"Vaccinating on an Immigrant Train Going West," *Harper's Weekly*, 10 February 1883. In the 19th century native-born Americans "were particularly upset over the apparent introduction of certain epidemic diseases into their communities by . . . immigrants." The morbidity and mortality rates among immigrants "loomed so conspicuously large that American observers and publicists felt it desirable to differentiate them from those of the native-born populations. This was not really a scientific matter in many cases, but a step considered necessary in order to preserve the sanitary reputations of the respective communities and ensure their attractiveness for commercial development." [From *Medicine and American Growth, 1800–1860*]

ty and made the life insurance industry a major force for expanded and more accurate vital statistics, as it was for public health reform in general.

Cassedy is one of this country's most distinguished medical historians, and *Medicine and American Growth*, like its predecessor volumes *Demography in Early America* (1969) and *American Medicine and Statistical Thinking* (1984), exhibits deep scholarship applied to a recondite subject with a deceptively light touch. The scientific reader should be warned that this is not a book *of* statistics or an attempt to reanalyze the era's demographic data. Somewhat ironically, Cassedy's method is the ancient one of literary history. Amid the quantitative preoccupations of much recent historical writing, numbers are notable here mostly by their absence. Intended or not, the result often seems to be an ironic critique of a brash numerical tradition by an older one, which has its own rules for attaining a very different kind of objectivity.

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Agrarian Anthropology

Farm Work and Fieldwork. American Agriculture in Anthropological Perspective. MICHAEL CHIBNIK, Ed. Cornell University Press, Ithaca, NY, 1987. 295 pp., illus. $39.95; paper, $12.95. Anthropology of Contemporary Issues. Based on a symposium, 1982.

A volume that focuses on anthropological methods and their potential for understanding agricultural systems in a complex industrial society such as the United States is long overdue. This book provides an overview of some current anthropological work on farmers in the rural United States. Since anthropologists have dealt with agrarian societies in virtually all other areas of the world, in many different kinds of cultural systems ranging from small-scale extensive swidden systems to relatively large and highly intensive systems (with and without irrigation and with and without domesticated animals), and since anthropology as a discipline encompasses contemporary (ethnographic), historic (ethnohistorical), and prehistoric (archeological) systems of agriculture, it is certainly appropriate for anthropologists to examine agrarian systems in a contemporary complex society. This volume is also part of a larger genre of economic anthropological writing on agrarian economic systems, their organization, and their relationships to social and political structures. At issue here is the nature of the interface between changing forms of agriculture, community organization, and the larger economy in both the rural and the urban areas of nation-states.

As Michael Chibnik points out, one of the distinguishing features of anthropology as a discipline has always been its panhuman scope. Thus anthropology is ideally positioned both to document and to explain cross-cultural similarities and differences, not only for small-scale, so-called exotic societies but for large complex systems as well.

This book's focus upon the rural agrarian parts of complex systems raises important methodological issues, not only for anthropology but for the social sciences generally. For example, how can qualitative case materials be collected and combined with quantitative data covering large numbers of cases? The papers in the book also present some important concerns regarding the choice of analytic and research units. For example, Peggy F. Barlett in her chapter on family farms in Georgia points to the county as the critical political unit with tie-ins to local government, education, and price-support systems. Though the county is certainly the most important locally recognized folk unit in rural America it may not be the most useful analytic unit. That is, depending upon how the research problem is conceptualized, the key analytic unit used by the social scientists for organizing data gleaned from fieldwork in counties may be a type of farm, a region, a state, or an entire nation. Susan Carol Rogers, for example, uses econometric (regression) analysis to test hypotheses without presuming that the folk units constitute analytic units. She begins to specify models for analyzing the relationships between some key variables, among them farm size, degree of specialization, labor-to-land ratio, total investment in farm equipment, and mixed farming versus monocrop production. She points out that some of the results indicate realities that are not unique to the Illinois farm community and thereby opens possibilities for comparative analysis.

Among the substantive issues raised in this collection are questions concerning household economic strategies, community character, demographic trends, family organization, and the division of labor according to age and sex. The topics addressed include the future of family farms and the importance of home-place ties as factors in rural-urban migration patterns, race and ethnicity as factors in farm organization, and policy issues at the local, national, and international levels. Understanding the relationships between subsistence production, cash cropping, and wage labor (income supplementation with off-farm employment, both temporary and permanent) is becoming increasingly important at all levels.

The book is divided into four parts. The first, Economic Strategies, examines changing economic conditions in the rural United States: family farms in Georgia (Barlett), the retention of diversified farming in Illinois (Rogers), and agricultural experimentation in Iowa (Chibnik). The second section contains two chapters dealing with the impact of economic change on the sexual division of labor for Iowa farmers. The first, by Debo-

rah Fink, shows that women's work was central to the pre-1940 farm economy. In the second, Tracy Bachrach Ehlers incorporates age and life-course considerations into the analysis of women as subsistence producers, wage laborers, managers, and sellers of petty commodities. She includes a good discussion of the varieties of cash-generating strategies initiated and maintained by women, from selling eggs in order to purchase groceries (until the mid-'60s) to selling cosmetics, vitamins, and home decorations from their homes (1982). The section points to the qualitatively different kinds of work performed by men and women and raises some important questions about labor force measurement.

Part 3, Racial and Ethnic Differences, contains papers by Sonya Salamon and B. Lisa Gröger. Salamon discusses resource control and ethnic differences in inheritance patterns, church affiliation, and family goals and strategies in two Illinois farm communities. Gröger contrasts land tenure arrangements and intergenerational relationships among blacks and whites in a North Carolina tobacco-growing community.

Part 4, Legal and Policy Issues, contains papers by Miriam J. Wells on sharecropping in the United States, Frances J. Aaron Brooks on trespassing on New Jersey vegetable farms, and Gerald M. Britan on the politics of agricultural science. Wells raises some important questions concerning comparative studies of sharecropping and their potential for explaining variations in sharecropping arrangements. In her discussion of the conflicts that result from trespassing, Brooks quite rightly points out that her analysis is most significant for its implications for understanding changes in the social and political structures of rural communities.

The afterword, by Chibnik, emphasizes the diversity and complexity of rural life. Chibnik points out, for example, that land tenure is a central feature of rural social structure—as land values fluctuate, tenure relations will change. He recommends, also, that much more research needs to be done on land use rights and obligations. Here is where the cross-cultural record can be mined. Are there regions of the United States in which agrarian systems are less developed (smaller, less capital-intensive) and, perhaps, comparable to areas in some Third World countries? Alternatively, are there other areas that are comparable to parts of other industrial states in Europe, for example, during certain periods in history? The challenge for anthropologists is to use the panhuman (cross-cultural) perspective to devise methods for dealing analytically with both diversity and complexity. This involves not only collecting data that can be used, for example, to paint a detailed picture of a single case in a single county or community but also developing analytical frames (models) for collecting and organizing comparable data so that we can begin to explain the precise nature of the diversity. The papers in this volume provide some good case materials. Much more work needs to be done.

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Homes of Research

To Advance Knowledge. The Growth of American Research Universities, 1900–1940. ROGER L. GEIGER. Oxford University Press, New York, 1986. x, 325 pp. $27.50.

The research university is a robust, familiar feature of 20th-century America. Anyone committed to the life of the mind can hardly avoid it. In fields from English literature to quantum physics the research university and the professoriate have come to play a central role, often to the dismay of thinkers more at home in salons, research institutes, government bureaus, professional organizations, museums, foundations, or the solitariness of their own studies.

The research university may be familiar, but it is ill understood. Information on its parentage, its origins, its early struggles, its growth, its transformations, its purposes, and its funding is fragmentary and confusing. The bewildering variety of forms and functions to be found in the research university by mid-century was openly celebrated by Clark Kerr in his brilliant essay *The Uses of the University*. Kerr himself was a master builder, with a sure sense of the rhythms, problems, and possibilities of the research university. Equally adept was Jacques Barzun. The latter's *The American University* is another celebrated text of that era which spells out in longhand many of the same points made by Kerr. The 1960s were of course receptive to large and expansive views, and much was heard of the information explosion, the knowledge-based society, and the apparently unlimited possibilities that lay ahead. However, to describe and project the visions of an era is not the same as to offer satisfying historical explanation. Besides, the mood has become more sober, doubting, and uncertain over the past 15 years.

The ebbing of the baby boom, the slowing in the growth of overall support for higher education from the federal government, the aging of the professoriate, and the shift of students from liberal to utilitarian studies have made it less appropriate to celebrate that high theory which the research university prizes above all. Yet the research university has if anything increased in its importance to our larger society. The federal government may seek to cut back on Pell grants, but it continues to devote increasing sums to university research on subjects deemed vital to our national defense or our industrial competitiveness (and what subject isn't?). The director of the National Science Foundation believes it possible to double his budget within five years and to multiply the foundation's support of university-based multidisciplinary centers. Corporations vie in their support of university research on subjects with commercial possibilities, from biotechnology to superconductivity. The prestige and the dazzle may have dimmed, but the research university marches on.

Roger Geiger is therefore to be greatly thanked for having put together the first reliable account of "The Growth of American Research Universities, 1900–1940." Now at length we have available between one pair of covers a comprehensive, organized text on how the research university got its start in American society.

The story that Geiger tells is an interesting, complex one. Strange as it may seem, there was a time when it was *not* settled that the university would be "the home of research." Early in this century many other models seemed possible. The Carnegie and Rockefeller philanthropies favored research in special institutes (what is now the Rockefeller University did not begin as a university, and the Carnegie Institution has still to succumb). It was not impossible to believe that government bureaus would hold center stage, for the Department of Agriculture and the Smithsonian Institution offered plausible paradigms. After World War I the universities themselves seemed to falter as "the collegiate man" came to the fore and Anglophilia waxed as the Germanic ideal waned. Experiments with industrial support of research at the Massachusetts Institute of Technology were less than encouraging in their implications for basic research on the campus. But despite the alternatives and the problems, the research university had moved to center stage by 1940. The die was cast.