

BOOK-REVIEWS.

Psychologie im Umrissen auf Grundlage der Erfahrung. Von Dr. HARALD HÖFFDING. Tr. from the Danish by F. BEN-DIXEN. Leipzig.

Essai de Psychologie Generale. Par CHARLES RICHEL. Paris, Bibliotheque de Philosophie Contemporaine.

FEW philosophical reformations have a more instructive history than that which introduced experimental methods and scientific conceptions into the study of mental phenomena. The cleft between the student of matter and the student of mind had no existence in the harmonious mental culture of Greek philosophers. The nature that is the common storehouse of the *physicist*, the *physiologist*, and the *physician*, was also the mine from which the philosopher drew his lore. The great modern revival that separates the sciences, and forces a medical congress to separate into nineteen sections to insure that he who reads will be understood, has left the philosopher in the high altitudes of the mountain-top, while the busy scientists throng down into the mine. Not until our day has the philosopher taken much interest in the carloads of rich ore dug out by the miners, and come to seriously consider the announcement that this patient digging had discovered many rich veins of thought suggesting those unifying generalizations for which he was searching in the clouds. The good effects of this change of method and re-arranging of interest are easily discerned. The 'know thyself' has been interpreted as including the whole man, body and mind, past and present, as modified by all kinds of natural and artificial agencies. But the most distinctly new contribution that this revival of nature-philosophy has brought about is the origination of a scientific psychology, borrowing its methods as well as many of its facts and conceptions from other sciences, — and so re-uniting what should belong together, — while maintaining its distinct character by the use to which it puts this material, and the point of view from which it regards it.

The two volumes before us are both typical results of the new psychology. The one comes from the professor of philosophy in the University of Copenhagen; the other, from a professional physiologist of Paris.¹ Their purpose is to set forth in plain language the conclusions which experimental research and observation have allowed us to draw regarding the nature and function of psychical phenomena, and to delineate the general conceptions to which these facts give warrant. As text-books, both will be eminently useful, and an English version of either would be a welcome contribution to our literature. The point at which the works divide is that the one is written especially for those in whose minds the philosophical interest is uppermost, while the other appeals more directly to the physiologist.

Professor Höffding, while seeing in objective research the central method of psychology, fully recognizes in self-consciousness a most important supplementary means of study. Not only that we can only make our own what we assimilate to our past selves, — the deposit of a host of conscious acts, — but also that the higher mental processes are amenable to no other mode of study. On the other hand, he recognizes in consciousness a somewhat subordinate concomitant of certain psychical acts, and regards with equal interest such acts as have not this accessory; moreover, he holds that the latter can alone determine what is the 'naturally' correct mode of viewing the former. The author thus sees growing around the central 'natural' view of man several psychologies, — a physiological psychology, a psychophysics, a comparative psychology, a sociological psychology. He does not attempt a strict definition of his science, and is more anxious that it should receive the benefit of a number of lights reflected from several quarters than that it should stand out as a distinct, self-made, smoothly finished specimen.

'The experimental basis' on which this psychology rests, includes quite as much such every-day facts as are made interesting by the tact of a humane observer, as rows of formidable tables fresh from the laboratory. The criticism passed upon Wundt's 'Physiological Psychology,' that it is simply a physiology with a psychology attached, would not be applicable here. Professor Höffding makes the physiology distinctly subordinate to the psychology,

while constantly utilizing the facts that physiologists have discovered. For the non-technical student this is perhaps the better plan: it retains for psychology that general broadening interest which its pursuit as a technical specialty may for a time weaken. The plan of the work is somewhat different from those of our text-books of psychology, and is an improvement upon them. After defining his point of view, he considers the relations between body and mind as well from the physiological as the philosophical point of view, and passes to the study of the conscious and the unconscious, treating the phenomena of instinct, unconscious cerebration, etc. Here, as elsewhere, his acceptance of the evolutionary theory, and his use of the analogy between the growth of the individual and that of the race, give life to his pages. He next accepts the trifold division of the intellect, the feelings, and the will, though accenting the fact that each depends upon the other, and the development of all three follow the same path. His chapters upon the mutual relations of intellect, emotions, and will, are full of sound educational material. He devotes an unusual space to the emotions, while rather slighting the will. To single out any points for special treatment would hardly be serviceable: the important aspect of the volume is its modern appreciation of the intimate connection between fact and theory. Dr. Höffding has made a distinct advance in the problem of adopting new psychological results into the body of accepted truth, which serves to educate the next generation.

The main purpose of M. Richet's work is to give a useful summary of those general propositions regarding the functions of the nervous system that have a direct psychological bearing. In this he has succeeded very well, and his success makes us realize the progress made in recent years. It is a book of this nature that impresses one with the rapidity with which mental science is taking on that long-desired scientific aspect. It is no longer meaningless to speak of psychological laws.

What M. Richet means by 'general psychology' can be best gathered from the titles of his chapters. These treat of irritability, the nervous system, reflex action, instinct, consciousness, sensation, memory, ideation, will. Under each heading the treatment is general, stating in brief the conclusions accepted by modern psychology. Within two hundred pages one has here a convenient handbook of the main principles on which an elementary course in psychology should be based.

There is one point in the volume which M. Richet has singled out for separate treatment elsewhere, and which should be noticed here. Between an ordinary reflex action and a conscious act, the author introduces a 'psychic reflex,' and by this he means all those involuntary acts which have become so by interposition of conscious, inferential elements. The dog that trembles when his master shakes a stick at him; the man who feels nausea while reading of a disaster; the vertigo experienced when looking down from a height; many kinds of laughter, as of tears, fear, pain, and pleasure, — are likewise psychic reflexes. These actions all take place involuntarily, but they would not happen if a psychic element did not intervene. Disgust would not occur if the tale were written in an unknown tongue. A psychic reflex is a response to a peripheral irritation insignificant in itself, but so transformed by an act of the mind as to put in operation the reflex centres of the spinal cord. This distinction is a convenient one, and the term will doubtless be adopted.

Ancient Nahuatl Poetry. By DANIEL G. BRINTON. Philadelphia, The Author. 8°.

THE recent volume of the author's valuable Library of Aboriginal American Literature, the seventh of this series, contains a number of ancient Mexican poems with translation, notes, a brief vocabulary, and an introduction. The poems are from a manuscript volume in the library of the University of Mexico, entitled 'Cantares de los Mexicanos y otros opusculos,' and printed from a copy made by Abbé Brasseur de Bourbourg. It is unfortunate that the author has not been able to have the texts collated with the original, but his efforts in this direction were unsuccessful: therefore it is probable that some corrections will have to be made in the texts. But scientists will nevertheless be thankful to Dr. Brinton for the publication of the interesting collection of poems

¹ M. Richet is also editor of the *Revue Scientifique*.

which are here for the first time made accessible to the student, and it is to be hoped that all that is extant of ancient Nahuatl literature will be printed ere long.

The texts are preceded by a brief introduction, in which the character of Mexican poetry is discussed. The importance of poetry, music, and dance among the Mexicans is set forth, and their method of delivering the songs is described. Of particular interest are the remarks of the author on prosody; and these are the more weighty, as he has studied this subject among many North American tribes. It is very difficult to decide whether accent or quantity is the ruling element of poetry, and the author does not attempt to decide which is more important. It seems to us that this question can only be solved by studying music and poetry jointly.

Dr. Brinton finds another wide-spread peculiarity of Indian poetry occurring in Mexican poetry. It is the inordinate lengthening of vowels and reduplicating of syllables for the purpose of emphasis or of metre, and the insertion of meaningless interjections for the same purpose. It is an interesting question whether the accent in Mexican poetry is always on the vowel, or whether certain combinations of consonants can form a syllable, as is the case in some American languages. The instrumental accompaniment of the songs is described, and the connection of the rhythm of the drums with the prosody is emphasized. In the present collection, as well as in those of other nations, we find a peculiar poetical language which makes their translation very difficult. Dr. Brinton describes this poetic dialect as abounding in metaphors. Birds, flowers, precious stones, and brilliant objects are constantly introduced in a figurative sense, often to the point of obscuring the meaning of the sentence. The grammatical structure is more complicated and elaborate than in ordinary prose writing, and rare words occur frequently. The rhetorical figure known as aposiopesis, when a sentence is left unfinished and in an interjectional condition, in consequence of some emotion of mind, is not rare, and adds to the obscurity of the wording. The last peculiarity is characteristic of the popular songs of all nations, while the occurrence of rare words may be due to the fact that many of them are sacred songs. The richness of metaphor, and the complicated grammatical structure, are also wide-spread qualities of poetry.

Dr. Brinton considers some of the songs as belonging to a time anterior to the Conquest, and gives in the brief notes which accompany each of the twenty-seven songs his reasons for this opinion. Undoubtedly most of them belong to the time of about 1500. Others are evidently ancient songs, composed before the Spaniards influenced the native customs and ideas, and this makes the present collection the more interesting. It is welcome material for the student of the Mexican aborigines.

Guatemala, the Land of the Quetzal. By WILLIAM T. BRIGHAM. New York, Scribner. 8°.

THE author terms his book very properly 'a sketch.' It is the tale of his journeys in Guatemala, adorned with some remarks on the geography and history of the country. The author does not claim to give any new information, but it is pleasant to follow him on his ride through a semi-civilized country. The book is profusely illustrated, and the illustrations have the merit of being new, characteristic, and trustworthy, most of them being reproductions of photographs. The scientific contents are selected somewhat at random, but will serve the purpose which the author has principally in view, — "to awaken among Americans greater interest in the much-neglected regions between the Republic of Mexico and the Isthmus of Darien." There are several maps in the volume, but they are of no great value. The map of Guatemala, which is claimed to have been compiled from various sources, is only a very rough sketch of that country. By far the greatest portion of the book is taken up by the author's journeys; and this is the most interesting part, as it gives a fair idea of Central American life, and valuable hints to future travellers. It is followed by a chapter on the ancient inhabitants of Guatemala, a brief history of the Republic, and a sketch of its volcanoes and produce. In an appendix, which the author compares to the attic-room of a thrifty housewife, information about a variety of subjects and a partial bibliography of Central America are given.

The Principles of Elocution. By ALEXANDER MELVILLE BELL. 5th ed., revised and enlarged. Washington, John C. Parker. 12°.

VERY many intelligent readers of the great orators, ancient and modern, must have experienced a feeling of keen regret that they themselves were unable even to approximate the directness, force, and fluency of those masters of the art of expression. It would almost seem that the power to rouse multitudes to action, to stir the deepest and most masterful emotions, to control and direct action, by the use of language, is so dangerous a one that it has been granted to but few. As a matter of fact, however, oratory or eloquence is nothing more than highly developed and cultivated power of expression. It implies the possession of something to express. The full head and the sympathetic heart are essentials.

But without aiming at the ambitious height of eloquence, there is a power of forceful and adequate expression by the use of language that belongs to us as human beings, but which is almost wholly overlooked in the training of the young. Not only is this undesirable in itself, but the conditions of our modern life render it more so. In politics, in religion, in practical life, and in social activity, men are endeavoring to communicate their own thoughts and convictions to others; and very many are the embarrassments that result from the lack of ability to properly express these thoughts and convictions. There is, therefore, a practical as well as a sentimental reason why our natural gift of expression should be cultivated.

All of this is very familiar to Mr. Bell, and, in addition, he has given so much time and study to the working-out of the practical applications of the thing, that he is to-day easily our first authority on the subject. In this last edition, the fifth, of his 'Principles of Elocution,' he has given us the ripest fruits of his thoughts and study.

Mr. Bell deprecates in his introduction the neglect of elocution, and ascribes it to two causes, — first, it is neglected because it is misunderstood and therefore undervalued; and, second, it is misunderstood because it has been confounded with recitation, and otherwise misrepresented by many writers on the subject. Mr. Bell defines (p. 6) elocution as "the effective expression of thought and sentiment by speech, intonation, and gesture." Inasmuch as it involves the exercise of language, elocution must embrace the physiology of speech. It must study carefully the instrument of speech, so that the elocutionist may have all its parts under his complete control. The author therefore takes the pupil back to respiration as the first step toward making him an expressive and agreeable speaker. Suggestions in respiration lead naturally to the principles of vocalization, and these to those of vowel formation. From this point on, the book is made up largely of practical exercises on the successive steps in the elocutionary process. These exercises and illustrations are a peculiarly valuable feature of the book; for they are not roughly thrown together, but carefully arranged on scientific principles.

We know of no higher praise of Mr. Bell's book than to say that it is pre-eminently fitted to be recognized in our high schools and colleges as the authoritative exponent of that branch of training which has too long been left out of their curriculum.

Bau und Verrichtungen des Gehirns. Von Dr. JOSEF VICTOR BOHON. Heidelberg.

Uebersichtliche Zusammenstellung der Augenbewegungen, etc. By Dr. E. LANDOLT. Tr. by Dr. H. MAGNUS. Breslau.

THESE contributions to the anatomy and physiology of the nervous system are evidences of the time and attention now devoted by the Germans to the preparation of aids to instruction whereby the student can readily obtain correct notions of his subject. Especially in the nervous system, where recent research from a variety of sources has so essentially altered the accepted views, is such an elementary reconstruction of the subject necessary. Dr. Rohon's pamphlet contains a lecture delivered before the Anthropological Society of Munich, setting forth in clear language the main outlines of current notions of the structure and functions of the brain. The main interest in the pamphlet will centre in the colored chart, which illustrates with great clearness the points referred to in the text.