To see if there is a distinct causal relationship between change in the general level of the achievement motive and change in the level of economic development, McClelland and associates carried out measurements of psychological and economic variables in 40 contemporary nations from 1925 through 1950. They also carried out similar measurements in the Ancient Greek civilization from 800 to 100 B.C., in Medieval Spain from 1200 to 1730, and in the English economy from 1500 to 1830. All their findings converged to the same conclusion: A protracted rise in the general level of achievement need precedes a protracted period of economic progress, and a protracted period of economic decline or stagnation is foreshadowed by a persistent decline in the need for achievement. This finding is the first major contribution of the book.

Since the entrepreneur is the main translator of the general national level of achievement motivation into concrete economic performance, McClelland and his associates carefully identified the essential components of entrepreneurial behavior such as risk-taking and long-range goals. Then they found through many cross cultural studies that each of its components is tied into a relatively high level of achievement motivation. This is the second major contribution of the book.

For some years it has been known that many life-long motives are acquired in very early years through child-rearing practices of parents. Through many experimental studies as well as cross cultural studies, McClelland and associates identified what specific characteristics of such practices induce a high level of achievement motivation in the oncoming generation, and what characteristics do not. This is the third major contribution of the book.

From these findings emerge the fascinating hypothesis that external conditions, such as political and economic institutions, occupational status, family structure, climate and physical resources, do not directly and automatically generate the achievement motivation that is necessary to exploit them. Instead, they influence economic development only indirectly through their effects upon child-rearing practices of parents, which directly determine the level of achievement need in the oncoming generation, which in turn generates economic change. To verify this hypothesis, the author and his associates made many cross cultural and historic investigations. The weight of their evidence strongly tends to confirm the hypothesis, and in so doing casts serious doubt on numerous long-standing explanations of the rise and fall of civilizations. This is the fourth major contribution of the book.

Now and then this reviewer finds himself taking exception to basic conceptualizations in the book, but this in no wise detracts from its outstanding contributions to the large and growing literature on economic development. This is not a book for bedside reading. But if one takes the time and pains to pick it to pieces, assimilate, digest and make its ideas his own, he will greatly enrich his perspectives of economic and cultural change in both present and past civilizations.

John M. Brewster

Land Economics Research

Edited by Joseph Ackerman, Marion Clawson, and Marshall Harris. The Johns Hopkins Press, Baltimore. 270 pages. 1962. $4.00.

We owe the symposium to the Greeks. To them a symposium was literally a banquet at which there was brilliant and entertaining conversation, and free exchange of ideas.

This symposium on land economics comes closer than most contemporary ones to satisfying the ancient criteria as to brilliance, wit, and free discussion. The place was Lincoln, Nebraska; the time was June 1961; and the sponsors were the Farm Foundation and Resources for the Future, Inc. The participants were 16 economists representing a cross section of youth and age, enthusiasm and wisdom, experience and training in the field of land economics.

The high level of accomplishment was also due to the careful planning that resulted from a pre-symposium conference of the principal participants some months before the symposium proper.

The 15 chapters are arranged under four headings concerned with scope, theory, procedure, and programs in land economics research. Each chapter was developed by one of the participants and in two instances by two participants jointly.

The focus of the book is on research in land economics with an eye to the future. The evolution from rural to urban phases is traced by M. M. Kelso in his scholarly review of the content and orientation of research in land economics today.
Urban and regional planning and economic growth and development on the world scene are carefully delineated. A chapter by Roy E. Huffman on better utilization of research results considers the responsibility of the researcher for getting his results into use.

The four chapters on theory are among the most stimulating in the book. Walter G. Miller's production theory is well prepared. The sparkling discussion of welfare economics by M. Mason Gaffney may move on too high a plane of sesquipedalianism for many readers. Yet his presentation may help to jar many plodding researchers from their occupational lethargy.

Kenneth H. Parsons' short paper on institutional economics is a cogent statement. But Howard W. Ottoson's parallel columns of similarities and differences between institutional and neoclassical economics deserve the attention of every agricultural economist. He drives home and clinches the point made earlier by John F. Timmons, Kenneth H. Parsons, and others that the different approaches are complementary and not antagonistic.

The chapters on research procedure have merit in emphasizing the need for orderly procedure and methodology. But the close identification of the function of science with the solution of problems may easily fence research into confines that leave too little room for the exercise of free imagination.

It is interesting that it was left for the practical administrator, Harry A. Steele, to point out the inhibiting aspects of the detailed project system and the inflexibilities of research organization: "The attention to basic and pioneering research in recent years is an effort to free the research worker from any inhibiting administrative restraints."

Steele believes research results are most useful if they are available at the strategic time. He stresses the need for continuing support for research organizations that are attuned to long-range programs, yet flexible enough to deal with specific problems as they arise.

For researchers in land economics this book is the most important "landmark" in research appraisal since the 1948 publication of Leonard A. Salter's *A Critical Review of Research in Land Economics*. For agricultural economists in general it is an intellectual banquet of superior rating.

If one might sometimes wish for a larger measure of singular insight and a smaller portion of plural insights, this may be the price of brilliant conversation. In any symposium some loose ends should be left for future conversation pieces.

Ronald L. Migel