Some central nervous system factors in the make-up of consciousness.—


Consciousness is a relative term used to describe states of mental clarity. Animals incapable of developing conditioned reflexes or symbols are probably incapable of consciousness. The greater any animal's capacity to develop symbols, the more nearly conscious are his mental states. The most efficient and workable symbols are the symbols of speech and language; the animal that has command of these is the one that is capable of the greatest consciousness, and for the same reason the one whose more primitive unconscious is more elaborate and replete with potentialities for trouble.

C. S. R.

NEUROSES AND PSYCHONEUROSES.

Studies in Stuttering. IV. Studies of action-currents in stutterers.—


Golla was the first to study the action-currents on the two sides of the body during voluntary muscular contraction. He recorded the action-currents in the extensor muscles of each forearm when a left-handed subject was requested to dorsiflex both hands the moment he heard a sound signal, and found a well-marked vibration coming from the extensors of the left forearm before any observable vibration appeared from the right. He further reported that when the subject raised the right hand only, the vibrations nevertheless appeared from the left arm before they did from the right; but that when the left hand was raised, a response did not follow from the right arm, although it was again recorded from the left.

This work suggested to Orton and Travis a method of determining the native handedness or natural physiological bent after the person has been exposed to a variety of chance and determined factors of motor training. It was found that when the currents of muscular action from both forearms are recorded during simultaneous voluntary contractions, they may appear simultaneously in the two arms, but in by far the greater number of trials the action-currents from one arm precede those from the other by a short interval.

In records of right-handed normal speakers, the number of times that the action-currents precede in the right arm far exceeds the precedence in the left, and also far exceeds the incidence of the simultaneous leads. In right-handed stutterers the greatest number of leads is in the left arm, and the number of simultaneous leads is much greater than in normal speakers.

The authors tentatively advance the suggestion that in many stutterers motor facility as determined by training is out of harmony with the physiological leads; and this envisagement fits with the clinical observations of the relationship of stuttering to enforced shifts of handedness in writing in young children.

R. M. S.

The study of the mind of the native in the primitive races of mankind, and in the different and aged civilizations of the east, is of importance in elucidating the mechanisms of the psychoneuroses. In unsophisticated natives hysteria is relatively common. Psychasthenia occurs among races, as well as persons, of a neurotic type. In the east it often appears to be an undesirable waste-product of competitive conditions introduced by western civilization. The mental strain is too great for the weakling, and a nervous breakdown may occur if the additional load of toxæmia or conflicting emotions and thwarted hopes be imposed. Similar and further strains affect the European resident in the tropics. The monotony of trying climatic conditions and of isolation are in striking contrast with life in England. Scorching days, suffocating nights, loss of sleep, the tension of an electrically charged atmosphere, monotonous rain, the petty annoyances of life, the irritation of biting insects, uninviting food, and the necessity of holding communications in a foreign language, have a cumulative effect. Under these circumstances true neurasthenia may develop.

The development of a psychoneurosis is due to failure to adapt by mental adjustment to the circumstances of the environment. Persons whose moral control and education are not of high degree may succumb to the temptations of their new environment and gradually sink to a low level. They satisfy their desires at the price of their civilization. The same fate may befall those of good promise, whose higher mental faculties have been blunted by alcoholism or by repeated illness. Certain tropical diseases are capable of inducing not only psychoneuroses, but actual insanity. Malaria and pellagra are the main ones. In the case of the former a confusional insanity or melancholia is the usual form of psychosis produced by gross cerebral involvement. Psychasthenic conditions are more common, characterized by mental apathy, inattention, and amnesia. Pellagra is a more important cause of psychosis. The effect in the brain appears to be a purely toxic action on the neurones, and the symptoms range from simple depression and backwardness to confusional insanity and melancholia, terminating in dementia. Intestinal infections appear to be an important cause of psychoneuroses and states of depression.

C. S. R.


The views of Janet and Freud are spoken of in relation to psychasthenia. The writer looks upon the compulsion neurosis as a true defence neurosis, and its symptoms, at least the compulsive acts, which develop late in the course of the disorder, as being of the nature of ceremonials, which not only serve to disguise the true situation from the patient, thus acting as a defence, but to atone for an evil. An illustrative case is given. In the history of this patient
are presented the typical symptoms of a compulsion neurosis arising as a result of a sex trauma experienced earlier in life. The symptoms, in the main, representing the efforts on the part of the patient to atone for her imagined uncleanness, her compensatory atonement being represented by symbolic attempts at self-purification.

C. S. R.


This is a readable essay on anxiety in general, of which two varieties, somatogenic and psychogenic, are distinguishable. Anxiety as a state is separable from mere reactions of anxiety, and the question is discussed why one should develop in one instance, and the other in another. Some significance is attached to what is called 'hypernoia,' by which term is meant a recognisable constitutional component of a psychical class consisting in predominance or fertility of ideas; hypernoia is stated to be the normal constitution of cultured people. Its converse is hyponoia. The reaction of the hypernoic and hyponoic to conditions giving rise to anxiety is different in the two. Thus with the hyponoic relative poverty of ideation, of imagination, will enable him to escape the anxiety state that might otherwise come into being. The general paralytic lives in an impossible cosmos of happiness because he is hyponoic. If imagination is fleeting anxiety states are slight. The reaction of the two categories to the same stimulus can be put thus: in the case of the hyponoic, the immediate response, the momentary feeling of anxiety, fright, and so on is stronger; he reacts without deliberation, reflexly. In the case of the hypernoic loss of self-control is much less obvious (unless the stimulus be overwhelming, as in earthquake or railway accident); his imagination, his store of ideas, is in reality an aid to control. In Freudian terminology, it may be said that the hyponoic abreacts, the hypernoic represses. The experience is much more quickly over in the former, and it is in the latter that psychical repercussions may lead to anxiety states.

S. A. K. W.

PSYCHOSES.


Two cases are described, both in women, in which organic brain disease supervened in the course of a schizophrenia. In the first case, after years of typical paranoid schizophrenia, a right hemiplegia and aphasia developed; in the second, symptoms of intracranial tension suggesting a tumour, possibly a case of cysticercus. Examination in the latter was difficult owing to the patient's mental state.