A Unit for Social Analysis

Households. Comparative and Historical Studies of the Domestic Group. ROBERT MCC. NETTING, RICHARD R. WILK, and ERIC J. ARNOULD, Eds. University of California Press, Berkeley, 1984. xi, 480 pp., illus. $35; paper, $14.95. From a symposium, Mt. Kisco, N.Y., Oct. 1981.

When the editors of this book organized the Wenner-Gren symposium on "Households: Changing Form and Function" they did so with the assumption that the household is a basic, if long neglected, unit for social analysis, one that "is sufficiently universal and recognizable for use in cross-cultural and historical comparison" (p. xix). In preparing for the conference, two of the editors (Wilk and Netting) prepared an essay, a revised version of which appears in this book, that was to serve as the basis for the individual contributions to the conference. In it they assert that the term household is "polysemic" and that analysts have tended to conflate form, or morphology, and function in comparative and historical examinations of households. Thus, for example, historians may stress continuity in household form over time but ignore changing functions. As Wilk and Netting pursue their argument, they suggest five functions or activity spheres—production, distribution, transmission (inheritance), reproduction, and coresidence—commonly associated with households, although they are careful not to make the functions constituent aspects of their definition. The analyses envisioned by the editors would trace change or variation of form, of function, or of the relation between the two across time and space.

To the extent that the organizing paper served as a catalyst for discussion, it stimulated and organized disagreement. Perhaps the most extreme reaction is Eugene Hammel's disquiet concerning the polysemic nature of the household and the epistemological problems associated with analysis in terms of variable form and function. His response is to "propose a category so formal, abstract, and devoid of specific cultural content as to rid it of bias," defining the household as "that social group larger than the individual that does not fail to control for its members all those resources that any (adult) member could expect to control for himself" (p. 41).

Most contributors, however, accept the basic framework and define the households they study in terms of one or more of the activity spheres suggested by Wilk and Netting. What is most interesting is their disagreement concerning the key functions in their definitions. Some stress the importance of the household as a basic unit of production, noting that coresidence, reproduction, and transmission may take place in social units that do not fully correspond to units of production. Others stress the importance of coresidence, again noting the lack of correspondence with other functions. And so on. Several interesting papers can be found among those that address this definitional problem, notably Eric Arnould's paper on Niger, Richard Wilk's on Belize, and Olga Linares's on the Diola of Senegal. All offer comparisons of three related field settings, noting changing form or function across space and time. Also notable in this group of papers is a reflective essay by Peter Laslett on the family as "a knot of individual interests," which examines the "congruence and conflict" of individual life courses and household reproduction. Martine Segalen examines the proliferation of nuclear family residential units in 20th-century rural Brittany and cautions that appearances can be deceiving. Many of the functions of distribution, consumption, and socialization continue to take place in the old parental household, as wider family connections remain central despite residential separateness. Taken as a group, these papers implicitly call into question the organizers' central assumption that the household offers a basic unit of social analysis, "sufficiently universal and recognizable." Recognition, it turns out, depends on dramatically different systems and categories of perception.

Other papers do not directly address the form-function theme of the editors' introduction and pursue other ends, some of which were suggested by the editors. One suggested theme is the extent to which "household organization responds sensitively to changes in the environment while preserving certain formal similarities for long periods" (pp. xix–xx). Peter Kunstadter would be least sympathetic to such an assertion, examining the importance of cultural ideals in determining household composition among various ethnic groups in Thailand. William Douglass explores attempts by Basque émigrés to maintain stem family structures in less hospitable cultural and legal environments: the American West and Australia. Andrejs Plakans offers the most careful test of the editors' hypothesis, examining each of its terms with care as he pursues a detailed analysis of changing household composition and structure on a Baltic estate in the aftermath of serf emancipation in the late 18th and early 19th centuries. Although his data offer provisional support, Plakans notes their inadequacy for full assent.

Especially stimulating, however, are three essays that directly criticize the predication of the household as a basic unit of social analysis. Sylvia Yanagisako places her emphasis on the polysemic nature of households; although she sees comparison as a desirable goal, she stresses that comparison cannot be simply formal. One must know what the household means to particular social actors in particular social situations. Unfortunately, the editors inappropriately place her essay in the section Households as Persisting Cultural Forms. Yanagisako does stress culture in drawing our attention to meaning, but hers is an analysis of cultural persistence only if we are working with a false dichotomy between cultural persistence and economic change. Her analysis explores the different meanings placed upon family and family life by two generations of Japanese Americans: the attempt to maintain the stem family by the first and the attempt to gain independence by the second. Indeed, the problem the essay considers is the demise of the stem family among Japanese Americans. David Herlihy does not explicitly criticize the organizers' assumptions, but his brief historical sketch of changing administrators' census criteria in the ancient world questions the universality of the household as a basic social unit. His reconstruction of early medieval elite families in Ireland by means of a reading of the lives of early saints is also quite lively. Orvar Löfgren's stimulating examination of changing family and household forms in Sweden questions whether households were basic units of production in preindustrial Sweden. Though they were basic units of administration and census, Löfgren contends that they were embedded in a variety of social and economic networks that have not survived in estate

and other documents, that they were part of a "hidden economy." Examining the growing social and ideological importance of the family and family life in the 19th century, especially for the middle class, Löfgren suggests that social life in the countryside was affected by the images others had of that life: "The conception of the 'traditional house' became a powerful tool, an attempt to create an utopia, to return to a mythical past devoid of class conflicts and disobedience" (p. 457). The essay offers a profound reflection upon the intersection of four cultural worlds—the lived reality of ordinary people; the categories used by their administrators in the collection of censuses, taxes, and rents; the images of a proper domestic life held by individuals in superordinate classes; and the categories used by social scientists trying to understand the lives of ordinary people or pursue comparative analyses.

This is an important book, in part because it collects substantive essays on household formation, structure, and change at a time when such studies are growing in significance and popularity, and in part because the most pertinent disagreements among those who study households can be found in it. One gets the feeling that the conference itself was more lively than the book, that some of the papers provoked heated discussions. It is unfortunate that some of these discussions could not be reproduced in the book. Nonetheless, some of the authors explicitly direct their comments to other contributors. One comes away from the book with a good sense of what is known, what is not known, and what is at issue in the comparative study of households.

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An Ancient Lake

Lake Biwa. SHOJI HORIE, Ed. Junk, Dordrecht, Netherlands, 1984 (U.S. distributor, Kluwer, Hingham, Mass.). xii, 654 pp., illus. $145. Monographiae Biologicae, vol. 54.

Shoji Horie has devoted the last 15 years to a broadly interdisciplinary study of Lake Biwa, a large deep lake in central Japan. The book includes chapters on the stratigraphy, structure, and geomorphology of the bedrock basin, on the physical, chemical, and biological characteristics of the modern lake, and on the stratigraphy of the lake sediments. Anyone who has been stimulated (or overwhelmed) by the nine annual volumes of research papers on Lake Biwa that have been widely distributed since 1972 should welcome this summary book, which reveals the high level of Japanese geological and limnological research. In view of the increased international interest in the limnology and especially the paleolimnology of large old lakes—an interest strongly promoted by Horie's international efforts—the book provides a model for a comprehensive plan of investigation and reporting. It should be a challenge to Soviet scientists to produce in English a comparable study of the biggest prize of all—Lake Baikal.

The basin of Lake Biwa was formed at least 5 million years ago, according to fission-track dates of associated volcanic ashes now exposed in terraces around the lake. The basin was originally three times the size of the present lake, and more than 1800 meters of sediment accumulated in the paleolake. It was initially connected to the Sea of Japan, and marine organisms now endemic to Lake Biwa entered the basin at that time. Periodic subsidence of the basin maintained a great depth for the lake through most of its history. It now has a maximum depth of 104 meters.

Interest in big lakes generally focuses on two aspects—their physical limnology and their sedimentary history, especially the long record of past climatic changes. The limnology of the lake is described in the book in chapters dealing with the water budget, currents, and seiches. Other chapters are concerned with the inorganic and organic chemistry, the plankton, macrophytes, fishes, and other organisms, and the sedimentary processes and chemical interchanges at the sediment surface. Analysis of the nitrogen budget in the lake indicates that most of the organic matter produced in the photic zone is decomposed within that zone, and almost all the rest is decomposed in the deeper water or on the sediment surface; only 1 percent of the total organic production is permanently buried in the sediment.

The lake history was determined from diversified analysis of a core 200 meters long obtained where water depth was 65 meters. The sediment consists largely of clay, in which 30 layers of volcanic ash are intercalated. The uppermost sediment was dated by the ^{210}Pb and ^{14}C methods, and the remainder by fission-track analysis of the zircon in six layers of volcanic ash, indicating that the entire section spans about 500,000 years. A comparable total age was estimated by stratigraphic analysis of the bulk density of the sediment and by calculation of the compression as a function of depth. The resulting chronology is used to date paleomagnetic reversals at about 100,000 years ago (Blake event) and 160,000, 310,000, and 380,000 years ago (Biwa I, II, and III events). A correlation was noted between reversals and minima in the curves for organic carbon, and it is postulated that low magnetic fields at the time of reversals (and at some other times) affected the climate, which in turn controlled the synthesis (or the decomposition) of organic matter in the lake.

A high proportion of organic carbon in the sediments is also closely correlated with high ratios of ^{12}C to ^{13}C. This relation is explained by the fact that phytoplankton, as compared with other lake organisms, is enriched in ^{12}C and that warmer climates (as indicated by pollen studies) result in increased phytoplankton production, represented by increased organic carbon and increased content of diatom remains. The very lowest values for ^{12}C (cool climatic intervals) correlate with the magnetic reversals and deep excursions, leading to the further speculation that the isotopic composition of atmospheric CO_2 (and thus of phytoplankton) was controlled by the geomagnetic field. It is acknowledged that correlation of these postulated cool phases with the conventional late Pleistocene climatic chronology is not particularly satisfactory—for example, a modest excursion is correlated with the Late Wisconsin glaciation, but the full Blake reversal event occurs within the Sangamon interglaciation.

Measurements of bulk density and particle size in the clayey sediment show certain systematic variations that lead to complex paleoenvironmental reconstructions. The correlation of lower density with larger particle size is attributed to the transport of coarser particles to deep water by turbidity currents, which result from increased runoff and erosion in the catchment and thus from rainy phases in the regional climatic history. The efforts to relate bulk density to aspects of particle size, volcanic-ash content, paleomagnetic reversals, carbon isotopes, carbon-nitrogen ratios, pollen stratigraphy, and Milankovich cycles are ingenious, especially when supported by suggestions for mechanisms, but the curve-matching on which the correlations are based is not always convincing, despite smoothing techniques that attempt to reduce the noise in the curves.

Pollen analysis was completed on the entire 200 meters of core at intervals of 5 meters, thus with a spacing of a few thousand years near the top of the core