On the Interpretation of Symptoms in the Infective Exhaustive Psychoses. (Journal of Nervous and Mental Disease, June, 1916.) Brown, Sanger.

The toxic exhaustive psychoses are well recognised as a clinical group, and they are easily diagnosed in typical cases, but in cases presenting unusual features the symptomatology is obscure and the diagnosis difficult. The writer feels that the clinical descriptions should be improved, and with this end in view he adopts a schematic arrangement by which the symptoms are grouped under different headings according to the basis on which they arise. The various symptoms are thus described under these three headings: the organic part of the reaction, the affective part, and the psychogenic part.

The organic part of the reaction.—Delirium is the symptom-complex most closely associated with the physical disorder—toxæmia, elevation of temperature, etc. In delirium, clouding of consciousness, disorientation, amnesia, fabrication, perceptual defects, elaborate and vivid hallucinations of sight, hearing, taste, smell, and touch, are the characteristic elements. Frequent changes in the degree of clouding are usual, and at times complete stupor ensues. Associated with these mental symptoms are various physical disturbances toxic in origin, viz., rapid action of the heart, dilated pupils, gastro-intestinal derangements, slurring and ataxic speech, and, in some instances, multiple neuritis.

The affective part of the reaction.—Apart from the plainly organic mental symptoms, affective or mood changes are responsible for a certain group of symptoms. These are depression, diffuse anxiety and suicidal impulses, or frank mania and elation with its characteristic features. These reactions may be slight, but frequently dominate the clinical picture and thereby lead to a faulty diagnosis.

The psychogenic part of the reaction.—This includes the delusional trends, peculiarities of behaviour, symbolism, etc. These symptoms are either superficial, and dependent upon the state of perplexity and confusion, or are of definite psychogenic origin, the expression of underlying trends of the personality which the state of impaired mental control allows to come to the surface. These latter symptoms often come to the surface after the delirium has entirely subsided.

These views may be utilised for the better understanding of certain clinical conditions. Since the organic part of the reaction is a very definite reaction on the part of the nervous system to toxic and exhaustive factors, the symptoms may be expected to appear when such factors are found. They are thus seen in drug psychoses, alcoholic deliria, as secondary symptoms in a number of psychoses of gross brain disease, as well as in the exhaustive toxic psychoses. The reaction does not appear in dementia præcox, and only in manic-depressive insanity when exhaustion or toxæmia supervenes. This schematic grouping of symptoms helps us to determine what ætiological or diagnostic significance to give to each. Cases of short duration will show mainly organic features; others of equally benign character may show marked affective reactions. Those with psychogenic reaction will be more serious, unless such symptoms are purely superficial, and the result of confusion. Further study is desirable in the direction of a fuller understanding of

the personality, and also in regard to the cell findings and pathological changes. To carry out these studies successfully a clear clinical differentiation is a preliminary necessity.

H. DEVINE.

The Rôle of Hallucinations in the Psychoses. (Journal of Nervous and Mental Disease, March, 1916, pp. 231-250, vol. xliii, No. 3.) Harrison, Forrest M., M.D.

Dr. Harrison prefaces his remarks on the subject in particular by a summary of historical instances of hallucinosis as exemplified in certain Biblical stories, and as in the cases of Mohammed, Luther, Jeanne d'Arc, Socrates, Swedenborg, and others; and he notes the influence which those suffering from hallucinations have had in the making of history.

The number of hypotheses advanced as explanations of the mechanism of hallucinations is an indication of the speculative nature of our knowledge of cerebral function. Two main points were considered in the elucidation of the problem—the sensory character of the phenomena and the part played by the mental state in determining what the hallucinatory object should be. The ideational centres were assumed to be locally separated from the sensory centres, and, this being the case, it was but natural to relegate the imaginative factors of fallacious perception to the higher elements of the cortex, and to assign the sensory part to those cells where incoming impressions are transformed into sensations. Ideas of sensation can, however, never rise to the level of true sensation; the ideational image lacks the feeling of objectivity, of externality. The centrifugal sensorial theories sought to explain this by assuming that the sensorial channels become the seat of a centrifugal nerve current, originating in the higher ideational cortical centres, passing to the sensorium, and in some cases to the sense organ, where the condition present indicated a local disturbance. As this was found to be inconsistent with accepted physiological beliefs, a reverse, or centripetal, process was assumed. Once the conclusion is reached, however, that the centres of sensation and of imagination are not separated, these beliefs become untenable. James held that in the cortex the sensory and ideational elements are the same, and that the difference in the process depends on the intensity of the stimulus; that from the periphery is usually more intense than that from the neighbouring regions of the cortex, and because of the difference in intensity, we tell reality from phantasy. If, however, for any reason the stimulation of these centres becomes as intense as that from the periphery the mind can see no difference, and an hallucination results.

In regard to the frequency of hallucinations among the 514 cases studied, Dr. Harrison found that they were present in 44.74 per cent.; and he notes that this figure would have been higher had he excluded readmissions and those diagnosed as not insane. Comparing the statistics of various observers (and including his own) he arrives at a percentage of 40.7; this is for a total of 3,160 cases. Of 230 cases which were subject to hallucinations, auditory fallacious perceptions, either separately or combined, were present in 210, or 91.3 per cent. Next in frequency came auditory and visual combined, 23.91 per cent. Then visual alone, 6.08 per cent.