

tion, defining homology, analogy, etc., and describing protoplasm, the cell, etc., and mentioning some names and dates in the history of zoology, the rest of the book is arranged according to the present classification of animals, beginning with the Protozoa, and systematically discussing systematic zoology with orders and sometimes suborders for units. The systematic consideration of the Metazoa is preceded by a fifty-page discussion of the tissues, organs and development of the many-celled body.

Where all animals are touched on none can be adequately considered. Text-books of zoology which get in the name of every order of living animals are misnamed; they are dictionaries of systematic zoology, catalogues of the animal kingdom. The beetles, of which there are 12,000 known species in North America—and how many thousand in the world?—with a variety of form and habit comparable in extent with that of the endless pattern pictures of a busily handled kaleidoscope, get one page and one figure of this book. Three fourths of this page are given to dividing beetles into four suborders. Why not make it one line, and be more truly and just as effectively a catalogue and less a pretense of being something else? The rest of the page could then go to the needed expansion of the account of the special structure and physiology of the class of insects. The student who is going to study beetles beyond the name Coleoptera has no possible use for one page and a subdivision into four suborders. He must have thirty pages and half of the families if he is to go a single step forward in their systematic study, or as many pages as he can have, with no subdivision, if he is to get a glimpse of their life and habits. The author, in trying to get all the animals catalogued in his 'Lehrbuch,' makes of it no text-book at all, and a sort of catalogue vastly inferior to a professed synopsis like Leunis's.

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*L'Hypnotisme et la Suggestion par le Dr. Grasset.* Paris, Octave Doin. 1903. 8vo. Pp. 534.

The culmination point of the contributions to the literature of hypnotism was reached

quite a number of years' ago. There was a period when the contributions to this topic quite overshadowed those to any other division of abnormal psychology. Dessoir issued in 1890 a supplement to his bibliography of hypnotism first issued in 1888, and recorded nearly four hundred titles to the credit of these two years.\* The more recent contributions that have been comprehensive in scope have likewise been more selective in purpose. Some have been devoted to the analysis and description of the psychology of suggestion; others to the therapeutic applications; others to the analogies between that and other states normal and abnormal. As a number of the International Library of Experimental Psychology now appearing in fifty volumes under the editorship of Dr. Toulouse, there has appeared a volume on 'Hypnotism and Suggestion,' of which the author is Dr. Grasset, of the University of Montpellier. As the representative of this library, the volume on hypnotism will command wider attention than would be accorded it as an independent contribution.

It can not be said that the volume, though it compares favorably enough with many others that have appeared, really adds much of note or illumination to the present status of the subject. It does, indeed, bring forward with a fair sense of their relative importance the several problems that are most worthy of attention in contemporary psychology. It wisely dispenses with much introductory or historical matter, which in former compends found a somewhat undue place. It recognizes that the fundamental problem, the

\* Beginning with 1896, the number of entries for this group of topics in the 'Psychological Index' is 51, 84, 154, 143, 77, 35, 35, 28. These numbers are not comparable, since the falling off in the more recent years is in part due to a subdivision of the topics that brings 'Hypnotism' into a separate division in the later but not in the earlier years. Parallel with this, there is some widening of the scope of the 'Index' since its foundation. None the less, the 'Index' shows the general falling off in the productiveness of this topic. Such falling off is a welcome consummation, so far as it represents the cessation of wordy and unorganized—not to say amateur—contributions.

solution of which will determine the status of hypnotism, of suggestion and of other varieties of mental states, is the problem of the subconscious and its relation to the ordinary form of mental action. Dr. Grasset's solution of this problem, or rather his attitude towards it, is not helpful. His discussion thereof is more like a logomachy than a psychological analysis, and his use of his favorite diagram decidedly illogical. He accepts the hypothesis, now current in such diverse forms, of two separate forms or types of psychic expression; by the letter *O* he designates the superior form of psychic action or the highest center; the *O* stands at the apex, and dependent thereon and with connections between them, are the members of the group of inferior psychic centers arranged in the form of a polygon. By this painfully artificial representation the words 'polygonal' and 'suspolygonal' become synonymous with subconscious and subvoluntary sources of action. We read of the 'dissociation of the polygon' of the individual, of 'polygonal spontaneity,' of 'polygonal patients or maladies' and other confusing and absurd expressions. This type of logicity is hardly pedagogical. It must also be added that the author's attitude towards many other questions of fact and interpretation are far from commendable. His reference to the independence of the action of the two hemispheres of the brain as proven by the phenomena of hypnosis, and his acceptance of questionable hypotheses in regard to the nervous substrata of hypnotic behavior, are instances in point. His entertainment of the hypothesis of telepathy and clairvoyance—though he believes that neither of these is proven—suggests weakness of grasp of their status, rather than judicial toleration.

The author's main positions are these: that there is a real hypnotic state, distinct from suggestion, marked by independent physical signs as well as by increased suggestibility; that the source of this state is in the dissociation or disaggregation of the subconscious psychic mechanism; that though normally the higher and lower psychic centers act in complexly coordinated, unified manner, in abnormal states—of which hypnosis is one great

type—they act separately; that hypnosis does not present sufficient analogies to sleep or to any normal mental state to be affiliated with it or interpreted by it; that a significance may be given to spiritistic or mediumistic phenomena analogous to the various states and types of hypnosis; that the phenomena of normal suggestion, which in the conception of the Nancy school is made almost synonymous with the acquisition of ideas, are not truly analogous to the increased suggestibility characteristic of the true hypnosis. These are all debatable positions that yet await a more competent master to set forth their bearing and value for experimental psychology. Dr. Grasset contributes something of value to the consideration of these positions, but not what one has a right to expect of a volume that is presented as authoritative in character. It only remains to add that there are the usual chapters upon the medical and legal aspects of hypnotism, and interesting, though somewhat prolix and not properly systematized presentation of the facts of hypnotism, and a better index than the average of French books offers. It is to be hoped that the further volumes of this series, the contributors to which include a few American names, will meet a higher standard. The ten volumes already published give the impression of very unequal care in their preparation and merit in their authors. Some of the volumes are distinctly commendable. May the rest prove to be so!

J. J.

#### SCIENTIFIC JOURNALS AND ARTICLES.

*The Plant World* for April contains the fifth of the 'Extracts from the Note-Book of a Naturalist on the Island of Guam,' by W. E. Safford. 'Monocotyledons or Dicotyledons,' by J. Arthur Harris, calls attention to the fact that there are some plants whose position in this respect is very puzzling, and briefly discusses the question which of the two forms is the older. George V. Nash describes 'The Palm Collection at the New York Botanical Garden,' and there is much of interest in the section on 'The Home Garden and Greenhouse.'