

and lightness are for the colour-blind differences in hue. An individual's colour vision may be described in terms of the four-stage classification of colour-vision. Each hue is given a rating of 1, 2, 3 or 4. A rating of 1 indicates perfect vision and one of 4 that the hue is seen as grey; 2 and 3 are for intermediate stages. The many different types of confusions made by different colour-blind individuals are explained by this classification, for only colours which are seen alike are confused.

A. WOHLGEMUTH.

*Grey and the Colour Pyramid.* (*Amer. Journ. of Psych.*, April, 1929.) Dimmick, F. L., and Holt, C. H.

The authors found that the necessary and sufficient colour categories, or unique colours, are red, yellow, green, blue, black, white, and grey; and consider that grey ought to be treated as a unique colour.

A. WOHLGEMUTH.

*Energy, Engines and the Engineer: A Critique of C. Spearman.* (*Amer. Journ. of Psych.*, April, 1929.) Washburn, M. F.

After paying merited tribute to Prof. Spearman's *The Abilities of Men*, the author gives an outline of Spearman's theory of general and specific factors, and then advances his objections to the vitalistic assumption of an engineer and to the assumption of a mental energy with laws that do not harmonize with those of nervous energy. The latter, he thinks, arises from the mystical tendency that assumes the control of an engineer. Prof. Washburn prefers to think that each of us inherits a central engine, the brain cortex, with peculiarities of structure that determine intellectual ability by determining what portion of the energy derived from metabolism can be used for thought. Neither innate quantity of mental energy, nor the power of a superphysical engineer, but innate differences in the structure of the engine, seem to him the most probable basis for differences in the abilities of men.

A. WOHLGEMUTH.

*Unconditioned Salivary Response in Man.* (*Amer. Journ. of Psych.*, April, 1929.) Winsor, A. L., and Bayne, T. L., jr.

Secretion from the parotid gland appears to be the result of highly integrated nervous action. The nature of this reaction at any time might be the result of direct or indirect excitation or inhibition, whether conditioned or unconditioned. The data in this report point to the possibility of direct proprioceptive stimulation of these glands from the muscles of mastication and swallowing. In addition to the functional evidence presented, attention is called to the fact that recent neurological research has presented conclusive evidence that there are nerve-fibres ascending from these muscles to the salivary centres.

A. WOHLGEMUTH.

*Preliminary Note on After-images from Stimuli of Low Saturation and Short Duration.* (*Amer. Journ. of Psych.*, April, 1929.) Frehafer, M. K.

With graded stimuli less than 70 ml. in brightness, of short duration and low saturation, the following results were obtained:

(1) White stimuli 5,300–5,460° K. usually produce blue or purple Purkinjé images, rarely white.

(2) Blue stimuli 6040° K. usually produce blue Purkinjé images, yellow to only a few.

(3) Yellow stimuli 4100° K. seem invariably to produce blue Purkinjé images of rather high saturation.

(4) This image is not strictly complementary to the stimulus.

(5) Red-haired observers report red (purple, pink, lavender, etc.) in nearly all after-images; brown-haired observers rarely report this hue.

(6) The Purkinjé image fails to appear in the fovea centralis, but appears in the parafoveal region. A. WOHLGEMUTH.

*The Influence of Degree of Learning upon Retro-active Inhibition.* (Amer. Journ. of Psych., April, 1929.) McGeogh, F. A.

The problem investigated was to find the influence of the degree of learning upon the amount of retro-active inhibition. The memory material consisted of nonsense syllables. Nine-syllable lists were learned by the anticipation method with a 2-second exposure to 6, 11, 16, 21 and 26 repetitions. At each number of repetitions a rest condition was compared with a work condition in which a 9-syllable list was learned similarly to 11 repetitions. The relative amount of retro-active inhibition when retention is measured by recall or by the saving method varies inversely as the number of learning presentations. A. WOHLGEMUTH.

*Reliability of the Galvanic Reflex.* (Amer. Journ. of Psych., 1929.) Lauer, A. R.

Before the validity of a test can be established the reliability of such measurement must be determined. If the test will not measure twice the same way, that is, if the reliability is low, then the use is not warranted. In this investigation the author set himself the task to determine the reliability of the galvanic reflex under experimental conditions. Although he finds that "the reliability of the galvanic reflex is quite high and apparently higher than that of pencil and paper emotional tests now on the market," the validity must first be thoroughly established in order to make the galvanometer an asset to psychological or physiological method. A. WOHLGEMUTH.

### 3. Clinical Psychiatry.

*Protopathic-instinctive Phenomena in Normal and Pathological Malay Life.* (Brit. Journ. Med. Psych., February, 1929.) van Loon, F. H. G.

*Amuk* and *Latah*, two forms of insanity among the Malay, and are racial, like the colour of the skin or the shape of the skull. In their