Book Reviews

How a baby grows: a story in pictures. Arnold Gesell. (With over 800 photographs, arranged and interpreted with the assistance of Katherine Gesell Walden.) New York: Harper, 1945. Pp. 77.

Few scientific careers have been marked by such continuity and concentration of effort as that of Dr. Arnold Gesell. His interest in the young child dates back at least to 1905, when, as a young graduate student, he reported in Professor Burnham's seminar at Clark University on Pestalozzi and Preschool Education. When, a half dozen years later, he completed the manuscript of his first book, The normal child and primary education, he was already committed to a lifetime of research on the young child. In order to prepare himself more adequately for his chosen work, he entered upon and completed a medical course at Yale University. Since that time he has authored about twenty volumes, several monographs, and scores of articles on infant and child behavior. Techniques developed in his laboratory at Yale include cinema analysis of behavior patterns and pattern phases, biometric and clinical procedures for the study of maturational differences, the method of co-twin control, and the now-popular screen for one-way visual observation. Among his most important publications are Mental growth of the pre-school child: an atlas of infant behavior (two volumes, 3200 action photographs); The first five years of life: a guide to the study of the pre-school child; Twins T and C from infancy to adolescence (with Thompson); Developmental diagnosis: clinical methods and practical applications (with Amatruda): Infant and child in the culture of today (with Ilg); and The embryology of behavior.

The book here reviewed is a picture story intended to illustrate "the hidden forces of growth which shape the baby's behavior day by day, month by month." There are in all about 800 photographs, selected and arranged to illustrate average trends with respect to (1) control of body and conquest of the physical world, and (2) the development of personality, emotional life, and social adjustments. Topics covered bear the following titles: Infant eyes, Infant hands, Infant feet, Creeping, Babies are not alike, Natural exercise, Sleep, The sense of touch, Play, The bath, Sitting, The baby stands, Infant and family, The patterning of personality, A mirror playmate, Crying, Smiling, Language behavior, A baby's day at twelve weeks, A baby's day at thirty-six weeks, Behavior patterns at one year, Learning and growth, The first three months, The second three months, The third three months, The fourth three months, Early drawing, Block building, The pre-school years, The school beginner, Inborn individuality, Infants are individuals.

Each topic is prefaced by a brief introduction and followed by anywhere from twelve to forty descriptively labeled photographs. The ontogenetic story told in these pictures and the accompanying text is simple enough to be grasped by any intelligent layman, yet interesting to the scientist because the photographs are representative of average growth and behavior. It is, therefore, both a primer and an authentic outline of child development. The author emphasizes, however, that no one baby can be expected to follow the average pattern and that all children are individuals with distinct personalities.

The task of preparing such a booklet was far less simple than might at first appear, for it involved the selection from thousands of photographs just the few hundred that would give the most accurate bird's eye view of typical behavior development. It is a story that no one else could have told so authoritatively; Gesell alone has such a wealth of photographic materials from which to draw and so rich a background of psychological and pediatric experience for their interpretation.

Here, as in all of Gesell's writings, we see not only the meticulous investigator but one who is also keenly aware of the dramatic aspects of his data—a scientist who has something of the poet in his make-up.

LEWIS M. TERMAN

Stanford University

The Maya of East Central Quintana Roo. Alfonso Villa R. Washington, D. C.: Carnegie Institution of Washington, 1945. Pp. xii + 182. (Publication 559; illustrated.) \$2.25.

The Mexican ethnologist, Alfonso Villa R., has in this volume produced a careful monographic study of the so-called X-Cacal tribe of partially acculturated Maya Indians of the chicle forest region of Quintana Roo, of the southeastern part of the peninsula of Yucatán. The community to which most attention was given is Tusik, and the group as a whole is culturally the most isolated of the area. The study was undertaken as part of a general plan of investigation involving four communities ranged on a "gradient" of acculturation or transition from relatively primitive (folk) culture through various stages of change to the culture of the modern city of Mérida, Yucatán. The study as a whole was carried out under the auspices of the Carnegie Institution of Washington and was directed by Dr. Robert Redfield, who has summarized the data and theoretical principles in his book, The folk culture of Yucatan (1941). The present monograph deals with the most "'primitive" or "least civilized" of the four groups involved.

The author has proceeded with great meticulousness not only to set down the present-day culture of the people but to reconstruct, so far as possible, the aboriginal culture of their Maya ancestors of the region and the historical vicissitudes to which the culture and the area have been subjected. As a straight ethnographic account, therefore, the book rates as a model monograph.

No one should suppose, however, that the "primitive-