The Study of City Life

Exploring the City. Inquiries toward an Urban Anthropology. ULF HANNERZ. Columbia University Press. New York, 1980. xii, 378 pp. \$15.

As the primitive world recedes or becomes less available, anthropologists have increasingly tried their hand at studies of urban places. When they do so are they becoming just another kind of sociologist, or do anthropologists have something distinctive to contribute to the study of cities? This is the broad question that preoccupies Ulf Hannerz's Exploring the City. Hannerz is a highly respected urban anthropologist. His views are informed by sustained research experience as well as a detailed appreciation for the literature. What he has to say deserves the attention of anthropologists, sociologists, and urban geographers.

The book begins by retracing the development of the "Chicago school" of urban ecology. While Hannerz makes many of the conventional criticisms of that school, he does not regard it as a "false start" but as a first start for giving his own work thematic unity. It is especially Wirth's emphasis on the size, density, and heterogeneity of urban places that he sees as bringing the individual back into the city in a way that is compatible with the humanistic interests of anthropology. Despite Wirth's emphasis on urban market forces. Hannerz finds in his work a recognition of urbanites' efforts to regroup their lives along voluntaristic lines.

Hannerz also reviews the extension and revisions of this approach as they have occurred in the hands of Redfield, Singer, Harris, Wheatley, and Adams (to mention a few). To my mind this is the most effective section of the book because it brings together a very coherent body of work that is scattered in several disciplines. Hannerz elaborates Redfield and Singer's conception of orthogenetic and heterogenetic cities so that it can be employed in studies of early urbanization and the shifting functions of cities in the modern world. Unfortunately he abandons this part of his analysis for the rest of the book because he then turns to the southern African studies carried out at the Rhodes-Livingstone Institute and their failure to resolve the question of what should be the scale at which ethnographic studies are carried out. Without saying so directly, Hannerz seems to accept the idea that ethnographic studies must be local in character, taking the wider society as a context rather than as an object of study. This draws him into an extensive examination of network analysis and a view of the city as a "network of networks." It also attracts him to the microanalysis of face-to-face relations provided in the works of Erving Goffman.

In a final chapter and appendix, Hannerz attempts to bring these various views of the city together in a socialnetwork approach to role differentiation and allocation along five dimensions: household and kinship, provisioning, recreation, neighboring, and traffic. The first four dimensions are familiar ones from role analysis, and the last attempts to capture a host of transient and segmental relations that Hannerz (following Wirth) sees as especially distinctive of urban life. Hannerz does not press for the exclusive advantages of this approach and takes great pains to be evenhanded in his characterization of alternative ways of going about urban anthropology. Nonetheless, it seems to me that the direction he takes is a step backward. Network analysis tends to be extremely descriptive when it is not guided by some overarching theory of urban structure and development. The ecologists, geographers, and economists may provide us with incomplete macrotheories of urban development, but they certainly help us single out what is significant. Also, why should anthropologists focus their work on microanalysis? Ethnography is only one of the methods they use, and that method can be accommodated to the study of large-scale institutions and organizations if not huge populations. Finally, Hannerz leaves out of his analysis any direct attention to political roles and institutions. This omission would leave anthropologists with only duller portions of city life and repeat one of the major weaknesses of the Chicago school itself.

What Hannerz does do is bring into sharp relief the multitude of relatively transient or "weak" relations that help make up city life and the degree of voluntarism that characterizes these relations. Here, indeed, network analysis and the manipulative face-work of Goffman may be especially valuable in understanding a slice—but only a slice—of urban life.

GERALD D. SUTTLES

Department of Sociology, University of Chicago, Chicago, Illinois 60637

A Microbiologist Once Famous

Noguchi and His Patrons. ISABEL R. PLESSET. Fairleigh Dickinson University Press, Rutherford, N.J., 1980. 314 pp. \$25.

Fifty-three years have passed since the tragic death of Hideyo Noguchi. From a high pinnacle of fame, his reputation has receded considerably. His name is seldom encountered in current medical literature. Shortly after his death in 1928, biographies in English and Japanese, as well as numerous tributes from colleagues, appeared. These were mostly laudatory in tone without critical examination of his work. Theobald Smith clearly exaggerated when he said, "he will stand out more and more clearly as one of the greatest, if not the greatest, figure in microbiology since Pasteur and Koch.'

The author of this book has produced a comprehensive biography of Noguchi describing his failures as well as his triumphs. Surely, Noguchi's rise from an impoverished farm family in a remote Japanese village to full membership in the Rockefeller Institute and the winning of the highest acclaims of European, American, and Japanese learned societies warrants reevaluation.

Noguchi's first tragedy was to fall into a household fire as an infant, severely burning his left hand. This deformity was a heavy handicap throughout his life. With little financial support Noguchi managed to get an education, graduating finally in his 21st year from a second-rate proprietary school of medicine in Tokyo. He early demonstrated the characteristics that were of value in his career. These were: an ability to gain the friendship of important people; a capacity for long work hours; and a facility in acquiring new languages. In addition, he had a powerful ambition to succeed on a grand scale.

While occupying a lowly post in the Kitasato Institute in 1899, Noguchi was fortunate to meet Simon Flexner, then on a short visit to Japan. Flexner spoke about possibilities for graduate research programs in America. He was greatly surprised when Noguchi turned up penniless in Philadelphia, where Flexner was head of pathology at the University of Pennsylvania. A small grant for the study of snake venoms was obtained for Noguchi, who pursued that study intermittently for years, publishing some 20 scientific reports on the subject.

In 1904, following a year on a fellowship study with Madsen in Copenhagen, Noguchi was appointed to a staff position at the Rockefeller Institute. He remained with the Institute for his lifetime.

Noguchi attacked his research problems with energy and developed great skill in laboratory procedures. He was by preference a lone worker and rather secretive about his investigations. Over a period of just over a quarter of a century, Noguchi published some 200 scientific papers. Some of his studies were of high quality, such as: confirmation of Treponema pallida as the cause of syphilis; discovery of T. pallida in the brains or spinal cords of patients with paresis or tabes; cultivation of the agent of Bartonellosis and the proof that Oroya fever and verruga peruana were different manifestations of the same disease; and studies on the morphology and cultivation of various spirochetes including Leptospira icterohaemorrhagiae.

On the minus side, Noguchi's claims to have cultivated the organisms of syphilis, rabies, poliomyelitis, and trachoma were not confirmed by others. His claim to have established *Leptospira icteroides* as the agent causing yellow fever proved to be a fiasco and led indirectly to his fatal infection with yellow fever virus.

Flexner became a "father figure" to Noguchi, and some believe that Noguchi held that stern administrator in such awe that he felt pressured to turn out a steady stream of brilliant results.

Perhaps the chief lesson to be learned from a study of Noguchi's career is that the eminence of an investigator should not preclude a thorough testing of his scientific reports.

In producing a credible picture of Noguchi's personality and a fair assessment of his professional career, Plesset has succeeded admirably. In Japan, Copenhagen, and New York, she interviewed Noguchi's surviving relatives, friends, and former colleagues. The book is well written and carefully documented. Students of the history of microbiology and those interested in the early days of the Rockefeller Institute will find it a valuable source of information.

Нидн Н. Ѕмітн

1200 East Ina Road, Tucson, Arizona 85718 24 APRIL 1981

Metal Artifacts

Pre-Columbian Metallurgy of South America. Papers from a conference, Washington, D.C., Oct. 1975. ELIZABETH P. BENSON, Ed. Dumbarton Oaks Research Library and Collections, Washington, D.C., 1980. x, 208 pp., illus. \$11.

Despite gaps in the coverage resulting from the omission of some of the papers given at the original conference, this volume manages to convey a very good idea of current research directions in South American metallurgy. It also makes clear, by indirection, the monumental problem facing scholars attempting solid research in this field.

The first of the six papers in the volume, by Lechtman, is an outstanding example of an approach now being essayed in many studies of ancient technology, in which technical analyses become first a means of reconstructing technological processes and then a source of information on the history and socioeconomic significance of the craft, and on broader aspects of prehistory.

In an examination of the shift from copper to bronze and the use of the harder metal in the Middle Horizon (around A.D. 600 to 1000). Lechtman is able to provide convincing documentation for the development of two separate metalworking centers in the northern and southern Andes. Though data on the south are scarce, she discerns a center of copper-tin bronze production there, while arsenic bronze was utilized in the north, apparently the result of local in-

novation. In addition to describing the smelting techniques involved in the two types of bronze production, she discusses ore sources as a determinant of the development of the separate traditions. She then addresses the matter of near-universal use of tin bronze under the Inca, concluding that the phenomenon must be explained in political rather than technological terms. Turning from bronze to copper-silver and copper-gold (tumbaga) alloys, Lechtman examines in depth the development and persistence of techniques of surface enrichment in the Andes. Here, as with bronze, she views metalworking within the framework of the ideological system, and provides explanations for the invention and distribution of the allovs that go far beyond mere technical analysis of artifacts. She suggests that the study of metallurgical traditions may provide a basis for the general interpretation of Andean technology; her paper is clearly a giant stride toward such interpretation.

Fortunately Lechtman was able to limit her study very largely to material from controlled excavations, as was Gonzalez in a survey of metallurgy in northwest Argentina that combines data on contexts and associations with typological and technical analyses and presents an organized overview of metalworking on the southern fringe of the Andean zone.

The other major paper in the volume is an extensive study by Jones of Mochica metal artifacts, among the best known in a metallurgically rich area. Jones deals with the artifacts as objets d'art, summarizing the tremendous variety of



Ceremonial axes from northwest Argentina, Late

Period. The ax on the left has its handle in one piece with the blade; that on the right has a socket for a handle. [Museo de La Plata, Universidad Nacional de La Plata; from A. R. González's paper in *Pre-Columbian Metallurgy of South America*]