

A slight criticism might, perhaps, be offered here, namely, it would have been better if any similarity between the nonsense names had been rigorously avoided. For instance, "Pimef," "Petul," "Bogil" gave rise to some confusion in the learning on account of the alliteration of the first or second and the terminal *l* in the second and third. In the testing the name was shown to the observer, who had to try and reproduce the figure. A note of the introspection was immediately written down.

The second part of the experiment, and the actual research, consisted in the completion of sentences—that is, in the formation of judgment about the material learnt: for instance, "the blue Bogil is ——" etc. The reaction time was measured by Hipp's chromoscope and the "pseudo-galvanic reflex" brought into service. This was done because the author holds, evidently with Dr. Aveling, that the psycho-galvanic reflex indicates conation. This, however, is a much-disputed point, and before the question is settled it would seem advisable not to complicate matters in such a research as this. Further, if it be granted for argument's sake that the psycho-galvanic reflex does indicate conative processes, the arrangement would be useless, for the setting of the attention on the warning being given is a conative process and the initial reflex would obscure any subsequent one. If, however, the reflex was not present in each single experiment, this fact would tend to prove that the psycho-galvanic reflex did *not* indicate a conative process, for the observer sets his attention at the beginning of each individual experiment. "Phenomenal aspect of the meaning of subject in judgments made," "Presence of the general meaning of the subject in judgments" are some of the matters discussed. A great number of tables and curves are given, but the text does not always contain sufficient data to verify these. The notes are most interesting reading. It is interesting to note the emphasis laid by the author upon the difference between volition and conation. The reviewer has always held that the psychic processes of a volitional act may be entirely cognitive, without any trace of conational activity.

A. WOHLGEMUTH.

The Phenomenology of Acts of Choice: An Analysis of Volitional Consciousness. By HONORIA M. WELLS. *British Journal of Psychology Monograph Supplements XI.* Cambridge University Press, 1927. Pp. 157.

This is the record of a fine piece of research carried out under Dr. F. Aveling in the Psychological Laboratory, King's College, University of London. The object of the research is to investigate the phenomenology of the process of choosing by the introspective method, to determine the part played by affective states in an act of volition, to examine the nature of awareness of self-activity, and to accompany the introspective analysis by certain objective controls, *e.g.*, reaction times, changes in electrical resistance, respiration, and pulse. Eight liquids, some pleasant, some unpleasant to the taste, were given "nonsense" names and had to be learnt

by the observers. When this task was completed the experiments proper were begun. Two small glasses with different liquids were placed before the observer, their names displayed in a tachistoscope, and the observer had then to make his choice and drink the liquid chosen. The protocol of the introspection was dictated immediately. Incidentally we are given here a very interesting discussion on the much-disputed problem of the psycho-galvanic reflex. The author, following Dr. Aveling, holds that the drop in the resistance is indicative of a purely conative process, and not, as has more generally been held, of an emotion. Although in textbooks the emotions are generally treated in conjunction with the feeling elements—pleasure, unpleasure—it must not be forgotten that by far the greatest part consists of cognitive, and especially conative elements. The evidence adduced here is, however, by no means conclusive. When the warning signal was given there was generally a marked fall in the resistance (if the specimens of tracing reproduced are typical), a smaller second fall when the Hipp chronoscope was started, and the largest fall when making the choice. Now this, to the reviewer's mind, tends to favour the emotion theory rather than the conation theory, for the attention, which is essentially a conative process, begins with the hearing of the warning signal, and continues with practically no flagging until the exposure of the names and the making of the choice. It is true that the specimen protocols given show practically no mention of emotional processes at the moments mentioned, but then we do not know what the observers would call an emotional process. Visceral sensations are experienced by many observers in similar circumstances. However, later in her work the author seems to come also to the conclusion that the importance of the psycho-galvanic reflex has been much over-rated. We may mention in passing that there is a mistake in the text to fig. 1 on p. 20. The arrow does not indicate the direction in which the photographic paper has been moving, but the direction in which the tracing is to be read. The paper has been moving in the opposite direction.

About 900 introspections by six observers were analysed as to what occurred during the time from the giving of the warning signal to the moment of completing the choice. This time was, for the purpose of the analyses, divided into five phases, namely, the fore-period, the perception of the stimulus, the development and discussion of motives, the intermediary period, and the final state or choice proper. In the text following, however, the numbering of the various paragraphs does not tally with this. With regard to the exact psychological constitution of value or worth, the author says: "Value can be found exclusively as an attribute of neither subject nor object, but rather in a functional relation between the two; all values are, therefore, descriptions of such relations, actual or possible. That is to say, value cannot be deduced from the qualities of the object, nor from a knowledge of the needs of the subject; it only appears as a content of consciousness when the two come into relation." However, many psychologists might demur to the author's assumption that a scale of the values of the

stimuli formed during the preliminary experiments remains constant during the whole period of the research. When, discussing the tripartite division of mental processes, the author thinks that there is reason to believe that the affective states, pleasure and unpleasure, are tones or modalities of the activity, by which she probably means conation, and which we are afraid will not meet with general assent. It seems to us that too much stress is laid upon the awareness of the "self" among the processes constituting the total volitional consciousness, for consciousness of "self" is probably present in every psychic process of the normal adult, and is therefore generally neglected in introspection on account of its ubiquity.

These few criticisms which we have thought fit to offer do not, however, detract from the great merit of the paper, which is a real contribution towards the solution of a very difficult problem.

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Hypnosis. By Prof. PAUL SCHILDER, M.D., Ph.D., and Dr. OTTO KAUDERS. Translated by SIMON ROTHENBERG, M.D. Nervous and Mental Disease Monograph Series No. 46. New York and Washington, 1927. Medium 8vo. Pp. 118. Price \$2.50.

To many modern psychotherapists the practice of hypnosis is antiquated and of limited utility; to the psycho-analyst it has been entirely superseded. The monograph before us, however, is free from any special pleading on behalf of hypnosis or against it, but explores all aspects, bringing the practice and theory of hypnosis into line not only with psycho-analysis but with the latest work in neurology. The authors have realized that while psycho-analysis has much to say that is useful with regard to the psychological state of the hypnotized subject and his *rappor*t with the experimenter, there is also a physiological side, which may throw light on the neurological state of the patient under hypnosis. The early chapters deal with hypnosis, and its effects on the somatic processes of the body through disturbances in affectivity. The relationship between sleep and hypnosis is fully discussed, but whereas the psychological state in hypnosis is clearly analysed, an attempt is made to deal with sleep as if it belonged solely to the same level. To speak of a sleep wish is to deal with one aspect only of the condition. Wish implies psychical initiative, unless all organic cravings which have an instinctive mechanism are to be regarded as wishes. This too wide use of Freudian concepts can only lead to confusion as physiological processes are involved. In the latter case psychological terms cannot be used unless we accept a pan-psychic philosophy, when all physiology would have to be restated. This the authors have no apparent intention of doing, for in a later chapter they deal with neurological mechanisms, and frankly admit the growing importance of the physiological approach.

The psycho-analytic theory of hypnosis and suggestion is described in Chapters VI and VII. In fact the psychological interpretation of hypnosis is throughout Freudian in character, yet the authors