

of the persons about him ; the feeling of " being one with somebody " which we mean symbolically is felt as actuality by the patient ; this same sense of union is felt with the universe, and is not unlike the experiences of mystics ; he becomes God by this same process of interpenetration.

From all this it is evident that while the peculiar experiences have a concrete actuality for the patient, they are yet different from his experiences of the generally accepted reality of the external world ; and this difference lies in the special relation of dependence and interpenetration which the autistic world has to the ego of the patient. Some patients can slip from the one to the other, and are aware that the autistic world appears when there is a lessening of attention directed to the real environment ; one patient speaks of the " weary struggle to control his senses and prevent himself from yielding to the temptation of blissfully letting consciousness vanish away." It disappears when the ego raises itself to the plane of clear consciousness and attention to the surroundings ; its appearance depends on his own mental state. The appearances of this autistic world are as vivid and real as external objects, but their reality is different, in that it depends on the observer, and they occur only when the deeper layers of consciousness come to the surface. Attempts may be made to fit this world into external reality—such as ascribing sensations or pictures to some apparatus ; or the patient may ascribe the appearances to some special gift he thinks he has of spiritual vision.

Two extreme types may be considered for the interpenetration of the self and the world : on the one hand, the whole world may seem to be absorbed into the self ; on the other, the self absorbed into the world. The former corresponds to the " idealist " philosophy, regarding phenomena of the world as without material existence, and merely as projections of the perceiving self. For the patient in this stage all objects are merely qualities of himself made concrete, emanations from himself ; and this view is based, not on philosophical considerations, but on the nature of his immediate knowledge, and is akin to the mental processes of savages. The other extreme is that when the sense of being an individual is lost, the self is felt as a dependent part of the surroundings, which can penetrate into his being. In this stage he feels his thoughts are taken from him, and he is thus deprived of portions of himself ; he refuses to speak, since speech is a " giving away of himself " in the most literal sense, and he withdraws from all contact with the external world to protect himself from the sense of loss which is accompanied by tension and emotional discomfort. Impulsive actions may be a reaction to such tension. He feels safe only in the most complete severance from the world, in the extinction of all relationships with it.

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*Pre-logical Thinking in Schizophrenia* [*Prälogisches Denken in der Schizophrenie*]. (*Zeitschr. für die ges. Neur. und Psychiat.*, 87, 1923.) v. Domarus, E.

Certain modes of thought which appear among primitive races are

described and compared with the "normal" or scientific and logical thought processes; the latter have survived as the "fittest"—that is, as the most useful in dealing with external reality. Recognizable stages in development are termed "pre-archaic," "archaic-paralogical," and "paralogical-logical." In the pre-archaic thinking, which may be supposed to exist in such primitive forms as *Pithecanthropus*, and in schizophrenic stupor, there is a generally lowered intensity of images, whether sensory or motor, and of affectivity, and a lack of any attempt to establish relationships between these images, and an absence of any real thought process. In the archaic thinking of a pre-logical kind, found among primitive savage races, the vividness of the images is greater than among more highly developed races, and the affect produced in the observer is projected and believed to be an inherent attribute of the object, which thus acquires a "demonic" character; all things which arouse a similar emotion are thought of as being actually the same. In dementia præcox there is a similar loss of objectivity; hallucinations and reality are imperfectly distinguished, and every happening has a meaning and effect on the observer; the idea of an action produces the action directly, instead of offering a possibility of action, and this is interpreted as a compulsion from without. The paralogical thinking is a stage beyond this; here identification of objects is based on similarities, differences being neglected. It follows the "law of participation" described by Levy-Brühl—all things with the same qualities are the same: "certain Indians run fast," "stags run fast," therefore, in this mode of thought, "some Indians are stags." This form of thought again is common among cases of dementia præcox. It is contrasted with logical thinking, in which a conclusion is based on identities tested by objective reality, and is a logical deduction from the premises.

The author then considers the bearing of this view on the recent researches into the inheritance of the disposition to dementia præcox. Just as with other developmental stages, the latest and highest stage tends to predominate, and in so doing, to inhibit the tendencies to more primitive stages, which may yet co-exist with it. He suggests that a "disposition-quotient" might be established corresponding to the quantitative distribution of such tendencies; the disposition to logical thinking may be a Mendelian dominant, that to more archaic forms a recessive. Schizophrenia would thus become an atavism, manifesting itself either when the inhibiting logical thought disposition was abolished by external causes, or through the cumulative inheritance of recessive characters.

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*Schizophrenic Signs in the Healthy Child* [*Schizophrene Zeichen beim gesunden Kind*]. (*Zeitschr. für die ges. Neur. und Psychiat.*, September, 1923.) Wildermuth, Hans.

Many workers, especially Bleuler, have pointed out how the double orientation, the mixture of the real and the delusional worlds, which is characteristic of schizophrenia, resembles the experiences of normal people in dreams. Mayer-Grosz has called attention to the similarity in the behaviour of the schizophrenic to that of the child at