the near future.

Thompson covers all these problems and more, as they are seen in Japan, India, China, Pakistan, Ceylon, Burma, Thailand, Cambodia, North and South Vietnam, Korea, and Taiwan, and includes a wealth of documentary evidence and personal observation. His observations on the demographic situation in all these areas are sound and relevant. However, his picture of policy in China is no longer accurate, for the policy has been changed since the book went to press.

It is impossible in a brief review to do justice to Thompson's book. It should be compulsory reading for every student of Asian affairs, and not just for demographers or social scientists. Both the author and the publisher are to be congratulated on having given us this book.

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A Record of History and Evolution of Early American Bridges. Llewellyn Nathaniel Edwards. University Press, Orono, Maine. 1959. xii + 204 pp. Plates. $5.

Although Llewellyn Edwards maintained that his intensive studies of the history of American bridges were a hobby, this little book is anything but the work of an amateur. The completed manuscript was prepared for publication through the efforts of Edwards' widow and a number of his former colleagues. The resulting volume is a valuable addition to the literature on the development of bridge engineering—a subject that deserves fuller analytical treatment than has been given it in the past. There is certainly no lack of effusive writing on the architectural and scenic character of the bridge, but there is too little serious consideration of the technical significance of the bridge in terms of materials and structural theory.

As an active and successful bridge designer until shortly before his death

in 1952, Edwards was well qualified to undertake this project, and he was one of the few writers with the necessary background who have appeared in this field.

The work is divided into four periods —pre-Colonial, Colonial, post-Revolution, and post-Civil War—and this division reflects its organization as a survey of general development. This approach, which differs from the more conventional presentation, made either in terms of the materials used or by major structural systems, permits a clearer discussion of the complex relationships between the practical need for bridges, the current state of technology, the availability of materials, and the influence of tradition.

Several other aspects of the work are unusual and of very real value. One is the great amount of material that Edwards uncovered on American bridges built before and shortly after the Revolution, including several bridges in South America. Since they are, naturally, the least well documented, the bridges of this period have received only the most casual attention from historians, and information on fewer than half a dozen of them has been readily available until now. The inclusion of a number of unbuilt projects in the discussion is unique. The many freak proposals are not mentioned, only those which appear to have been rationally conceived, and plausible, if bold, for their time. Ellet's proposed iron suspension spans for St. Louis (1840) and Georgetown, Maryland (1852), receive a deserved amount of attention. A further interesting sidelight is the description of a little known, unbuilt, iron-bowstring truss designed in 1796 by the civil engineer Robert Fulton. Far from being of marginal value, information of this sort is as essential in a comprehensive study of the history of bridges as description of completed works.

It is regrettable that a need for economy in publishing the volume permitted the inclusion of only a small portion of the material resulting from the author's extensive and very competent research. This same restriction made it necessary to confine the illustrations to a single grouping at the end of the book—a disconcerting arrangement. Careful editing would have prevented the mismatching of two photographs with their captions and with the text.

These are insignificant faults compared to the major contribution Edwards made in a branch of technological history which has received so little serious attention.

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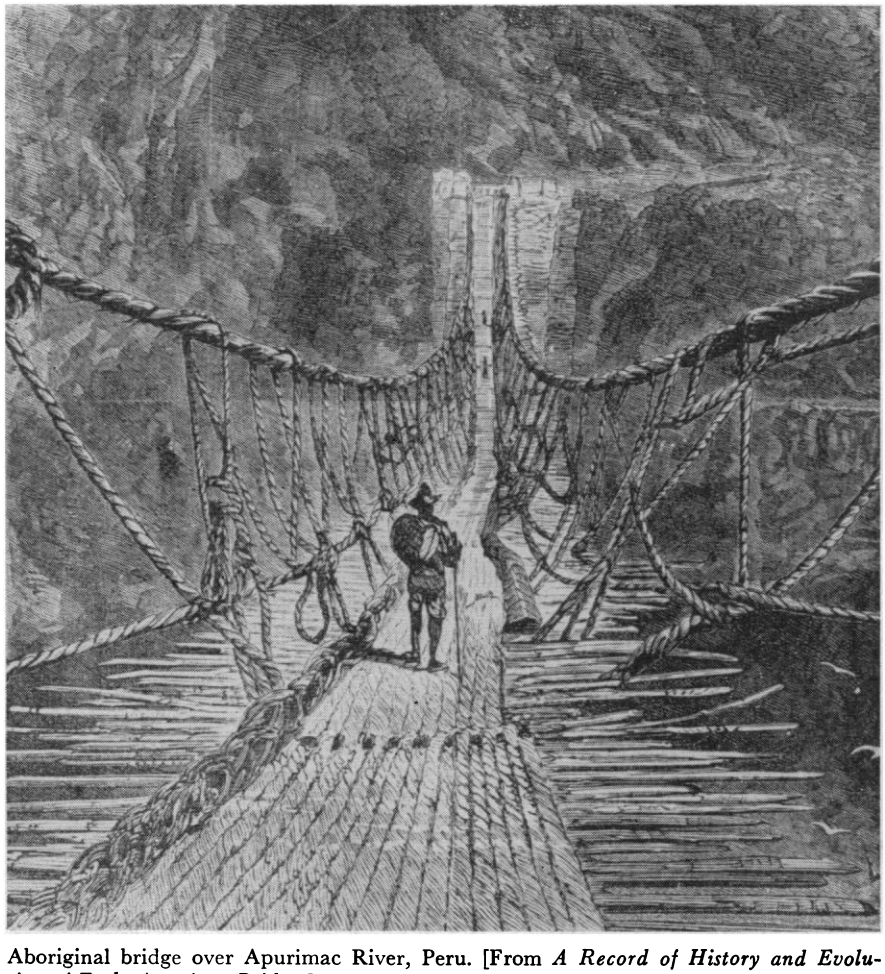

Aboriginal bridge over Apurimac River, Peru. [From *A Record of History and Evolution of Early American Bridges*]

The Cellular Slime Molds. John Tyler Bonner. Princeton University Press, Princeton, N.J., 1959. viii + 150 pp. Illus. $4.

In his previous books, Bonner has displayed a charming gift for light treatment of biological problems. The present work, envisioned in the introduction as "a comprehensive survey of all the different known aspects of the biology of the cellular slime molds" and "a useful summary of all the work done before 1959," is a more scholarly undertaking. It is not nearly so successful.

My most general objection to this book is that, while Bonner takes decided stands in evaluating previous investigations, he does not provide enough factual information about experimental methods and results to enable readers to do their own evaluating. It is an astonishing fact that the 150 pages include one histogram, one semidiagrammatic graph, and no tables at all, to represent what is, by now, a considerable body of quantitative information about slime mold development, genetics, and physiology.

Despite the author's intention of providing a complete survey, a number of pertinent papers and experiments have been slighted. For example, the superb paper of Raper and Fennell on the construction of the fruiting body—which serves as a foundation of the modern description of culmination—is accorded a single short paragraph, on page 107, among pages of observations and considerations of much less import. The recent work of my coworkers and me on the identification of the initiator cell for slime mold aggregation is cited in a footnote on page 89 but is not described, and the experiments which showed a Poissonian distribution of aggregative centers among small population samples, as well as a large body of data concerning synergistic aggregation by cell mixtures of wild type and aggregateless mutants—work which provided the basis