

always experienced it, and saw exactly the same colour as her son for each vowel. As regards the diphthongs, however, mother and son were not agreed, and the mother's synæsthesias were more extensive than the son's.

HAVELOCK ELLIS.

Variability of Reaction-Time. (*Psychol. Bull.*, April, 1904.) R. Yerkes.

The *Psychological Bulletin* is a "literary section" of the *Psychological Review*, of some fifty pages, now published every month, and made up of short articles, reviews, and notes.

This paper on reaction-time deals with scientific method rather than with results. The author believes that investigators do not give sufficient attention to the variability of their results, and wishes to call attention to (1) the importance of variability in reaction-time statistics; (2) the need of choosing statistical methods in accordance with the nature of the material in hand and the demands of the problems; (3) the desirability of the more general use of curves of distribution; (4) the pre-eminent importance of relative variability, or the co-efficient of variability, for comparative reaction-time studies; and (5) the use of equality of variability as a basis of comparison in case of reactions to different modes of stimulation. In every study of reaction-time, he points out, it is usually desirable, and often necessary, to determine (1) *the curve of distribution*; (2) *the mode* (*i.e.* the most frequent group); (3) *the average* reaction-time, with its probable error; (4) *the range* of the series; (5) *the standard deviation* and its probable error; and (6) *the co-efficient of variation*. Several diagrams are given in illustration, and the paper will be found very valuable by those who wish to work out reaction-times in accordance with the methods now widely advocated by scientific investigators.

HAVELOCK ELLIS.

4. Clinical Neurology and Psychiatry.

On Unilateral Hallucinations of Hearing [*Sulle allucinazioni unilaterali dell' udito*]. (*Riv. di Patologia Nerv. e Ment.*, vol. ix, p. 228, May, 1904.) Lugaro, E.

Lugaro's patient, a married railway official, æt. 39 years, had a maternal aunt who suffered from about 40 years of age from delusions of persecution, and a sister who, from the age of about 39, suffered from auditory hallucinations and mental enfeeblement. He himself broke down after his father's death, in 1898, became intensely depressed, and shot himself with a revolver in the right ear. The external auditory canal and the drum were injured by the ball, which lodged in the temporal bone, and was probably only partially extracted, having been broken up in its progress. Notions of persecution and sitophobia followed the suicidal attempt, but these were soon relinquished, and patient professed to have forgotten them, though he remembered the other incidents of his early illness. In about two months he resumed his business, feeling perfectly recovered. Early in November, 1901, he