

The uncertainties of the author and the difficulties of the translator are evident in the following passages: "A feeling differs from passion in that its phenomena are less intense; the mind is a little more free; psychical energy is less absorbed; consciousness is less invaded; psychical phenomena are weakened and not as a rule very pronounced. Here it is necessary to distinguish from other affective phenomena. . . . In the course of this study I have myself often used the words *emotion* or *feeling* in order to avoid verbal repetitions in designating affective phenomena as a whole. . . . By feelings (*sentiments*), therefore, I understand those fairly durable affective phenomena such as ambition, love, fear, hatred, etc., which are less violent than passion and are generally, though not invariably, accompanied by a more or less clear consciousness of the object." The psychologist will see how hopelessly the author's concepts are muddled and the general reader will be unable to follow him.

Another statement to which many will take exception is that "pleasure is the result of a growing systematization; pain (*i.e.*, unpleasure) is the result of a decreasing systematization." And again: "An affective phenomena (*sic*) is the sign of a disturbance which may sometimes accompany an extension of systematization about to be effected in the organism, but it is always the sign of an imperfection and disorder of activity."

There follow two supplementary essays on "Feeling, Intelligence and Will in General Psychology" and "The Nature of Feeling, Intelligence, and Will," which are clever and suggestive.

A. WOHLGEMUTH.

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1. *The Reward Value of a Conditioned Stimulus.* Williams, K. A.
 2. *The Genetics of Learning Ability in Rats.* Tryon, R. C.
 3. *The Effect of the Introduction of Reward upon the Maze Performance of Rats.* Blodgett, H. C.
 4. *A Further Study in Discrimination of Maze Patterns by Rats.* Yoshioka, J. G.
 5. *Weber's Law in the Discrimination of Maze Distance by the White Rat.* Yoshioka, J. G.
 6. *The Effect of Change of "Drive" on Maze Performance.* Elliott, M. H.

(University of California. *Publications in Psychology*, Vol. 4, Nos. 3, 5, 8, 9, 10, 11.)

These are accounts of experiments with rats carried out in the Psychological Laboratory of the University of California and

published during 1929. The experiments appear to have been carefully planned and to have been executed in a thoroughly scientific manner. The results may be summarized as follows :

(1) The conditioned stimulus retains for some time a reward value equal to that of the unconditioned stimulus itself, but it soon loses this value in a given setting if it is not reinforced by the unconditioned stimulus. This loss of reward value, however, is concomitant with a loss of, or change in, its character as a conditioned stimulus.

(2) Mental ability (maze learning in rats) is inherited, in part at least, and there is reason to believe that pure lines of bright and dull individuals may be obtained. The results so far obtained are consistent with what would be anticipated if this trait were produced by multiple genetic factors.

(3) Rats run under a non-reward condition learned much more slowly than rats run under a reward condition. This held for both errors and time. Rats previously run under a non-reward condition, when suddenly rewarded made a great improvement. On the first day after the introduction of the reward their drop in mean error was greater than that made by the control group on any single day. This fact seems to indicate that, during the non-reward period, the rats were developing a latent learning of the maze, which they were able to utilize as soon as reward was introduced. The author seems, however, to overlook the fact that there was no special drive for the rat before the introduction of the reward.

(4) Rats preferred a pentagon-maze and still more complicated mazes to a triangular one, but there was no preference between the various mazes of five or more angles.

(5) With different absolute distances the same relative difference of distance yields the same proportion of correct choices. Therefore, it is concluded that Weber's law holds in the discrimination of maze distances by the white rat within the limits of distance investigated in this experiment.

(6) Rewards may be changed without materially affecting the learning curve, provided that the drive is changed so as to maintain an "appropriate" relationship between drive and reward.

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Identity and Reality. By EMILE MEYERSON. Authorized translation by K. LOEWENBERG. London: Geo. Allen and Unwin, Ltd. Demy 8vo. Pp. 495. Price 16s. net.

This is a massive study, a standard work alike for physicist, psychologist and philosopher. First published in 1908, it has now been made available in English. It is based on pre-electron conceptions of science; but Meyerson's close scrutiny of the gems of thought of Newton, Leibnitz, Kant, Descartes, Carnot, Bergson, Poincaré, Duhem, and countless others, his critical brilliancy