Book Reviews

Personality and Culture

Six Cultures: Studies of Child Rearing. Beatrice B. Whiting, Ed. Wiley, New York, 1963. viii + 1017 pp. Illus. \$12.50.

This report of six parallel studies of child rearing and its consequences involves six cultures, six ethnographic teams, and six extraordinarily different sets of field problems. Yet, for once, the data are truly parallel and sufficiently comparable to offer the possibility of quantification in ethnography at the data-collection level and not only afterthe-fact, as the cross-cultural area files.

To social science, an important area of investigation is the effects of divergent cultural practices that are involved in rearing the young of the species. Adult personality is thought to result in large measure from experiences and training, starting in infancy and going through the early childhood years. However, the relationships between specific practices and specific aspects of personality are just beginning to be firmly nailed down, and the effects of interaction between the cultural beliefs, the constitutional factors of a given child or group, and the particular ways of a given mother still need a great deal of elucidation.

Since experimental manipulation of the environment in which children grow up is not feasible in most aspects of their lives, naturalistic study of parents' behavior, obtained by observation or report, and related to personality indices of children and adults, has been the method of choice. For our own culture there is now a sizable body of knowledge derived from such research, with sufficient confirmation to allow certain relationships to be regarded as well established.

Six Cultures: Studies of Child Rearing represents a major contribution to the broadening of such knowledge.

Here we have careful study of six widely divergent cultures-one is a small New England town and the others are in Kenva, in Khalapur (India), on the island of Okinawa, in Mexico (a small barrio at Oaxaca), and in the Philippines. The work has been carefully systematized so that the same information is available from each culture. Comparisons among the six are thus possible to an extent rarely found in previous anthropological literature. Each of the cultures has been studied and reported by a different pair of investigators; however the work was coordinated by common theory, questions, and techniques. Initially all of the investigators received a common period of training, and they followed agreed-upon techniques of investigation as they worked in the field.

Both adult and child behavior are given extensive coverage, in some cases by the use of comparative statistics (for example, of crime and education) and in others by observer reports on certain activities (such as leisure time and typical work patterns). Folk tales, religious beliefs, and theories of disease are given attention as indices of adult personality patterns. The authors summarize the conceptual scheme in the following way: ". . . ecology, economics, social and political organization are viewed as setting the parameters for the behavior of the agents of child rearing. Child behavior is viewed as an index of child personality, and adult behavior, beliefs and values as indices of adult personality" (p. 5). The childrearing practices may then be regarded as arising out of, and designed to carry forward, the culture of the adults.

There is a wealth of descriptive ethnographic material here. Each of the six monographs is fascinating reading in its own right; each provides provocation with respect to the formulation of hypotheses about the effects of the socialization process. Comparison of one culture with each of the others can be done on a great number of dimensions, and will provide some preliminary checks on such hypotheses. Subsequent publications from the same research project will present quantitative data that will permit tests of clear hypotheses, both intraculturally and cross-culturally.

The volume, which is the work of a team of researchers, was edited by Beatrice B. Whiting; the senior investigators were Irvin L. Child, William W. Lambert, and John W. M. Whiting. The field workers (and also the authors of the monographs that describe the six cultures) were Robert LeVine and Barbara LeVine (Nyansongo: A Gusii community in Kenya); Leight Minturn and John T. Hitchcock (The Rajputs of Khalapur, India); Thomas W. Maretzki and Hatsumi Maretzki (Taira: An Okinawan village); Kimball Romney and Romaine Romney (The Mixtecans of Juxtlahuaca, Mexico); William F. Nydegger and Corinne Nydegger (Tarong: An Ilocos barrio in the Philippines); John L. Fischer and Ann Fischer (The New Englanders of Orchard Town, U.S.A.). **PAULINE S. SEARS**

Stanford University

A Synoptic Approach

Animal Physiology. Bradley T. Scheer. Wiley, New York, 1963. xii + 409 pp. Illus. \$9.95.

Bradley Scheer's other books, *General Physiology* and *Comparative Physiology*, are well known. The present book *Animal Physiology* is not a revised amalgam of the previous volumes but a synoptic approach to animal physiology as opposed to human physiology, cell physiology, or comparative physiology.

The book is divided into four sections: I, Metabolism (84 pp); II, Irritability (81 pp); III, Vegetal activity (112 pp); IV, Integrative functions (108 pp). The number of pages, and hence the balance given to the various topics, is as follows. In Section I: Biological oxidation, 30 pages; energy transformation, 13; cell structure, 20; functions of cell boundaries, 13. Section II: Excitation of animal cells, 9; contraction of muscle, 17; excitation of receptors, 35; transmission of excitation, 11. Section III: Nutrition, 30; body fluids and respiration, 26; circulation of body fluids, 20; intermediary

SCIENCE, VOL. 142