

with special emphasis upon the mechanisms of identification, introjection, and projection, are viewed in their relationship to the primary and secondary symptoms of schizophrenia. The discussion paves the way to a consideration of the development of schizophrenic delusion. This material is presented through illustrative clinical histories.

Problems of transference and of interpretation shift the focus to the technique of psychotherapy. The contributions of Federn, Rosen, Fromm-Reichmann, and Sechehaye are reviewed and evaluated. The author formulates his interpretation of the events that occur during and after shock therapy. Here he introduces such terms as "psycho cerebral explanation" and "counter cathexis of the frontal lobe." The last third of the book covers the clinical manifestations, dynamic formulations, and therapy, chiefly of depressions. Elated states, latent psychoses, pharmacothymia, and paranoia are given brief consideration.

This brief paraphrasing of the topical content of the book is perhaps unjust in demonstrating that neither new and illuminating theoretical formulations nor new techniques in therapy are introduced. But this apparently was not the author's objective. As a "synthesis of present knowledge" it achieves a broad survey of psychoanalytical contributions to the dynamic theory of the psychoses. A valuable perspective is added in calling attention to the contributions of investigators whose work lies tangential to the psychoanalytical approach. The references given, often with some evaluating comment by the author, provide a readily accessible key to the pertinent literature.

In bringing together in comprehensive form the theoretical formulations and main currents of thought that underlie a sound approach to therapy, a synthesis is achieved, which in some respects is a very individual one. Within this particular synthesis, the values assigned to some major concepts—as for example "regression" and "ego strength and ego weakness"—are internally consistent. The reader is free to make his own interpretations of what constitutes a hypothesis, a description, or an explanation. A most rewarding contribution of the book lies in its demonstration of the continuity and relatedness of psychic processes as they develop in the life history of an individual, and as they may differentiate and unfold towards opposite poles of "normality" and "psychosis."

MARIA LORENZ

King Solomon's Ring

Konrad Z. Lorenz

New York, Thomas Y. Crowell Co., 1952,
202 pp., \$3.50.

In any person interested in animal behavior, this book will arouse enthusiasm and generous impulses; this reviewer has sent five copies to his biologist friends! The author is an Austrian, son of the well-known professor of orthopedics in Vienna. He did much of his work on the Danube, but has traveled much and spent recent years in Muenster. His close relation to the English school of biology is indicated by his dedicating the book to Mr. and Mrs. J. B. Priestley and by Julian Huxley's foreword. This begins by saying:

"Konrad Lorenz is one of the outstanding naturalists of our day. I have heard him referred to as the modern Fabre, but with birds and fishes instead of insects and spiders as his subject-matter. However, he is more than that, for he is not only, like Fabre, a provider of an enormous volume of new facts and penetrating observations, with a style of distinction and charm, but in addition has contributed in no small degree to the basic principles and theories of animal mind and behavior. For instance, it is to him more than any other single man that we owe our knowledge of the existence of the strange biological phenomena of 'releaser' and 'imprinting' mechanisms.

"The reader of this book who has followed the account of how Lorenz himself became 'imprinted' on his baby goslings as their parent, or how his jackdaws regarded him as their general leader and companion, but chose other corvine birds (so long as they were on the wing), as flight companions, and fixed on his maid-servant as a 'love-object'; or how certain attitudes or gestures on the part of a fighting-fish or a wolf will act as releasers to promote or inhibit combat reactions in another individual of the species, will realize not only the strangeness of the facts but the fundamental nature of the principles that underlie them."

There are fascinating chapters on the water shrew, the relation of dogs to man, and language in animals. By close association and companionship with unrestrained birds he has gained a remarkable insight into their mental processes. He heartily dislikes the anthropomorphic explanation of amateur naturalists. He gives many examples of complex social reactions, pointing out the great superiority of many "lower" animals

to man in sensory perception. In relation to language, he says:

"Animals do not possess a language in the true sense of the word. In the higher vertebrates, as also in insects, particularly in the socially living species of both great groups, every individual has a certain number of innate movements and sounds for expressing feelings. It has also innate ways of reacting to these signals whenever it sees or hears them in a fellow-member of the species. The highly social species of birds such as the jackdaw or the graylag goose, have a complicated code of such signals which are uttered and understood by every bird without any previous experience. The perfect co-ordination of social behavior which is brought about by these actions and reactions conveys to the human observer the impression that the birds are talking and understanding a language of their own. Of course, this purely innate signal code of an animal species differs fundamentally from human language, every word of which must be learned laboriously by the human child."

In speaking of sex people often refer to the "animal side" of human love, or call it "bestial." Lorenz shows that many animals mate for life, that only a brief mating season each year brings coitus into prominence, and that most of the lives of these animals is spent in a close and useful companionship. In fact it brings up the possibility that man as well as some of his domesticated pets has lost a breeding season and is much more constantly obsessed with sexual preoccupation than some of the wild beasts.

Remarkable examples are given of the effect of mating on the "pecking order" of jackdaws. The chosen female takes the social status of her mate, and if this gives her a marked rise in "pecking order" situations occur which cause much amusement to the human observer because of its resemblance to small-town snobbery. But Lorenz warns:

"You think I humanize the animal? Perhaps you do not know that what we are wont to call 'human weakness' is, in reality, nearly always a pre-human factor and one which we have in common with the higher animals? Believe me, I am not mistakenly assigning human properties to animals: on the contrary, I am showing you what an enormous animal inheritance remains in man, to this day."

For psychiatrists who talk about "instincts" and "instinctual behavior" this book should be invaluable.

S. C.

Research in Endocrinology

August A. Werner, M.D., and Associates
(Edited by Al R. Schmidt, City Editor of the
Belleville Daily Advocate)

Belleville, Illinois, A. A. Werner, 1952,
285 pp., N. P.

It is not clear whether this book is written by or assembled as a tribute to Dr. Werner. The first four chapters include lists of publications, biography, poems by Dr. Werner, and suggestions formulated by him for success in life. These sections will be of interest chiefly to his friends. The last chapter reprints sixteen articles which have appeared in the medical literature from 1931 to 1946. They are chiefly concerned with his reports of the effects of estrogens and testosterone used therapeutically. He supports the thesis that involuntional melancholia in women is due solely to hypo-ovarian function and that estrogens are curative. He believes involuntional melancholia in men is an extreme form of the male climacteric. He and his editor appear to regard many questions concerning endocrine physiology and psychiatry as settled, whereas these questions are being studied intensively at the present time.

GARDNER C. QUARTON

Visceral Innervation and its Relation to Personality

A. Kuntz

Springfield, Ill., Charles C Thomas, 1951,
152 pp., \$4.50.

Dr. Kuntz has given us a valuable summary of visceral neurology in this small volume of the "American Lecture Series." The main chapters on "General Plan of Somatic and Visceral Innervation," "The Autonomic Nerves," "Reflex and Integrating Centers," and "Innervations of Specific Viscera," are excellently done. Chapter IV on "General Physiology" is less illuminating. Chapter VI on "Visceral Neural Factors in Personality" takes the author into deeper waters. In the first place, Kuntz uses the term "somatic" to refer to the exteroceptive system only, the striated muscles and sensory and motor nerves related thereto. Viscera and the visceral autonomic motor nerves and the sensory afferents make up the interoceptive system, which is not "somatic." This is a good classification and similar definitions have been acceptable to great anatomists such as C. J. Herrick. It will cause