2. Psychology and Psycho-Pathology.

Estimation of Time. (*Psychol. Bulletin, vol. xxx, March,* 1933.) *Weber, A. O.*

Adequate understanding of the nature of time is fundamental to the understanding of every problem of conscious experience. The subject of time occupies an increasingly important place in philosophical speculation. In Bergson's conception we have a basis for regarding the psychological flow of time as a normal and valid adaptation to fit the existing conditions. The relativistic conception of time as a fourth dimension can hardly be made the basis of a concept of experiential time. A third general view assumes a definite division between objective and subjective time. Sturt assumes that time is a concept which grows out of individual and racial experience; in her view time is subjective, and she maintains that our organization of the past and future originates in utilitarian motives. Taking this view, a profitable line of attack would be through an investigation of the development of the time-sense in children and primitive people. Sturt has also cited evidence to disprove the commonly accepted idea that unpleasantness of mental content increases the apparent duration of time. Experiments of estimation under varying degrees of kinæsthetic strain would add materially to our understanding of the time-sense. M. HAMBLIN SMITH.

The Rôle of Speed in Intelligence. (*Psychol. Bulletin, vol. xxx, Feb.,* 1933.) *Beck, L. F.*

Thorndike has advanced the suggestion that human abilities should be measured in three respects: (1) Height or level of difficulty; (2) extent or range of different tasks; and (3) speed. The relative importance of these three factors is somewhat problematical, owing to the divergent results which have been obtained. The work which has been done is summarized. It seems probable that some scores which are supposed to represent only speed are vitiated by other factors which tend to raise the correlation. M. HAMBLIN SMITH.

The Constancy of the I.Q. (*Psychol. Bulletin, vol. xxx, Feb.,* 1933.) *Nemzek, C. L.*

The results from studies on this subject present a high degree of consistency. There is a rather wide range in the magnitude of the reliability coefficients for the Stanford-Binet and for various group tests. It is important to consider the groups studied by the various investigators. The extremely low coefficients reported for the Stanford-Binet tests were not found in unselected groups. The reliability coefficients for group tests tend to be as high as for individual tests, thus casting doubt upon the view of the gross unreliability of group-testing.
M. HAMBLIN SMITH.

Effect of Caffeine upon Chess-Problem Solving. (*Journ. Comp. Psychol., vol. xv, April,* 1933.) *Holch, H. G. O.*

Under controlled conditions, one series of 255 two-move problems in 17 tests of 15 problems each was done after the subcutaneous injection of 0·4 ml. of saline solution, and another similar series after the injection of 200 mrgm. of caffeine. The subject did not know which injection was being given. After caffeine there was a 7% improvement in the number of problems solved per hour. It would be unsafe to conclude from this that caffeine improves the capacity to solve such problems. As to the use of such problems as a mental test, we have evidence that the number of pieces is a factor in the solving time, and that the maximum difficulty occurs with a range of from 17 to 21 pieces. The "solving piece" in the "key move" has also to be considered. When the queen had to be used the efficiency was better and the mistakes fewer; the bishop came second, in spite of most errors being made with this piece. M. HAMBLIN SMITH.