

tion with the rapid progress of astronomy, and to improve the methods of presentation.

*Consider the Heavens.* By FOREST RAY MOULTON. xi + 332 pages, 15 × 23 cm. Doubleday, Doran and Company, New York, 1935. Price, \$3.50.

THE author of this book for the general reader again demonstrates his ability to tell the story of the heavens in a clear and entertaining style. Into his accounts of the celestial bodies and their ways he introduces much of the romance of astronomy, and his belief that order prevails in the universe. Of the fifteen chapters, the one on the origin of the planets is especially welcome, in view of Dr. Moulton's well-known contributions to the subject. The closing chapter on "All Things Change" provides material for reflection on the significance of the picture of the universe that has been presented.

*Handbook of the Heavens.* Edited by HUBERT J. BERNHARD, DOROTHY A. BENNETT and HUGH S. RICE. xvi + 131 pages, 15 × 23 cm. Whittlesey House, New York, 1935. Price, \$1.00.

THIS "Simple Introduction to the Study of the Stars" was written by members of the Junior Astronomy Club of the Museum of Natural History, New York. Well illustrated, it contains descriptions of the constellations in their seasons, and of the sun, moon, planets, meteors and stars. Young readers, and older ones as well, will find here many suggestions out of the authors' experience for observing the heavens with or without the telescope. And they are likely to be stimulated by the spirit of eager inquiry which pervades its pages. The foreword is a greeting from Dr. Harlow Shapley.

*Highlights of Astronomy.* By WALTER BARTKY. viii + 280 pages, 17 × 23 cm. The University of Chicago Press, Chicago, 1935. Price, \$2.50.

WRITTEN expressly for an orientation course in the University of Chicago, the chapters of this book conform closely to the conventional sequence, beginning with the earth and its motions, and ending with the sidereal universe. They open brightly with verses and modernistic sketches doubtless designed to lead the student on to the somewhat more difficult matter ahead. Simple charts are included to aid in locating the stars and planets.

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### INFANT APE AND HUMAN CHILD

*Infant Ape and Human Child (Instincts, Emotions, Play, Habits).* By N. KOHTS. Moscow, 1935, pp. xvi + 596, with 145 plates. (Published in Russian, with English summary.)

THE author, wife of Professor Alexander Kohts, founder and director of the Darwinian Museum, Moscow, USSR, presents a long-delayed sequel to her volume on chimpanzee intelligence, which was published in 1923.<sup>1</sup> These two volumes, and a third, which is projected, on the "ability of the chimpanzee to distinguish form, size, quantity, and number, and his capability towards ascertaining likeness and dissimilarity, making analysis and synthesis" (p. 579), are based on naturalistic and experimental studies of an infant chimpanzee between the estimated ages of one and a half and four years, conducted from 1913 to 1916, and in the present volume on comparable studies of the son of the author from birth to four years of age, carried forward from 1925 to 1929.

Mrs. Kohts is a gifted observer, well informed, sympathetic, who with fidelity and exceptional insight describes and compares in these elaborate reports varied expressions of psychobiological characteristics in chimpanzee and man. Fortunately for non-readers of the Russian language, among which the reviewer is numbered, this book includes a comprehensive and extremely interesting summary in English, and in addition 120 pages of photo engravings which present hundreds of carefully selected photographic records. It is chiefly because of these illustrations, which indeed convert the volume into an atlas, that this review is presented to American biologists. The volume is primarily a pictorial and verbal account of emotional expression in chimpanzee and human infancy, and although the illustrations of Mrs. Kohts's earlier volume were superb in quality and of high scientific value, the present collection, in the reviewer's opinion, surpasses them in all respects. They constitute a rich mine of information: fascinating to those who seek entertainment, engrossing to those concerned with psychobiological problems. One need not be deterred from attempt to use this book by language handicap.

The work is constituted by three parts: (1) Behavior of the infant chimpanzee; (2) behavior of the human child; and (3) analysis of behavior of man and ape. Among the topics treated descriptively in these several parts are: physical characteristics and expressions, emotional expressions, instincts (feeding, property, nesting, sex, freedom, social, etc.), play, cunning and deception, use of tools, imitation, memory and language.

The following examples, chosen almost at random, will serve to illustrate the nature and quality of the author's comparisons. Anent destructiveness and effects of prohibitions the author remarks: "Many

<sup>1</sup> "Untersuchungen über die Erkenntnisfähigkeiten des Schimpansen." Moscow, 1923, pp. 453, with 16 plates. (Published in Russian, with a German translation of summary.)

common traits could again be observed in the destructive games of both infants. Such forms of activity as throwing, tearing and breaking seemed indeed to provide both subjects with a peculiar form of self-contained pleasure" (p. 536). "The behaviour of both Roody [boy] and Joni [ape] seems to give ample support to the truth of the saying: prohibited actions were just those to the performance of which both little ones would cling with the greatest steadfastness" (p. 537). "In performing prohibited actions both Roody and Joni would try as best they could to be cunning. They would often try to trick or deceive the observer . . ." (p. 538).

In general, the ape was more readily frightened than the boy, but he overcame his fears more readily and rapidly (p. 550), and whereas the chimpanzee lacked sympathetic feeling for smaller animals, the child was gentle and considerate (p. 551). This contrast appeared despite the fact of like environment for both subjects and efforts on the part of the observer to discourage ill-treatment of animals and to foster sympathetic behavior toward them (footnote, p. 552).

After a multitude of such interesting comparative statements based upon her prolonged study of these two primates, Mrs. Kohts thus sums up her findings: "(1) In the functional biological field: the chimpanzee totally ignores the possibility of walking erect and of freeing his hands for carrying weights. (2) In the sphere of imitation: the chimpanzee is devoid of imitation in so far as human sounds are concerned and generally fails to extend or improve his imitative behavior. (3) In respect of emotional altruistic and

social behavior: the chimpanzee fails to understand the advantages of friendly and sympathetic intercourse with creatures standing on a lower biological level than himself. (4) With regard to habit-forming: the chimpanzee does not improve in the motor habits connected with the use of tools and household implements. (5) In the sphere of playful behavior: he does not indulge in creative constructional play. It seems difficult to predict how far the chimpanzee *might* go by way of acquiring essentially human features, but one thing seems certain, and it is, that the chimpanzee—this strong, sanguine, strongly-willed and highly active animal—actually fails to possess any inherent tendency towards progressing in the above-outlined directions, his failing being especially plainly marked out in such domains where he is definitely handicapped or thwarted by nature" (p. 577).

Concerning these general comparative statements, the reviewer offers the comment that study of many chimpanzees ranging in age from infancy to maturity in Yale Laboratories of Primate Biology indicates the necessity for qualification and supplementation. Neither developmental status nor individuality may be ignored, and if Mrs. Kohts's descriptive statements and comparisons are accepted as generally true for Pan and Homo, serious injustice will be done to the facts. The opinion also is offered that the genus Pan is placed in a disadvantageous light in this volume, because what appears to be an ordinary or typical specimen of immature chimpanzee is compared with an obviously extraordinary example of mankind!

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## SOCIETIES AND MEETINGS

### THE EASTERN BRANCH OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

At the annual spring meeting of the New York Branch of the American Psychological Association, held at Fordham University on April 11, it was voted to change the name of the New York Branch, American Psychological Association, to "The Eastern Branch of the American Psychological Association."

In 1929 the New York Branch was reorganized and since then has held annual spring meetings at which the ratio of attendance has been larger than that of the American Psychological Association at its annual meetings. In recent years, the various branch meetings of the American Psychological Association have been highly successful. Many members of the New York Branch have felt increasingly that the time was nearing when the branch should increase its area. It was voted that its territory include the entire Atlantic

seaboard. This is to be construed that it may draw its membership from Florida to Canada, and westward to contiguous territory of whatever branch of the American Psychological Association may exist or may be formed.

At the business meeting the secretary reported that the branch membership numbered 225—the highest in its history. Dr. Samuel W. Fernberger, Pennsylvania, was unanimously elected honorary president for the year 1936–37. Directors elected were: D. H. Fryer, New York University, 1936–39; C. J. Warden, Columbia University, 1936–39; P. M. Symonds, Columbia University, 1936–38. The directors announced the appointment of the following committees: *Program Committee*—C. W. Bray, Princeton University, *chairman*; G. W. Hartmann, Pennsylvania State College; T. W. Forbes, New York State Psychiatric Institute; *Nominating Committee*—H. Helson, Bryn Mawr College, *chairman*; T. M. Abel, Progressive Education