

in the insane individual there is no such voluntary contest for the idea. The author traces the evolution of the various ideas which have dominated civilization, Islamism, scholasticism, nominalism, etc., stating that metaphysics asks objectively "What does life and the universe mean?" Religion asks the question in a subjective form, "What does all this mean to me?" being less interested in absolute existence than in other worldly values. Insanity asks no question at all, but finds ideas unsought and extends them to the falsification and exclusion of all healthy thought. [J.]

Rosenberg, Maximilian. ESTIMATION OF TIME. [*Zeitschr. f. d. ges. Neurol. u. Psychiat.*, 1919, Vol. LI, p. 208.]

In persons suffering from mental disease there is often an alteration of perception of time, so that given periods seem longer than they really are, particularly in melancholias, or shorter, in various mental disturbances. The author observed both forms of alteration of time perception in a case of hysteria, which besides offered a very good idea of the complexity of the affective processes which lead to disorientation of this sort. It was one of those very rare cases in which there is a disturbance, not only of the estimation of periods as a whole, but also of the estimation of duration of shorter events falling in these periods, which all seem shorter without losing their relation to the whole. To such patients a time which is long past seems to be quite recent. When the author's patient had been in the institution months not only did the period seem a few days, but the days themselves seemed short, and the hours only a flash. At eleven o'clock in the morning the patient states that she had "just got up," etc. Bechterew in 1903 was the first to call attention to a case of this sort and in the epicrisis assumed that in certain cases of mental disease disturbances of the sense of time occur which are due to alterations of the primary images and hence not conditioned by the insane idea. The author, from an analysis of the case observed by him arrives at a different explanation. Judgments as to duration of a period depend on the number of separate memory images that emerge, and a time seems shortened if, for any reason, these memory pictures do not arise. The author made use of tests which showed that there was no disturbance of immediate primary perception of time generally, but only for those periods in which the memory pictures were connected with the psychosis. It became apparent that either a circle of monotonous ideas with strong emotional emphasis and of egocentric interest occupied the patient's field of attention (a constantly reiterated paranoid idea "that she was not in the right place"), or her attention was diverted to some accessory feature, as when she was asked to count the taps of a hammer, she attended only to the force of the separate blows—results which betrayed a schisis within certain groups of reactions from which it could be inferred that a like dissociative force was exercised on all her experiences especially in regard to time orientation. Because of this dis-

turbance of attention the separate partial experiences scarcely reached consciousness with the result that the total periods of which they were composed were also shortened. Thus the author believes that these errors in the estimation of time are not due to disturbances of primary sensations, but to faulty judgments arising from the distraction of attention by the perseverating complex "desire to go away." Because of the force of this dominating idea the period of the patient's stay in the institution did not seem short but on the other hand "tiresome." Here there is what Wundt calls a comparison with an "ideal time." The "three days" which the patient thinks she has spent in the institution seem a "too much" in comparison with her desire "not to be there at all."

Krueger, Hermann. FALSE PERCEPTIONS AND INSANE IDEAS. [Zeitschr. f. d. ges. Neurol. u. Psychiat., 1919, Vol. LI, p. 45.]

After reviewing the hallucinatory and delusional symptoms in the various forms of insanity the author comes to the conclusion that there are no phenomena which can be interpreted as false perceptions of sense without peripheral stimuli of some sort. All isolated hallucinations arise from an illusory falsification of actual sense stimuli which takes place at the time of the illusory perception or shortly before it. The material for the illusory misinterpretation is furnished by the vaguely or fleetingly perceived environment or by entoptic and entotic phenomena or paresthesias. Of the two factors of which hallucinations are composed, *i.e.*, the sense factor and the interpretational, it is the latter which is to be considered pathological; it may be defined as pure ideational activity influenced by the clouding of consciousness, or a one-sided direction of thought in the sense of pathologically exaggerated affects. Every false judgment attributing reality to a hallucination is an insane idea. Thus both illusions and insane ideas are conditioned by the same fundamental psychic disturbance, but the existence of the first is dependent on the existence of the latter; without pathological ideational activity there is no illusory falsification of sense impressions, while insane ideas, on the other hand, need not be accompanied by false sense perceptions. Illusions and insane idea are not, like normal perceptions, qualitatively and genetically different, but both spring from the same foundation, and a transitional form, *i.e.*, pseudohallucinations, constitutes the type of delusions most frequently met with. Both insane ideas and false sense perceptions serve the same purpose, namely, to give an objective foundation to strong affective tensions for which the patient finds no cause in his conscious experience, and which, therefore, he is unable to understand. The hallucinations and delusions are formed in response to a need felt by the patient to give a causal basis to subjective feelings and to explain them by extra-psychic processes. This motivation may take place unconsciously, though in many instances, for example in the paranoid psychoses, the process is more or less conscious. As to the localization of these disturbances, their correspondence with past psychic experi-