

## V.—CRITICAL NOTICES.

*Völkerpsychologie. Eine Untersuchung der Entwicklungsgesetze von Sprache, Mythos und Sitte.* Von WILHELM WUNDT.  
Erster Band: *Die Sprache.*

ASSUREDLY the theme of this first volume of Prof. Wundt's monumental work is profoundly interesting. We commenced the study of it with a very real enthusiasm. Here at last was a systematic treatment of linguistic material from the psychological point of view. Here we should find a vast array of facts, countless and diverse, culled from all possible sources, compared with one another, articulated upon the continuous thread of psycho-genetic explanation. Instead of mere *disjecta membra*, viewed from the outside, instead of the empirical classifications of the comparative philologist, we should have exhibited to us the internal mechanism, the causal connexions; linguistic forms would be shown to be the results of mental process; a new insight into mental process would be gained from the comprehensive study of linguistic forms. Nothing less, we imagined, could satisfy the psychologist bent on giving a systematic account of the evolution of language than a survey of all possible means of expression, including the language of signs. And since the evidence for psycho-genetic theory is largely to be found in comparative philology, the marshalling of linguistic facts should go hand in hand with theoretical exposition. We expected that Prof. Wundt's work would be, in a very real sense, at once a philological treatise for psychologists, and a psychological treatise for students of linguistics. Such a book would be the labour of a life-time. Wundt's work is but an incident in one of the busiest learned careers on record. There is far too much theory, and too little fact to please us. The facts are quoted merely as illustrations of theories, not as proofs of them, and no one but a competent philologist could judge whether the illustrations are fairly chosen or not. The same instances from the same languages are apt to recur wearisomely often. The references to primitive languages are much too scanty and vague. For the partial disappointment we are bound to confess to, we may be to blame. We may have pitched our expectations too high; and assuredly an author has a

right to his own conception of the scope of his task. But Prof. Wundt offers little encouragement to his readers. It is a thorny path that leads to his inner shrine, and would-be disciples tread it with bleeding feet. Nearly 1,300 pages of pale German ink on the most exasperating German glazed paper—the physical discomfort of reading them might easily damp the most ardent enthusiasm!

So far as it goes, the first part of this volume is in many ways admirable. It maps out the development of means of expression from the natural expression of the emotions, through gesture-language, up to articulate speech; and thanks to the insight gained into the processes involved in the most primitive methods of expression, Wundt is able to offer most suggestive hypotheses on many interesting problems of the evolution of spoken sounds and the formation of words. The general account of the expression of the emotions is full and good. In view of recent sphygmographic and plethysmographic work in Germany and in America it would certainly appear that his treatment of the vasomotor intensity-symptoms is much too simple and definite. The Chapter on gesture-language, in which he examines one after another the sign-systems of the deaf-mutes, whether natural or artificial, the gestures of savages, of Cistercian monks, and of European peoples—such as the Neapolitans, is of the highest interest. Prof. Wundt is at his best as an expositor; and this chapter is a model of exposition. He divides gestures into two fundamental classes: indicative (*hinweisen*) and representative (*darstellen*) which latter species includes three classes: the imitative (*nachbilden*) the significant (*mitbezeichnen*) and the symbolic. The first are a plastic representation of the whole object or of some striking feature of the object, the second designate the object by means of some one of its qualities or marks, the third are either direct or indirect-symbols of ideas. All these kinds of gestures are admirably exhibited as steps in a progressive development. There is nothing to add to Prof. Wundt's classification, and it may be looked upon as final. The sections on the change of meaning of gestures are also full of suggestiveness. But the section on the Syntax of gesture-language, reliable and accurate as it is, cannot be said to add anything to Dr. Tylor's account in his *Early History of Mankind*. Most unhappily, that same practical interest to which, as Wundt remarks, we have in the past been indebted for all we know of deaf-mute gesture-language, has in the last two decades prevented any addition to the material at our disposal. For the psychologist, at least, the decay of the old system of educating deaf-mutes has had disastrous effects. The natural gesture-language still exists in the home, and in the playground, if not in the class-room, but there is scarce any one willing or competent to observe it. Wundt notes the analogies between deaf-mute gesture syntax, and the syntax of Amerind gesture-language as described by Mallery; shows the development of gesture-language in general out of

emotional pantomime, and connects it with the primitive forms of plastic art, with picture-writing in especial. But although recognising to the full the peculiar interest of gesture-language ("Sie repräsentirt in ihrer Bildung alle Entwicklungsstufen, die das geistige Leben des Menschen überhaupt zurücklegt") he contributes nothing to the solution of any but the most general problem of its syntax, and seldom makes use of it to throw light upon cognate problems of the syntax of speech. It would surely have been interesting to compare the structure of Amerind speech with Amerind gesture, or the structure of deaf-mute gesture language with that of primitive savage tongues. The additional insight into the mental processes involved would assuredly have been worth even a good deal of extra trouble.

Chapter iii. deals with vocal sounds, from the animal's cry of pain—or rage, which is an automatic expression of emotion, devoid, in the first instance, at least, of any objective significance—through the songs of birds to the articulate and purposive speech of man. He distinguishes three stages in the development of the child's speech. First come inarticulate cries, next articulate but meaningless sounds, finally articulate sounds which are intended to convey a meaning to other people. Prof. Wundt will not allow that children ever invent their own speech. This view, assuredly widespread among nurses and mothers, and even psychologists, is a result, he believes, of the common illusion "dass der Mensch von Hause aus ein Wesen sei, das in Seinen Handlungen von logischen Reflexionen bestimmt werde". And we fully agree with him that such an intellectualism is barren in principle and wrong in fact. But so to agree is to reject some special theory as to the process of word-invention, not to declare the impossibility of that invention itself. Wundt quotes several instances of such alleged word-invention from Taine, Sully, Darwin, Miss Moore, and he thinks they can all be explained by direct imitation of already existent words. This point obviously admits of discussion, and can only be settled by the examination, not of half a dozen instances, but of a large mass of facts. *A priori*, there seems no reason why the only sounds imitable by the child should be the sounds of the human voice. Whether or not onomatopœia does occur in the early months of life is a question which still awaits solution, and it is assuredly worth careful study. As for the alleged invention not of single words but of a whole language, Wundt is even more sceptical. These tales "sind wohl ein für allemal in das Gebiet der Fabel zu verweisen". He sums up his general view in a pithy sentence: "The child's speech is a creation of his environment, in which he is but a passive co-labourer" (p. 296). Passing now to the natural sounds of developed language, Wundt divides them into primary and secondary interjections, both of them direct emotional expressions devoid of grammatical form; he shows the connexion between secondary interjections (such as *me hercle!* *Good heavens!* etc.)

and the Vocative, and Imperative ; between primary interjections (such as *ah ! weh ! heu !*) and certain verbs (as *to howl*) or nouns (as *father* and *mother* : he follows Buschmann in rejecting the theory that these words are formed from conceptual roots). He next passes in review the instances of imitative sounds in developed speech. They fall into two main classes : words that bear an immediate resemblance to objective sounds (*cuckoo*, *to tick*), and words that bear an auditory resemblance to some visible or tangible object. German is particularly wealthy in such instances ; but surely German is not the only language able to throw light upon a process which Wundt regards as one of the most primitive in the building-up of speech. Surely this is a case in which we have a right to insist upon a much wider survey of linguistic material than a mere parcel of facts from a highly developed tongue ! Wundt insists upon the continuity of the evolution of language (p. 314 *et passim*). Well and good, yet it is but one more reason for a comprehensive study of languages belonging to all possible stages of development. He rejects the root-theory of word-formation, and considers roots to be mere grammatical abstractions ; that is a question no argument about which is anything but waste of breath, unless it be supported by corroborative evidence. This evidence may be familiar to the philologist, but it is not to the student of psychology, and Wundt makes no serious attempt to enlighten us. Again in discussing the second class of imitative sounds—that of imitation of some non-auditory object by means of an articulated sound—it would have been most instructive to study not merely the traditional expressions of literary speech, but that large mass of new formations, the slang of the populace ; for here we have indeed speech in the making. Of all this material, Wundt uses not a scrap. What now is the exact nature of the similarity between word and object in this second class of imitative sounds ? By what process do they come into existence ? He answers that it is not in the sound itself, but in the movements of articulation upon which its production depends, that we must look for the essential factor. “Die Beziehung zwischen Laut und Bewegung kann keine im voraus gewollte, sondern nur eine nachträglich entstandene sein. . . . Unmittelbar sind es nicht die Laute, sondern die Lautbewegungen, die durch den äusseren Eindruck triebartig ausgelöst werden” (p. 321). In short, these movements of articulation are to be regarded as belonging to the class of imitative gestures (*nachbildende geberde*). And he even asserts (p. 323) that the source of the apparent similarity between words such as *bummeln*, *torkeln*, *kribbeln*, and the actions they denote, is not the sound, but the movement of the tongue and the lips. Surely this is a most paradoxical theory. Is our perception of the movements of articulation in and for themselves so very fine as Wundt supposes ? So far as my own introspection goes, this is not true. Muscular sensation and auditory image seem, in my own case, to

be indissolubly combined,<sup>1</sup> and the former has no meaning apart from the latter. And when we remember how very defective is the articulation of the totally deaf, we feel inclined to assume that this connexion is universal. He assumes too that all these processes take place beneath the level of free ideas. This again is an extremely doubtful point. Moreover, had he borne in mind a number of other instances—*e.g.*, modern slang words—which he does not quote, I doubt whether he could have maintained for a moment that the theory proposed was of universal validity. Nor does it really apply to a certain group of words which he discusses under the same head. Thus (p. 324) "Organs or actions which are connected with the production of vocal sounds, are often designated by means of words, in the articulation of which these organs or actions play a part". Examples: *Zunge, schliesfen, blasen, Mund*, etc. . . . To bring these cases under the concept of true indicative gestures is a really brilliant inspiration. Yet it seems clear that between such words and onomatopœia—direct or indirect—there is all the difference which separates indicative from representative gestures. Wundt's treatment of natural sound-metaphors is also very suggestive.

Chapter iv. discusses the laws of sound-change, in great detail, first continuous, then discontinuous change; and examines the various explanations that have been offered of Grimm's Law. We have space only to note the general features of his treatment. He will not compromise with intellectualism in any shape or form, and denounces the teleological and æsthetic explanations as unpsychological to the core. The main principle of his own psychophysical interpretation is that in the variations of the rate of speech a *vera causa* of sound-change is to be found. He contends that the development of civilisation has been accompanied by a regular increase in this rate. He admits indeed that we can have no direct proof of this proposition, but so far at least as the Indo-Germanic languages are concerned, there are several indirect proofs: *e.g.*, the lessening of the length and cumbrousness of the written sentence, the simplification of grammatical forms, and—the analogy is instructive—the increasing rapidity of musical tempo from say Scarlatti, or Mozart, to Beethoven and Brahms. Let an aspirata be pronounced faster and faster, and it tends to become a media; similarly a media to become a tenuis. This inauguration of an 'experimental' philology is assuredly interesting in the highest degree. It deserves, and it has already received, the attention of linguistic specialists. But, accepting Wundt's assumption that the rate of speech tends to increase as man advances in civilisation, how can the hypothesis explain at once

<sup>1</sup> It is strange that he should overlook at this point a connexion which he fully recognises farther on. On p. 385 he speaks of the "unmittelbare Verbindung der gehörten Sprachlaute mit den Articulationsempfindungen".

the change from aspirata to media and tenuis, and the opposite and simultaneous change from tenuis to aspirata? For such is the substance of Grimm's law (as Wundt himself, indeed, has noted p. 410). Moreover, it is not at all certain that Wundt's assumption is correct. Do savages talk less rapidly than civilised men? Wundt, of course, is ready to admit the lack of any satisfactory evidence. But merely to ask the question is to realise its ambiguity. Is it the emotionally excited or the comparatively calm savage we are speaking of? The rate of speech certainly varies with the speaker's emotional states. On the other hand, the rate with which ideas follow one another does not seem necessarily to vary in direct proportion to the degree of culture. Wundt believes that it does (p. 420). Yet he makes no attempt to justify his belief by making an exhaustive analysis of the factors upon which the rate of speech depends. Practice is the only definite one mentioned by him. But it is clear that there are many others—the development of abstract ideas, the increasing complexity of meaning, the possible changes in emotional excitability, etc., etc.—which may not all tend to produce the same results. Wundt explains in the same way the mutual influence upon one another of two sounds in more or less close contact. (Regressive and progressive sound-induction.) A section upon Assimilation—the influence through association of one word upon another, closes the chapter.

Chapter v. deals with the formation of words, naturally from the psycho-physical point of view. The physiological mechanism is discussed, so too the pathological disturbances of the function of speech, aphasia, paraphasia and amnesia; there is a section on the shortcomings of the cerebral localisation theory; and the chapter includes a small treatise on the psycho-physiology of reading, on the apprehension of the spoken and written sentence. Erdmann and Dodge are hardly treated with the respect to which their careful labours are entitled, and there is nothing noteworthy in the treatment of the psychology of meaning, but the account is a useful *résumé* of the experimental work hitherto published. All this, however, belongs to the province not so much of social as of general psychology; and so it is, indeed, with the rest of this chapter, and practically the whole of the book. But for an occasional reference to imitation or tradition, we are told wonderfully little of the social factor. As a consequence of his psychological analysis of the nature of the word, Wundt finally rejects the 'realistic' theory of roots, and allows them only a conceptual validity. They are what remains when philological analysis has separated the word into its ground and its connective elements. "In the beginning was the word": "Die Annahme einer Wurzelperiode der Sprache ist ein Phantasiegebilde" (p. 559). Neologisms are next examined, and some interesting points are made with regard to such groups of words as *e.g.* *baumeln*, *bammeln*, *bimmeln*, *bummeln*, of which each seems to be derived from the previous one by a process of partial onomatopœia (p.

571). After this come word-formations through sound-reduplication, and through synthesis. Our complaint is once more of the small number of examples given. They are practically all taken from Indo-European languages, and more especially from modern German.

We have too little space left for more than the vaguest indication of the contents of the second half volume. It is divided into four chapters, the first of which treats of the different kinds of words—substantive, adjective, verb, pronoun, etc.—and their various forms (number, gender, case). The second deals with the interconnexion of words in the Sentence. The third is on the alteration of meaning of words and idioms,—and is a contribution to what Dr. Postgate would call Rhematology, and what Prof. Bréal writes about under the name of Semantics. The fourth chapter discusses the origin of Speech, and the main types of theories that have been devised to account for it. Wundt's own theory is evolutionary, and postulates the continuity of evolution. It is eclectic, and borrows from the previous theories (those of interjectional, imitative, and fortuitous vocal sounds) the undoubted facts which they erred only in selecting as the exclusive basis for a doctrine of origin. To ask whether speech or reason came first is, for Wundt, as absurd a question as that famous conundrum about the hen and the egg.

F. N. HALES.

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*The Varieties of Religious Experience: a Study in Human Nature. Being the Gifford Lecture on Natural Religion Delivered at Edinburgh in 1901-1902.* By WILLIAM JAMES, LL.D., etc., Corresponding Member of the Institute of France and of the Royal Prussian Academy of Sciences, Professor of Philosophy at Harvard University. Longmans, Green & Co., London, New York and Bombay, 1902.

THIS is not an easy work to review. The greater part of it is taken up with records of actual religious experience, mostly of abnormal kinds—remarkable cases of conversion, of exceptional saintliness, of religious exaltation and mystic insight. That the book is one of the highest interest, that extraordinary industry and research have been employed in collecting these records from the religious literature of all ages and faiths, that Prof. James's comments upon them are characterised by all his accustomed charm of style, vivacity and open-mindedness, is unquestionable. Nor can there be any doubt that it was well worth while to undertake such a task. They will at least be valuable as materials for Psychology and Philosophy, whatever may be thought of the use which Prof. James himself makes of them. It is good that philosophers should be reminded that there are sides of human nature