

Abstracts of Periodical Literature

The following excerpt from a review of the book by Charles Susskind of the Microwave Laboratory, Stanford University, is of interest in connection with the personality of a great scientist.

Rutherford, by Those Who Knew Him: Being the collection of the first five Rutherford lectures of the Physical Society

London, Physical Society, 1954, 69 pp., illus., paper, 8s. 6d.

The life of the man who first proposed a mechanical model for the atom has been recorded in several biographies.

He soon established himself (at Manchester and later at Cambridge), as the spiritual leader of a group of scientists and students who evolved theories that were to influence and change not only the field of physics but (by showing the possibility of splitting the atom) the destiny of the entire world.

These five lectures comprise a host of additional personal facts and anecdotes. We get a good inside view of the way Rutherford attacked a problem; how he could drive his collaborators and students to search and probe until a question had been answered; how he infused the people around him with the idea that only by working together harmoniously can good results be achieved; and how he taught that, for a real scientist, the victorious feeling of having wrung one more secret from nature should be the ultimate goal, not the financial reward. Another lesson from his life is the importance of the collaboration of scientists from many countries.—*Science* 121:57, 1955.

Garma, A., et al.

A congress on headache

Numbers I and II of Volume II of *Revista de Psicoanalisis* deal entirely with a series of works presented to a symposium on headache organized by the Asociacion Psicoanalitica Argentina, September 11-12, 1953.

The material discussed includes a total of

17 reports on the analysis of patients with headache, who for practical purposes were divided into 3 groups: (1) patients that sought therapy with migraine as the only presenting problem; (2) patients in whom migraine or other types of headache were an incidental finding during analysis or an associated symptom in their neurosis or psychosis; and (3) candidates for psychoanalysts, who in the course of their own analysis suffered with headache. The study of this last group proves to be particularly valuable in the sense that it discloses intricate mechanisms of countertransference involved in the erroneous interpretations given to their patients and in the genesis of their own headache.

Most of the cases considered seem to be those of borderline psychotics of the chronic undifferentiated or "pseudoneurotic" type of schizophrenic; most of them present strong paranoid traits and their headache appears to be structured as a somatic delusion.

Constantly during the discussion emphasis is given the capital role that submission or surrender plays in the genesis of headache, and it is pointed out how dangerous are liberal and indiscriminate applications of the wide-spread concept that psychogenic headache represents repressed hostility. Doctor Garma, president of the Congress, goes as far as to say that in the etiology of headache masochistic surrender is more important than hostility. Its fundamental genesis could be traced back to "psychological blows" on the head, provoked by infantile traumatic situations plus secondary traumas added to the former. They are external aggressions magnified by a severe and cruel superego, which in turn was conditioned by a severe and cruel environment that existed in reality or in fantasy.

Doctor Garma believes that the hostile attitude, so frequently described in the psychoanalytical literature, is only an apparent defense and that a deeper analysis reveals a personality crushed by external aggression that surrenders with self-defeat in a masochistic fashion and whose aggressivity is only a defense elaborated secondarily in a futile attempt to strive for normality.—*Rev. psicoanal.* 11:1, 1953.

(CARLOS ALFREDO LEON)

PSYCHOSOMATIC MEDICINE

McAdam, W., and Orme, J. E.

Personality traits and the normal electroencephalogram

To assess the correlations between certain persistent personality traits and patterns in the EEG, 40 male alcoholics (chosen because of accessibility and cooperation) were studied by means of a Standard Psychological Interview and a Ranking Rorschach Test. The EEG recording was standard except for the refinement of a band-pass filter to obtain a more accurate measurement of alpha activity. A tendency toward two groupings of psychological traits was found, corresponding to activity and passivity, similar to the dichotomies of extraversion and introversion (Jung), or of cyclothymia and schizothymia (Kretschmer). Activity correlated with a predominance of high frequency in the EEG, and introversion with a predominance of alpha activity. The lower the alpha index, the more "neurotic" is the score on the Ranking Rorschach, according to Eysenck's standards. The possibility was acknowledged that the "extraversion" of the chronic alcoholic is a neurotic simulation of healthy extraversion.—*J. Ment. Sc.* 100:913, 1954.

(ROBERT A. CLARK)

O'Leary, J. L., and Goldring, S.

D.C. potentials

The circuits of the standard EEG equipment cut out all direct current potentials and this information about brain activity is lost. The authors describe the additional data obtained by modification of the apparatus so as to give readings of D.C. potentials. This is accomplished by the introduction of a "chopper" which short-circuits the input 8 times a second, thereby giving observations of the instantaneous level of D.C. potential at each moment the circuit is shorted.

In this paper results on only animals have been reported but the method has been used on man. A potential drop of several millivolts is found across the cortex and this study reports the effects on this steady potential of several drugs that essentially affect cell metabolism. One of these is malononitrile which on injection initially causes a primarily intracellular anoxia. This drug was found to have a marked effect on trans cortical steady potentials, as had also anoxia induced by clamping the trachea. Paroxysmal activity also changes the D.C. poten-

tial level, as does applied surface polarization.

The steady potential change is accompanied by changes in the responses evoked by sensory stimuli, and such drugs as topically applied veratrine, strychnine, and KCl profoundly affect both. There is evidence that the site of action of veratrine is the surface reaches of the apical dendrites of the pyramidal cells, and that the steady potentials of the brain, as recorded transcortically, are the potential drop along the elongated structure of these long radially oriented neurones.

Direct current records add to the information obtainable about the brain's activity and appear to reflect metabolic changes more emphatically than does the standard electroencephalographic recording.—*Electroencephalog. & Clin. Neurophysiol. Supp.* 4:52, 1954.

(MARY A. B. BRAZIER)

Gastaut, H.

Indications and results of metrazol activation

The history, technique, and effects of metrazol activation are recounted. The types of electroencephalographic response that cannot be considered normal are described in detail. The results obtained by metrazol activation in the study and assessment of epileptic disorders are considered by the author as superior to those of any other method of activation.

In cases other than epilepsy, the most consistent abnormal results, on controlled injection of metrazol, are found in certain schizophrenics, the abnormality consisting of a convulsive threshold below that of the normal population.

In the discussion following this paper Dr. George Ulett confirmed this finding on schizophrenics and reported his experience in using activating drugs (and in particular Azazol) for convulsive treatments in psychiatric patients.—*Electroencephalog. & Clin. Neurophysiol. Supp.* 4:121, 1954.

(MARY A. B. BRAZIER)

Kaada, B. R.

Temporal lobe seizures

The behavioral manifestations of temporal lobe seizures make any investigation of the underlying mechanism of wide interest. This paper reviews the experimental work in this field and introduces new findings of the author. The latter indicate that most of the clinical manifestations

of this type of epilepsy, including the complex somatomotor, visceral, psychical, and EEG phenomena, can be produced in animals by stimulation of the anterior temporo-insula cortex, the amygdaloid complex, and the anterior hippocampus. The author quotes some work that indicates that this may also be so in man.—*Electroencephalog. & Clin. Neurophysiol. Supp.* 4:235, 1954.

(MARY A. B. BRAZIER)

Charatan, F. B. E.

An evaluation of chlorpromazine (largactil) in psychiatry

Selected because of increased and pathological psychomotor activity, 42 female inpatients were given chlorpromazine. Their diagnoses were schizophrenic, manic, depressed, or schizoaffective, except for 2 obsessive-compulsives and 1 "mixed puerperal state." When the drug was given orally (75-300 mg. daily for 10 to 106 days) no observable alteration was seen. When given intramuscularly (50-300 mg. daily for 6 to 60 days) there was a general diminution of psychomotor activity. Demands on the nursing staff in the disturbed wards was greatly reduced. Response was variable and unpredictable. Two showed no reduction in overactivity with dosages of 200 and 300 mg. daily. Results were better in schizophrenia. One death by coronary infarction occurred after 2½ weeks of medication.

Eleven patients were given a combination of chlorpromazine and barbiturates daily for 2 weeks, as in prolonged narcosis. Though the dosage of barbiturates was less than usual, the outcome of treatment was disappointing. Only 1 patient was symptomatically improved, and then no more than with electroshock, modified insulin, and narcosis given in previous attacks.—*J. Ment. Sc.* 100:882, 1954.

(ROBERT A. CLARK)

Ropert, R., and Nourissier, M. T.

Combination of amphetamine and "d"-glutamic acid: Clinical evaluation in neuropsychiatric cases

Report of 22 out of 50 cases in which simultaneous exhibition of amphetamine (Benzedrine) and D-glutamic acid was tried in neuropsychiatric illness. The cases described covered a large field of psychiatric practice. The majority of the patients had manic-depressive reactions.

However, also represented were shy, withdrawn individuals. Many had severe conflicts in interpersonal contacts. Four of the patients reacted very well to this therapy and made satisfactory social adaptations.—*Gaz. méd. française* 61:271, 1954.

(REGINALD B. WEILER)

Stanton, J. B.

Investigation of Gerstmann's syndrome induced by hypnotic suggestion

One neurotic subject (a 21-year-old hysteric) was hypnotized and given the suggestion that after awakening, at a signal, a symptom would appear. Dyscalculia, dysgraphia, right-left disorientation, and finger agnosia were separately suggested and canceled. The induction of the last-named brought some or all of the others in its train. The patient had had no such symptoms beforehand, and her original symptoms of tremors, giddiness, aphonia, and insomnia were rapidly removed under hypnosis. The author recommends that hypnosis be used with a larger number of subjects, preferably healthy volunteers, as a means of revealing functional interdependence between various higher cortical functions.—*J. Ment. Sc.* 100:961, 1954.

(ROBERT A. CLARK)

Antonelli, F.

Protracted sleep therapy in psychosomatic practice

Narcotherapy or artificial hibernation or sleep therapy, as exemplified in Soviet psychiatry, which adheres to Pavlov's theses, may be of some auxiliary value in stubborn, deep-seated psychoneurosis. The prolonged sleep serves to reduce emotional urgency through depression of the cortical and subcortical structure, and thus serves to mitigate symptoms through "reduction of psychic control." Energy is stored up through elimination of its expenditure by exclusion of much of the environmental stimuli and stresses which otherwise serve to drain the narcissistic capital. Transference to the therapist is rendered firmer, so that the ego is strengthened. Because of this the patient is enabled to participate in the psychotherapeutic process.—*Gazz. sanit.* 25:53, 1954.

(REGINALD B. WEILER)

Houston, F., and Royse, A. B.

Relationship between deafness and psychotic illness

Forty deaf inpatients were matched for age and sex with 40 nondeaf inpatients to determine the proportion of paranoid and nonparanoid syndromes. Seventeen of the deaf patients, against 8 of the nondeaf patients, were paranoid. It was concluded that deafness and paranoid reaction were positively correlated. It was also noted that the deaf patients were less deteriorated. This verifies the hypothesis, according to the author, that such patients project their inner feelings of inferiority caused by deafness on to their environments and develop ideas of reference and delusions of persecution when the personality is unstable initially.—*J. Ment. Sc.* 100:990, 1954.
(ROBERT A. CLARK)

Schraml, W.

Zum Problem der frühen Mutter-Kind-Trennung (On the problem of early mother-child separation)

The author mentions, in reviewing the literature on the effects of the early separation of children from their mothers, that increased susceptibility to diseases; decreased rate of growth and development; and retardation of psychic development, especially the development of speech, have been found as a consequence.—*Praxis kinderpsychol. u. kinderpsychiat.* 3:243, 1954.
(GERHARD H. FROMM)

Freyhan, F. A.

Clinical and theoretical considerations in narcoanalysis

Narcoanalysis was utilized in 231 cases exhibiting psychotic or psychopathic reactions. The indications for this therapy were: (1) to evaluate the results of changes of consciousness upon orientation, in (a) those with an intact time and space orientation and (b) patients exhibiting twilight states with a distorted orientation; (2) to establish contact in inaccessible patients; (3) to produce changes in the affective tone; (4) to produce alteration of the dynamics in order that repressed material might become available; (5) to aid patients showing no beneficial response from other therapy. Only one third of these individuals produced an increase of sig-

nificant material. In one quarter there was no response at all. Narcoanalysis is ineffective unless there is a previous study of the patient's personality pattern. Only where there is a character structure is it possible to revivify traumas, recall buried memories, or abreast deeper conflicts. There is no relationship between the depth of the narcoanalytical state and recall of deep material.—*Nervenarzt* 23:326, 1952.
(REGINALD B. WEILER)

Schwidder, W.

Psychische Faktoren bei Magen- und Darmerkrankungen (Psychic factors in gastrointestinal disorders)

The author reviews the evidence available in the literature on the significance of psychic factors in gastrointestinal disorders. Present-day knowledge about this subject has been obtained by 5 major lines of investigation: (1) research on psychophysical constitution types; (2) physiological and pathophysiological investigations; (3) experience in internal medicine; (4) experiments on the influence of hypnotic suggestion on the gastrointestinal tract; (5) psychosomatic investigations, which in the last decades have strived more and more to find specific psychic factors.

The possibility of psychologically caused gastrointestinal disturbances is no longer disputed, in view of the evidence accumulated by the lines of research outlined, but there is no unanimity about the specificity of these factors as yet. The author considers the following to be the principal modes of action of psychic factors on the gastrointestinal tract:

1. There is a correlation between consciously experienced affect and alterations of function.
2. In addition, there appear to be specific biological correlations—"oral" desires have the same functional meaning as wishes related to eating and nourishment.
3. Gastrointestinal disturbances appear as a consequence of the repression and blocking of normal needs to "take in" during childhood.
4. The association of environmental events can manifest themselves as a sort of conditioned reflex.

4. Symbolic representation of psychic factors.
The paper ends with a review of gastrointestinal symptoms that have been found to be psychogenic in origin at one time or another.—*Ztschr. psycho-som. Med.* 1:4, 1954.
(GERHARD H. FROMM)

Hagspühl, K.

Das Besitzproblem in auslösenden Konflikt bei Magen-Darmerkrankungen (The problem of "having" or "possessing" in the causal conflict in gastrointestinal disorders)

The author holds that neurotic symptoms are precipitated by stressful situations that are specifically related to the underlying neurotic structure. In the case of neurotic gastrointestinal diseases, conflicts that concern problems related to "having" or "taking in" play a significant role. Four case histories are given in which this causal relationship appears to be particularly clearly demonstrated.—*Ztschr. psycho-som. Med.* 1:21, 1954.

(GERHARD H. FROMM)

Schellack, D.

Neurosenpsychologische Faktoren in der Aetiologie und Pathogenese der afebrilen Colitis ulcerosa chronica (Neurotic factors in the etiology and pathogenesis of afebrile chronic ulcerative colitis)

The author reports on 7 cases of chronic ulcerative colitis that were studied analytically, giving case reports on 3 of these. He states that although general conclusions cannot be drawn from such a limited series, neurotic errors in development were found in all 7 cases. Conflicts ensuing from toilet training seem to play an important part in the etiology. Consequently, a cathexis free of affect of the act of defecation, so intimately related to the emotions associated with giving and not giving, does not occur. The elimination of the stool forced on the child is experienced as the loss of a valued possession. An extremely nonpossessive and giving child develops who is constantly inwardly tormented by retentive reaction formations motivated by the anxiety of loss. This causes a neuromuscular dyskinesia resulting eventually in functional derangement of bowel activity. The structural changes, as also in spastic obstipation, acquired megacolon, and mucous colitis, are secondary. Analytical psychotherapy is held to be the most appropriate form of treatment of these patients, as they are for the most part severe neurotic personalities. Quick initial success in female patients who have a positive transference to a male therapist should not lead to an untimely termination of treatment. Only when the neurotic structure has been completely corrected is one

assured that a recurrence will not occur soon. Patients whose retentive behavior leads them not to want to part with anything, even in analysis, and who therefore tend to silence, pose a hard problem. Hypnosis, which has been reported successful in cases of chronic ulcerative colitis, should receive careful consideration as a method of therapy in these cases.—*Ztschr. psycho-som. Med.* 1:28, 1954.

(GERHARD H. FROMM)

Glatzel, H.

Zur Psychosomatik der Ulkuserkrankung (Contribution to the psychosomatic aspects of peptic ulcer disease)

The author reviews the literature on the clinical investigations of the personality of people with peptic ulcers. They are mostly people with above-average sensitivity, intelligence, and will to succeed, and who have a lack of inner warmth, imagination, and ability to express their emotions. These characteristics are present long before the appearance of the first ulcer symptoms and are its cause. How much of these personality factors can be attributed to early childhood experiences and how much is hereditary has not been proven conclusively. In most patients, if not in all, the actual ulcer is preceded by a conflict arising out of the above-described "ulcer personality"—a chronic feeling of anxiety and inferiority in its incessant striving to outdo itself. It cannot overcome this feeling of inferiority and yet it cannot give up and accept less. It is not settled whether there is any correlation between this particular type of conflict and peptic ulcer disease, or whether it could result in any other disease also.—*Ztschr. psycho-som. Med.* 1:11, 1954.

(GERHARD H. FROMM)

Kuhn, R.

Psychiatric experience in crippled patients

Fifty individuals with crippling defects, including 10 patients with Little's disease, 14 with defects caused by trauma, 6 with sequelae of anterior poliomyelitis, 3 with tubercular bone disease, 3 with arthritic arthropathy, and 7 with congenital (birth trauma?) defects were studied. No unusual or specific psychological problems were encountered except where the bodily deformity had a traumatic effect on the emotions. The relatively uncommon neuroses found in

such individuals present great interest. One girl with residual paraplegia from anterior poliomyelitis developed a reactive depression in response to frustration and misfortune, which yielded to psychotherapy. There is a dissociation of varying degree in the psychosomatic unity, the type and extent of which determine the choice of psychotherapy.—*Monatsschr. Psychiat. u. Neurol.* 125:572, 1953.

(REGINALD B. WEILER)

Rafton, H. R.

More on "A New University"

A new type of university was proposed by William Seifriz (*Science*, 120:87, 1954), for a culture based on an intelligent biologic system of ethics. Rafton remarks that the American Humanist Association with headquarters at Yellow Springs, Ohio, is a membership organization described as "a way of life, of philosophy, firmly based on the findings of science, imbued with the democratic outlook, and cultivating a rational system of ethics." It has faith that man has the capacity of solving his problems, not only material but also moral, and can develop his ethical concepts on a naturalistic foundation.—*Science* 121:41, 1955.

(L. J. S.)

Carp, E. A. D. E.

Transfert de relations sur base de fixation et d'union

Psychotherapy aims at arousing in the patient certain modes of expression and feeling; it fulfills hereby a liberating function with the help of human intuition. The instinctive experiences taking place in the course of the transference situation have to be replaced by more appropriate feelings and modes of expression. In other words: psychotherapy aims at transforming emotional relationships based on infantile fixations into relationships based on mature, loving companionship, in which the psychotherapist acts as intermediary.—*Acta psychother. psychosom. et orthopaed.* 1:304, 1954.

(AUTHOR'S ABSTRACT)

Langer, M., and Parks, Ochandorena

Fallopian tube spasm as a cause of sterility: Its origin, mechanism and treatment

Psychogenic sterility may operate, in many cases, by producing a chronic spastic condition

of the fallopian tubes. Case histories illustrate differential diagnosis as well as the therapy. The psychopathology indicates the condition to be defensive in origin. It is often associated with fear of ectopic pregnancy. Associated symptomatically are vaginismus and sexual frigidity. Frequently complicating the rest of the psychological factors is an identification with the pregnant mother. This results in the hatred toward the mother being turned upon the self. Further, there is fear and symbolic expression of the talion which the child visited upon the pregnant mother, which now falls upon the patient, due to her identification relationship with the early mother figure. The indicated therapy is psychotherapeutic.—*Rev. psicoanal.* 10:103, 1953.

(REGINALD B. WEILER)

Cenac, M.

The psychoanalytic consultation and treatment center

The aim of the center is to help those patients who are less fortunate economically. The sources of referral are: The Public Office of Social Hygiene, The Students Dispensary, Public Assistance, Seine's Psychiatric Hospital, and directly from medical and surgical consultations.

Psychosomatic and psychiatric diagnoses and evaluations and treatments are made by the students of the Institute of Psychoanalysis under close supervision of experienced psychoanalysts. The Center is a pilot organization where psychoanalytic treatments may be perfected.—*Rev. franç. psa.* 2:173, 1954.

(CARLOS CORONA IBARRA)

Further References

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