A NOTE IN REPLY TO DOCTOR PERRY

MY attention has just been called to an article in this JOURNAL, by Doctor Ralph Barton Perry, entitled 'Recent Philosophical Procedure with Reference to Science,' in which I am charged with 'indulging in considerable riddling of the conceptions of science,' censured for 'criticizing science negatively and not positively, and coupled with Professor Karl Pearson as 'furnishing convenient illustrations of reactionary tendencies in contemporary philosophy of science,' mine being 'the untenable position of refuting science in detail and his that of refuting philosophy in general.' Now, I, for my part, should be grateful to Doctor Perry, if he could, either privately or otherwise, cite instances in justification of his strictures of my procedure. My concern has been with Naturalism, which is a form of philosophy and not science, and a form of philosophy which scientific men—Professor Pearson among them—have done a good deal to expose. I have devoted two or three pages in my second edition (Vol. I., pp. 303–5) to this point, and will venture to refer anyone interested to these. Here I will content myself with saying that I have never referred to any scientific details except they were misconstrued by the naturalistic philosopher, and never without falling back on scientific specialists for support. JAMES WARD.

TRINITY COLLEGE, CAMBRIDGE, ENGLAND.

SOCIETIES

THE NEW YORK ACADEMY OF SCIENCES. SECTION OF ANTHROPOLOGY AND PSYCHOLOGY

THE regular meeting of the section was held on March 28 in conjunction with the New York Branch of the American Psychological Association. The afternoon session was held at the Psychological Laboratory of Columbia University, the evening session was held as usual at the American Museum of Natural History. The program was as follows:

Mental Resemblance of Twins: Professor E. L. THORNDIKE.

A report was made on the general results of a comparison of twins in tests of attention, perception, association, rate of movement, addition, multiplication and stature. The resemblances, as measured by a rough, preliminary method, were about .75. The amount of this resemblance that should be attributed to similarities in home training was apparently slight. There was no evidence in the

results to support the theory that twins fall sharply into two species, those very closely alike and those no more alike than ordinary brothers and sisters.

Measurements of the Mentally Deficient: MISS NAOMI NORSWORTHY.

The paper was a report of some work done among one hundred and fifty mentally deficient children in two state institutions for the feeble-minded and in two of the special classes organized in the New York schools. The measurements taken were physical, such as height, weight and temperature, tests of maturity, as perception of weight and of form, tests of memory and tests of intelligence or the ability to deal with abstract ideas. The main conclusion reached was that the difference between idiots and people in general is less than has been commonly supposed, and is a matter of degree rather than of kind.

Color Contrasts: Dr. R. S. WOODWORTH.

Dr. Woodworth presented a modification of Hering's binocular demonstration of the 'physiological' origin of simultaneous contrast. If monocular fields of different colors, with a gray spot on each, be combined by the stereoscope, each gray retains the contrast color suitable to its own field, however the conscious background may vary as the result of fusion or rivalry of the two fields. The demonstration is readily extended to cover brightness contrast, by placing gray spots on white and black fields which are combined as before. To show that these effects are not the result of a binocular mixture of the gray with the opposite field, a number of gray spots may be scattered over one field, and the other field made particolored; the gray spots appear all alike, or nearly so, though binocular mixture would have made them differ.

New Apparatus and Methods: Professor J. MCKEEN CATTELL.

(1) Kymographs were exhibited in which typewriting ribbons were applied to secure the records. Electro-magnetically moved points strike the paper tape, whose rate of movement may be adjusted, and a record is left by the slowly moving typewriter ribbon. Two forms were exhibited, in one of which the kymograph was driven by an electric motor and in the other by clock-work. In the latter the clockwork could be started and stopped by an electric current by an observer in another room. The kymographs, while not especially suited for drawing curves, are much more convenient than smoked paper or siphon pens for time records, such as rhythms, conflict of the visual fields, after-images, etc. (2) Instruments were shown by which a number of faint clicks could be given at intervals of a second for testing sharpness of hearing and defective hearing. Instead of giving the observer a continuous sound, such

as from the ticking of a watch, two, three, four or five faint sounds are made, and the observer is asked how many he hears. By this method errors from the common illusions in the case of faint sounds are avoided. (3) A method was exhibited for testing color blindness by the time it takes to distinguish one color from another. By the normal individual red can be distinguished from green in about the same time as blue from yellow, but it takes longer to distinguish red from orange. If the observer belongs to the red-green class of the color blind, he can distinguish blue from yellow as quickly as others, but not red from green. An instrument was shown by which the conditions of the railway service can be imitated, it here being necessary first to distinguish a certain color and then to make the proper movement.

The Time of Perception as a Measure of Differences in Sensation: Mr. V. A. C. HENMON.

The aim of the investigation upon which this paper is based is to measure qualitative differences in color by the time of perception. The colors taken as standards were red, orange and yellow, whose wave-lengths had been definitely determined. Equal intermediate steps betwen orange and red were produced by the mixture of pigments. Small squares of each of these colors, 3 x 3 cm., were mounted on cards side by side with red, and exposed to the subject by means of a drop-screen so arranged as to give almost instantaneous exposure. The subject reacts with the right or left hand according as the predetermined stimulus appears to the right or left. The registration is made with the Hipp chronoscope. The results of 6,000 reactions gave evidence of the validity of the method and the fruitfulness of the problem. Equal objective differences are correlated with differences for consciousness, showing a definite increase as the magnitude of difference is decreased.

The Daily Curve for Efficiency: Mr. H. D. MARSH.

Habits Based on Analogy: Professor CHARLES H. JUDD.

The Determination of the Habit Curve for Associations: Professor J. E. LOUGH.

A report of experiments made in the psychological laboratory of the school of pedagogy. It was found that the time required to write series of letter-equivalents when the 'key' of equivalents was not memorized, but was consulted as frequently as necessary, diminished as the associations between the letter-equivalents became more habitual. The curves representing the results of these experiments exhibit all the characteristics of the typical habit curve. Repetition of the experiment using new 'keys' shows little or no interference due to earlier associations, while with each succeeding

'key' the physiological limit was reached after a constantly diminishing number of trials.

A Neglected Point in Hume's Philosophy: Dr. WILLIAM P. MONTAGUE.

The paper aimed to show (1) that Hume (in Part IV., Section II. of the 'Treatise') had quite unwittingly furnished what from his own point of view should have been regarded as a logical deduction and justification—rather than the mere psychogenetic description, which it purported to be,—of the realistic belief in the independent and uninterrupted existence of sensible objects; and (2) that the *naïve realism* or positivism thus accidentally promulgated was, from both the scientific and the popular standpoint, a far sounder and more inviting doctrine than the empirical idealism or sensationalism with which Hume's name is usually associated.

Action as the Concept of Historical Synthesis: Mr. PERCY HUGHES.

Rickert's description of the content of history as reality is amended to read *past reality,* the past of evidence. From this definition the individual, objective, moving and continuous character of historic content follows; and further, the conception of action as descriptive of both historic content and historic synthesis. An historical synthesis is a past action that itself has created a certain synthesis of evidence; which the historian discovers. In such synthetic actions, 'simple' actions retain their individuality as means, stimuli or hidrances to the main action, *i. e.,* in a functional relation.

At the close of the afternoon session the members were invited to attend a lecture given at Columbia University by Professor John Dewey on 'The Psychologist's Account of Knowledge.'

JAMES E. LOUGH,
Secretary.

REVIEWS AND ABSTRACTS OF LITERATURE

La Philosophie en Amérique. Depuis les Origines jusqu'à nos Jours. L. VAN BECELAERE, O.P., Member of the American Philosophical Association. New York, The Eclectic Publishing Co., 1904. Pp. xvii + 180.

The book before us is the most complete presentation of the whole development of philosophy in America which has yet appeared. Several of the general histories of philosophy contain very brief sketches of this development, a number of articles in periodicals have summarized it, and there are several studies of special periods which are more complete than the corresponding discussions in the present volume; but there is no one work which covers the whole field so well as this. The author has