

ABSTRACTS OF THE SCIENTIFIC WRITINGS OF DR. SIGM. FREUD 1877-1897

A-BEFORE APPOINTMENT AS PRIVATDOZENT

I

‘Observations on the configuration and finer structure of the lobed organs in eels described as testes.’

Dr. Syrski had recently recognized a paired, lobulated, grooved organ occurring in the abdominal cavity of the eel as the animal’s male sexual organ which had long been looked for. At Professor Claus’s suggestion I investigated the occurrence and tissue components of these lobed organs at the zoological station in Trieste.

II

‘On the origin of the posterior nerve-roots in the spinal cord of Ammocoetes (Petromyzon planeri).’

(From the Institute of Physiology of the University of Vienna. With one plate.)

Investigation of the spinal cord of Ammocoetes showed that the large nerve-cells described by Reissner as occurring in the posterior grey matter (posterior cells) give rise to the root fibres of the posterior roots.-The anterior and posterior spinal roots of the Petromyzon, at all events in the caudal region, are displaced relatively to each other in their origins and remain distinct from each other in their peripheral course.

III

‘On the spinal ganglia and spinal cord of Petromyzon.’

(From the Institute of Physiology of the University of Vienna. With four plates and two woodcuts.)

The spinal ganglion cells of fish were long regarded as bipolar, and those of the higher animals were considered to be unipolar. As regards the latter elements Ranvier had shown that their single process branched in a T-shape after a short course. - By the use of a gold maceration technique it was possible to make a complete survey of the spinal ganglia of Petromyzon; their nerve cells exhibit every transition between bipolarity and unipolarity with T-shaped branching of the fibres; the number of fibres of the posterior root is regularly greater than the number of nerve cells in the ganglion; thus there are ‘fibres of passage’ and ‘subsidiary’ nerve fibres, of which the latter merely mingle with the elements of the roots. - A link between the spinal ganglion cells and the posterior cells in the spinal cord which have been described is provided in Petromyzon by cellular elements which are exposed on the surface of the spinal cord between the posterior root and ganglion. These scattered cells indicate the path taken by the spinal ganglion cells in the course of evolution. - In relation to the spinal cord of Petromyzon, the paper further

describes the branching of the fibres in the central pathway of the posterior root fibres, and the forked ramification of the anterior commissural fibres, the intercalation of nerve cells in the spinal portions of the anterior roots, and a very fine nerve-net (which can be stained by gold chloride) in the pia mater.

IV

‘Note upon a method for anatomical preparations of the nervous system.’

A modification of a method recommended by Reichert. - A mixture of 1 part concentrated nitric acid, 3 parts water, and 1 part concentrated glycerine, since it destroys connective tissue and makes it easy to remove bones and muscles, is useful for laying bare the central nervous system with its peripheral branches, particularly in small mammals.

V

‘On the structure of the nerve fibres and nerve cells of the river crayfish.’

The nerve fibres of the river crayfish, when the tissues are examined live, exhibit without exception a fibrillary structure. The nerve cells, whose survival can be recognized from the granules in their nucleus, seem to be composed of two substances. One of these is reticular and is continued into the fibrils of the nerve fibres, and the other is homogeneous and is continued in their ground substance.

VI

‘The structure of the elements of the nervous system.’

(Lecture delivered before the Psychiatric Society, 1882.)

Contents as in V.

VII

‘A new method for the study of nerve-tracts in the central nervous system.’

If fine sections of the central organ, hardened in chromate are treated with gold chloride, a strong solution of soda and a 10 percent solution of calcium iodide, a red to blue stain is obtained which affects either the medullary sheaths or only the axis cylinders. The method is no more reliable than other methods of gold staining.

VIIa

‘A new histological method for the study of nerve-tracts in the brain and spinal chord.’

Contents as in VII.

VIII

‘A case of cerebral haemorrhage with indirect basal focal symptoms in a patient suffering from scurvy.’

A report of a case of cerebral haemorrhage in a patient suffering from scurvy, which ran a rapid course under continuous observation. The symptoms are explained with reference to Wernicke's theory of the indirect effect of focal lesions.

IX

'On Coca.'

The alkaloid of the coca plant which was described by Niemann received little attention for medical purposes at the time. My work included botanical and historical notes on the coca plant based on statements in the literature; it confirmed by experiments on normal subjects the remarkable stimulating effects of cocaine and its action in preventing hunger, thirst and sleep; and it endeavoured to lay down indications for the therapeutic use of the drug.

Among these indications the reference to the possible employment of cocaine during withdrawal of morphine became of importance later. The expectation voiced at the end of the work that the property of cocaine for producing local anaesthesia would find further applications was soon afterwards fulfilled by K. Koller's experiments in anaesthetizing the cornea.

X

'Contribution to our knowledge of the effects of coca.'

Dynamometric demonstration of the increase in motor strength during cocaine euphoria, motor strength (measured by the strength of the grip) shows a regular daily oscillation (similar to that of body temperature).

XI

'A note upon the inter-olivary tract.'

Short notes on the connections of the roots of the auditory nerve and the connection between the inter-olivary tract and the crossed trapezoid body, based upon incompletely myelinated human preparations.

XII

'A case of muscular atrophy with extensive disturbances of sensibility (syringomyelia).'

The combination of bilateral muscular atrophy, of bilateral disturbance of sensibility in the nature of a 'partial', dissociated paralysis of sensation, and of trophic disturbances in the left hand (which also exhibited the most intense anaesthesia), taken together with the restriction of the pathological symptoms to the upper part of the body, permitted a diagnosis in vivo in a 36-year-old man of syringomyelia, an affection which at that time was regarded as rare and hard to recognize.

B. AFTER APPOINTMENT AS PRIVATDOZENT

XIII

‘Acute multiple neuritis of the spinal and cranial nerves.’

An eighteen-year-old man fell ill without fever but with general symptoms and dragging pains in his chest and legs. At first he showed symptoms of endocarditis, but later the pains increased and sensitiveness to pressure developed in the vertebral column and regionally in the skin, muscles and nerve trunks as the affection involved one extremity after the other: heightening of the reflexes, outbreaks of sweating, local wasting, and lastly diplopia, disturbances of swallowing, facial paresis, and hoarseness. Finally fever, extreme acceleration of the pulse and pulmonary affection. The diagnosis of acute multiple neuritis made during the course of the illness was confirmed by the post-mortem findings, which showed that all the spinal nerves in their sheaths were injected, greyish-red, and, as it were, bunched up. Similar changes in the cranial nerves. Endocarditis. - According to the pathologist, this was the first post-mortem finding of polyneuritis to be made in Vienna.XIV

‘On the relation of the restiform body to the posterior column and its nucleus with some remarks on two fields of the medulla oblongata.’

Jointly with Dr. L. Darkschewitsch (Moscow).

By studying preparations with incompletely myelinated medulla the restiform body can be divided into two components: a ‘nucleus’ (primary restiform body) and a ‘fringe’ (secondary restiform body). The latter contains the olivary fibre system which becomes medullated later. The primary restiform body, which is medullated earlier, is divided into a ‘head portion’ and a ‘tail portion’. The head of the primary restiform body arises from the nucleus of the column of Burdach and thus represents a (for the most part uncrossed) continuation to the cerebellum of the centripetal tract from the extremities. The corresponding continuation to the cerebrum is provided by means of the arcuate fibres originating from this same nucleus. The tail portion of the primary restiform body is a direct continuation of the spinal lateral cerebellar tract. - The lateral field of the medulla oblongata allows of a uniform interpretation of its components. It contains four grey substances with the systems of fibres proceeding from them, which are to be considered homologous to one another as substances in which the sensory nerves from the extremities, and the trigeminal, vagal, and auditory nerves have their origin.

XV

‘On the origin of the auditory nerve.’

A description of the origin of the auditory nerve, based on preparations of the human foetus, illustrated by four drawings of cross-sections and a diagram. The auditory nerve falls into three portions, of which the lowest (most spinal) terminates in the auditory ganglion and has continuations through the cornu trapezoides and the tracts of the superior olivary body; the second can be traced as the ‘ascending’ auditory root of Roller into what is known as Deiters’ nucleus; and the third runs

into the inner auditory field of the medulla oblongata, from which continuations into the cerebellum arise. Details are given of the further course of these tracts so far as it has been possible to follow them.XVI

‘Observation of a severe case of hemi-anaesthesia in a hysterical male.’

(The organ of vision was examined by Dr. Königstein.)

The case history of a 29-year-old engraver with a bad family history, who fell ill after a dispute with his brother. The case afforded a demonstration of the symptom of sensible and sensorial hemi-anaesthesia in its classical form. - The disturbance in the field of vision and in the sense of colour is reported by Dr. Königstein.

XVII

‘Remarks on addiction to cocaine and the fear of cocaine.’

(With reference to a lecture by W. A. Hammond.)

The employment of cocaine for the relief of abstinence from morphine resulted in the misuse of cocaine and gave physicians an opportunity of observing the new clinical picture of chronic cocaine addiction. My essay, supported by a pronouncement from an American neuropathologist, seeks to show that this addiction to cocaine comes about only in addicts to other drugs (such as morphine) and that cocaine itself cannot be blamed for it.XVIII

‘On hemianopsia in earliest childhood.’

An observation of disturbance in one half of the visual field in two children, aged 26 months and three and a quarter years, an age at which the symptom had not previously been medically recorded. A discussion on the lateral inclination of the head and eyes which was to be observed in one of the cases and on the localization of the suspected lesion. Both cases are to be classed among the ‘unilateral cerebral palsies of children’.

XIX

On the Interpretation of the Aphasias, a critical study.

After a firm basis for the understanding of cerebral disturbances of speech had been established by the discovery and definite localization of a motor and a sensory aphasia (Broca and Wernicke), the authorities set about tracing the more subtle symptoms of aphasia as well to factors of localization. In this way they arrived at the hypothesis of a conduction aphasia, with subcortical and transcortical, and motor and sensory forms. This critical study is directed against this view of speech disorders and it seeks to introduce for their explanation functional factors in place of the topographical ones. The forms described as subcortical and transcortical are not to be explained by a particular localization of the lesion but by conditions of reduced capacity for conduction in the apparatus of speech. In fact there are no aphasias caused by subcortical lesion. The justification for distinguishing a central aphasia from a conduction aphasia is also disputed. The speech area of the cortex is seen rather as a continuous region of the cortex

inserted between the motor fields of the cortex and those of the optic and auditory nerves--a region within which all communication and association subserving speech function takes place. The so-called speech-centres revealed by the pathology of the brain correspond merely to the corners of this field of speech; they are not distinguished functionally from the interior regions; it is only on account of their position in relation to the contiguous cortical centres that they produce more obvious signs when they become disordered.

The nature of the subject treated here called at many points for a closer investigation of the delimitation between the physiological and the psychological approach. Meynert's and Wernicke's views on the localization of ideas in nervous elements have had to be rejected and Meynert's account of a representation of the body in the cerebral cortex has required revision. Two facts of cerebral anatomy, namely (1) that the masses of fibres entering the spinal cord are constantly diminished on passing upwards, owing to the interposition of grey matter, and (2) that there are no direct paths from the periphery of the body to the cortex - these two facts lead to the conclusion that a really complete representation of the body is present only in the grey matter of the cord (as a 'projection'), whereas in the cortex the periphery of the body is only 'represented' in less detail through selected fibres arranged according to function.

XX

Clinical Studies of the Unilateral Cerebral Palsies of Children.

(In collaboration with Dr. O. Rie.)

(No. III of Beiträge zur Kinderheilkunde edited by Dr. M. Kassowitz.)

A monograph describing this affection, based on studies of material in the First Public Institute for Children's Diseases in Vienna, directed by Kassowitz. In ten sections it deals with (1) the history and literature of the cerebral palsies of children;(2) 35 observations of the authors' own, which are then summarized in tabular form and described individually; (3) the analysis of the individual symptoms of the clinical picture; (4) the pathological anatomy; (5) the relations of cerebral palsy to epilepsy and, (6) to infantile poliomyelitis; (7) differential diagnosis and (8) therapy. A 'choreatic paresis' is described by the authors for the first time; it is distinguished by peculiar characteristics in its onset and course, and in it the unilateral paresis is from the beginning represented by hemichorea. There is further an account of the findings of an autopsy (lobar sclerosis as a result of an embolism of the middle cerebral artery) on a woman patient described in the *Iconographie de la Salpêtrière*. Emphasis is laid on the close relations between epilepsy and the cerebral palsies of children, in consequence of which some cases of apparent epilepsy might deserve to be described as 'cerebral palsy without palsy'. In connection with the much discussed question as to the existence of poliоencephalitis acuta, which is supposed to constitute the anatomical basis of unilateral cerebral palsy and to offer a complete analogy with poliomyelitis infantilis, the authors argue against this hypothesis of Strümpell's; but they hold firmly to the expectation that a modified view of poliomyelitis acuta infantilis will allow of its

being equated with cerebral palsy on another basis. In the therapeutic section are collected the hitherto published reports on the intervention by brain surgeons directed to the cure of genuine or traumatic epilepsy.

XXI

‘A case of successful treatment by hypnotism with some remarks on the origin of hysterical symptoms through "counter will".’

A young woman after the birth of her first child was compelled to give up breast-feeding it owing to a complex of hysterical symptoms (loss of appetite, sleeplessness, pains in her breasts, failure of milk-secretion, agitation). When, after the birth of a second child, these obstacles recurred, deep hypnosis on two occasions, accompanied by counter-suggestions, succeeded in removing the obstacles, so that the patient became an excellent nursing mother. The same result was brought about a year later in similar circumstances after two more hypnoses. Some remarks are appended on the fact that it is possible in hysterical patients for distressing antithetic or anxious ideas to be realized which normal people are able to inhibit; several observations of tic are traced back to this mechanism of ‘counter-will’.XXII

‘Charcot.’

An obituary of the master of neuropathology who died in 1893 and among whose pupils the present writer numbers himself.

XXIII

‘On a symptom which often accompanies enuresis nocturna in children.’

In perhaps half the cases of children suffering from enuresis we find a hypertonia of the lower extremities the significance and implications of which are unexplained.

XXIV

‘On the psychical mechanism of hysterical phenomena.’

(Preliminary communication in collaboration with Dr. J. Breuer.)

The mechanism to which Charcot traced back hystero-traumatic paralyses, and the assumption of which enabled him to provoke them deliberately in hypnotized hysterical patients, can also be made responsible for numerous symptoms of what is described as non-traumatic hysteria. If we put the hysteric under hypnosis and lead his thoughts back to the time at which the symptom in question first appeared, a memory of a psychical trauma (or series of traumas) belonging to that time awakens in him with hallucinatory vividness, the symptom having persisted as a mnemonic symbol of the trauma. Thus hysterics suffer mainly from reminiscences. If the traumatic scene which has been arrived at in this way is reproduced vividly, accompanied by a generation of affect, the symptom which has hitherto been obstinately maintained disappears. We must therefore suppose that the forgotten memory has been acting like a foreign body in the mind, with the removal of which the irritating phenomena cease. This discovery, first made by Breuer in 1881, can

be made the basis of a therapy of hysterical phenomena which deserves to be described as 'cathartic'.

The memories which are revealed as 'pathogenic', as the roots of hysterical symptoms, are regularly 'unconscious' to the patient. It seems that by thus remaining unconscious they escape the wearing-away process to which psychical material is normally subject. A wearing-away of this sort is brought about by the method of 'abreaction'. Pathogenic memories avoid being dealt with by abreaction either because the experiences concerned have occurred in special psychical states to which hysterical persons are inherently inclined, or because those experiences have been accompanied by an affect which brings about a special psychical state in hysterical persons. A tendency to a 'splitting of consciousness' is accordingly the basic psychical phenomenon in cases of hysteria.

XXV

An Account of the Cerebral Diplegias of Childhood (in Connection with Little's Disease.)

(No. III, New Series, of Beiträge zur Kinderheilkunde edited by Dr. M. Kassowitz.)

A supplement to the Clinical Study of the Unilateral Cerebral Palsies of Children summarized under XX above. The history, pathological anatomy and physiology of the affection are treated here in the same order as in the earlier monograph, and the relevant clinical pictures are illustrated by 53 observations made by the author himself. It was, however, necessary in addition to take into account the range of forms that must be described as 'cerebral diplegias' and to point out their clinical similarity. In face of the differences of opinion that prevail in the literature of these disorders, the author has adopted the standpoint of an earlier authority, Little, and has thus arrived at the erection of four principal types, which are described as general spasticity, paraplegic spasticity, general chorea and bilateral athetosis, and bilateral spastic hemiplegia (spastic diplegia).

General spasticity includes the forms which are usually referred to as 'Little's disease'. Paraplegic spasticity is the name given to what was earlier regarded as a spinal affection, *tabes spastica infantilis*. The spastic diplegias correspond most easily to a doubling of unilateral cerebral palsies, but are characterized by a superfluity of symptoms which finds its explanation in the bilateral nature of the cerebral affection. The justification for including general chorea and bilateral athetosis among these types is provided by numerous characteristics of the clinical picture and by the existence of many mixed and transitional forms which link all these types together.

A discussion follows of the relations of these clinical types to the aetiological factors which are here assumed to be operative and to the insufficient number of post-mortem findings that have been reported. The following conclusions are reached:

Cerebral diplegias can be divided according to their origin into (a) those congenitally determined, (b) those arising at the time of birth and (c) those acquired

after birth. But it is extremely rarely that this distinction can be drawn from the clinical peculiarities of the case, and not always possible from the anamnesis. All the aetiological factors of the diplegias are enumerated: prenatal (trauma, illness, or shock affecting the mother, place of the child in the family); operative at the time of birth (the factors stressed by Little, namely premature birth, difficult labour, asphyxia); and after birth (infectious diseases, trauma or shock affecting the child). Convulsions cannot be regarded as causes but only as symptoms of the affection. The aetiological part played by inherited syphilis is recognized as important. There is no exclusive relation between any one of these aetiologies and any one type of cerebral diplegia, but preferential relations are often apparent. The view that cerebral diplegias are affections with a single aetiology is untenable.

The pathological findings in the diplegias are of many kinds, and in general the same as in the hemiplegias; for the most part they are in the nature of end stages, from which it is not invariably possible to infer back to the initial lesions. They do not as a rule allow of a decision as to the aetiological category to which a case is to be referred. Nor is it usually possible to deduce the clinical picture from the post-mortem findings; so that the assumption that there are intimate and exclusive relations between clinical types and anatomical changes must also be rejected.

The pathological physiology of cerebral diplegias has an essential connection with the two characteristics by which both general and paraplegic spasticity are distinguished from other manifestations of organic disease of the cerebrum. For in both these clinical forms contracture predominates over paralysis and the lower extremities are affected more severely than the upper ones. The discussion in this paper reaches the conclusion that the more intense affection of the lower extremities in general and paraplegic spasticity must be connected with the localization of the lesion (meningeal haemorrhage along the median fissure) and the preponderance of contracture with the superficiality of the lesion. The strabismus of diplegic children, which is particularly common in paraplegic spasticity and where premature birth is the aetiology, is traceable to the retinal haemorrhages in new-born children described by Königstein.

A special section directs attention to the numerous instances of the familial and hereditary occurrence of children's diseases which show a clinical affinity with cerebral diplegias.

XXVI

'On familial forms of cerebral diplegias.'

An observation of two brothers, one six and a half and the other five years old, whose parents were blood relations, and who present a complicated clinical picture which has gradually developed, in the one case since birth and in the other since the second year. The symptoms of this familial disorder (lateral nystagmus, atrophy of the optic nerve, alternating convergent strabismus, monotonous and, as it were, scanning speech, intention tremor of the arms, spastic weakness of the legs, accompanied by high intelligence) give grounds for constructing a new affection which is to be regarded as a spastic counterpart to Friedreich's disease. Emphasis

is laid on the far-reaching similarity of these cases to those described as multiple sclerosis by Pelizaeus in 1885.XXVII

‘The cerebral diplegias of children.’

A summary of the findings in the monograph abstracted above, No. XXV.

XXVIII

‘Some points for a comparative study of organic and hysterical motor paralyses.’

A comparison between organic and hysterical paralyses made under the influence of Charcot in order to arrive at a line of approach to the nature of hysteria. Organic paralysis is either periphero-spinal or cerebral. On the basis of discussions in my critical study on the aphasias, the former is described as projection paralysis and paralysis en détail, and the latter is described as representation paralysis and paralysis en masse. Hysteria imitates only the latter category of paralyses but has freedom to specialize which makes it resemble projection paralysis; it can dissociate the areas of paralysis which regularly occur in cerebral affections. Hysterical paralysis has a tendency to excessive development; it can be extremely intense and yet strictly confined to a small area, while cortical paralysis regularly increases its extent with an increase in its intensity. Sensibility behaves in a directly contrary manner in the two kinds of paralysis.

The special characteristics of cortical paralysis are determined by the peculiarities of cerebral structure, and allow us to infer back to the anatomy of the brain. Hysterical paralysis on the contrary behaves as though there were no such thing as cerebral anatomy. Hysteria knows nothing of the anatomy of the brain. The alteration which underlies hysterical paralysis can have no resemblance to organic lesions but must be looked for in the conditions governing the accessibility of some particular circle of ideas.

XXIX

‘The neuro-psychoses of defence: an attempt at a psychological theory of acquired hysteria, of many phobias and obsessions and of certain hallucinatory psychoses.’

The first of a series of short papers which now follow and which are directed to the task of preparing a general exposition of the neuroses on a new basis which is now in hand.

The splitting of consciousness in hysteria is not a primary characteristic of this neurosis, based on degenerative weakness, as Janet insists. It is the consequence of a peculiar psychical process known as ‘defence’ which is shown by some short reports of analyses to be present not only in hysteria but in numerous other neuroses and psychoses. Defence comes into operation when an instance of incompatibility arises in ideational life between a particular idea and the ‘ego’. The process of may be figuratively represented as though the quota of excitation were torn away from the idea that is to be repressed and put to some other use.. This can occur in a variety of ways : in hysteria the liberated sum of excitation is

transformed into somatic innervation (conversion hysteria); in obsessional neurosis it remains in the psychical field and attaches itself to other ideas which are not incompatible in themselves and which are thus substitutes for the repressed idea. The source of the incompatible ideas which are subjected to defence is solely and exclusively sexual life. An analysis of a case of hallucinatory psychosis shows that this psychosis too represents a method of achieving defence.

XXX

‘Obsessions and phobias: their psychical mechanism and aetiology.’

Obsessions and phobias are to be distinguished from neurasthenia as independent neurotic affections. In both it is a question of the linkage between an idea and an affective state. In phobias the latter is always the same, namely anxiety; in true obsessions it can be of various kinds (self-reproach, sense of guilt, doubt, etc.). The affective state emerges as the essential element of the obsession, since it remains unaltered in the individual case, whereas the idea attached to it is changed. Psychical analysis shows that the affect of the obsession is justified in every instance, but that the idea attached to it represents a substitute for an idea derived from sexual life which is more appropriate to the affect and which has succumbed to repression. This state of affairs is illustrated by numerous short analyses of cases of folie du doute, washing mania, arithmomania, etc., in which the reinstatement of the repressed idea was successful and accompanied by useful therapeutic effects. The phobias in the strict sense are reserved for the paper on anxiety neurosis (No. XXXII).

XXXI

Studies on Hysteria.

(In collaboration with Dr. J. Breuer.)

This volume contains the carrying-through of the subject raised in the ‘Preliminary Communication’ (No. XXIV) dealing with the psychical mechanism of hysterical phenomena. Although it proceeds from the joint work of the two authors, it is divided into separate sections, of which four detailed case histories together with discussions and an attempt at a ‘Psychotherapy of Hysteria’ represent my share. The aetiological part played by the sexual factor is stressed with greater emphasis in this book than in the ‘Preliminary Communication’, and the concept of ‘conversion’ is used to throw light on the formation of hysterical symptoms. The essay on psychotherapy seeks to give some insight into the technique of the psycho-analytic procedure, which is alone able to lead to the investigation of the unconscious content of the mind, and the employment of which may also be expected to lead to important psychological discoveries.XXXII

‘On the grounds for detaching a particular syndrome from neurasthenia under the description "anxiety neurosis".’

The concurrence of a constant grouping of symptoms with a particular aetiological determinant makes it possible to pick out from the composite province of ‘neurasthenia’ a syndrome which deserves the name of ‘anxiety neurosis’, because

all of its constituents arise from the symptoms of anxiety. These are either to be regarded as immediate manifestations of anxiety or as rudiments and equivalents of them (E. Hecker), and they are often in complete opposition to the symptoms which constitute neurasthenia proper. The aetiology of the two neuroses also points to an opposition of this kind. Whereas true neurasthenia arises from spontaneous emissions or is acquired through masturbation, the factors belonging to the aetiology of anxiety neurosis are such as correspond to a holding back of sexual excitation - such as abstinence when libido is present, unconsummated excitation and, above all, coitus interruptus. In actual life the neuroses here distinguished usually appear in combination, though pure cases can also be demonstrated. When a mixed neurosis of this kind is subjected to analysis, it is possible to indicate a mixture of several specific aetiologies.

An attempt to arrive at a theory of anxiety neurosis leads to a formula to the effect that its mechanism lies in the deflection of somatic sexual excitation from the psychological field and a consequent abnormal employment of that excitation. Neurotic anxiety is transformed sexual libido.

XXXIII

‘A reply to criticisms of my paper on anxiety neurosis.’

A reply to objections made by Löwenfeld to the content of No. XXXII. The problem of the aetiology of the pathology of the neuroses is dealt with here, to justify the division into three categories of the aetiological factors that appear: (a) preconditions, (b) specific causes and (c) concurrent or auxiliary causes. What are called preconditions are the factors which, though they are indispensable for producing the effect, cannot by themselves produce it but need in addition the specific causes. The specific causes are distinguished from the preconditions by the fact that they figure in only a few aetiological formulas, while the preconditions play the same part in numerous affections. Auxiliary causes are such as neither need invariably be present nor are able by themselves to produce the effect in question. - In the case of neuroses it is possible that the precondition may be heredity; the specific cause lies in sexual factors; everything else that is brought up apart from these as forming the aetiology of the neuroses (overwork, emotion, physical illness) is an auxiliary cause and can never entirely take the place of the specific factor, though it can no doubt serve as a substitute for it in the matter of quantity. The form of a neurosis depends on the nature of the specific sexual cause; whether there shall be a neurotic illness at all is determined by factors operating quantitatively; heredity works like a multiplier inserted in an electric circuit.

XXXIV

‘On Bernhardt’s disturbance of sensibility in the thigh.’

A self-observation of this harmless affection, which is probably traceable to local neuritis; and a report of some other cases, including bilateral ones.

XXXV

‘Further remarks on the neuro-psychoses of defence.’

(1) The specific aetiology of hysteria. A continuation of psycho-analytic work with hysterical subjects has had the uniform result of showing that the suspected traumatic events (as mnemonic symbols of which hysterical symptoms persist) occur in the patients’ earliest childhood and are to be described as sexual abuses in the narrowest sense.

(2) The nature and mechanism of obsessional neurosis. Obsessional ideas are invariably transformed self-reproaches which have re-emerged from repression and which always relate to some sexual act that was performed with pleasure in childhood. The course taken by this return of the repressed is traced, as are the results of a primary and secondary work of defence.

(3) Analysis of a case of chronic paranoia. This analysis, which is reported in detail, indicates that the aetiology of paranoia is to be found in the same sexual experiences of early childhood in which the aetiology of hysteria and of obsessional neurosis has already been discovered. The symptoms of this case of paranoia are traced in detail to the activities of defence.

XXXVI

‘The aetiology of hysteria.’

More detailed reports of the infantile sexual experiences which have been shown to constitute the aetiology of the psychoneuroses. In their content these experiences must be described as ‘perversions’, and those responsible are as a rule to be looked for among the patient’s nearest relatives. A discussion of the difficulties which have to be surmounted in uncovering these repressed memories and of the objections that may be raised against the results thus arrived at. Hysterical symptoms are shown to be derivatives of memories operating unconsciously; they appear only in collaboration with such memories. The presence of infantile sexual experiences is an indispensable condition if the efforts of defence (which occur in normal people as well) are to result in producing pathogenic effects - that is to say, neuroses.

XXXVII

‘Heredity and the aetiology of the neuroses.’

The findings hitherto arrived at by psycho-analysis on the aetiology of the neuroses are here employed to criticize the current theories of the omnipotence of heredity in neuropathology. The part played by heredity has been overestimated in several directions. Firstly, by including among the inheritable neuropathic illnesses conditions such as headaches, neuralgias, etc., which are very probably attributable as a rule to organic affections of the cranial cavities (the nose). Secondly, by regarding every discoverable nervous ailment among relatives as evidence of hereditary taint and by thus from the first leaving no room for acquired neuropathic illnesses which can possess no similar evidential weight. Thirdly, the

aetiological role of syphilis has been misunderstood and the nervous ailments deriving from it have been put down to the account of heredity. But in addition, a general objection is permissible against a form of heredity which is described as 'dissimilar inheritance' (or inheritance with a change in the form of the illness), and to which a far more important part is allotted than to 'similar' inheritance. But when the fact of hereditary taint in a family is demonstrated in its members being affected alternatively by every sort of nervous complaint - chorea, epilepsy, hysteria, apoplexy, etc. - without any more precise determinants, then either we need a knowledge of the laws according to which these complaints replace one another or else room is left for the individual aetiologies which determine precisely the choice of the neuropathic state which in fact results from them. If such particular aetiologies exist, they are the specific causes, so much sought after, of the various different clinical forms, and heredity is pushed back into the role of a requirement or precondition.

XXXVIII

Infantile Cerebral Palsies.

This is a summary of the two works on the same theme published in 1891 and 1893, together with the additions and alterations which have since become necessary. These affect the chapter on poliomyelitis acuta, which has meantime been recognized as a non-systematic disease, on encephalitis as an initial process of spastic hemiplegia, and on the interpretation of cases of paraplegic spasticity, the cerebral nature of which affection may recently have been placed in doubt. A special discussion is concerned with the attempts to split up the content of the cerebral diplegias into several clearly divided clinical entities, or at least to separate what is known as 'Little's disease' as a clinical individual from among the medley of forms of similar affections. The difficulties which meet such attempts are pointed out, and it is maintained as the only justifiable view that 'infantile cerebral palsy' shall be retained at present as a collective clinical concept for a whole number of similar affections with an exogenous aetiology. The rapid increase in observations of familial and hereditary nervous disorders of children, which resemble infantile cerebral palsies clinically at many points, has made it a pressing matter to collect these new forms and to attempt to draw a fundamental distinction between them and infantile cerebral palsies.

APPENDIX A. Works written under my influence.

E. Rosenthal, Contribution à l'étude des diplégies cérébrales de l'enfance. Thèse de Lyon. (Médaille d'argent.) (1892.)

L. Rosenberg, Casuistische Beiträge zur Kenntnis der cerebralen Kinderlähmungen und der Epilepsie. (No. IV, New Series, of Beiträge zur Kinderheilkunde, edited by Kassowitz.) (1893.)

B. Translations from the French.

J.-M Charcot, Neue Vorlesungen über die Krankheiten des Nervensystems, insbesondere über Hysterie. (Toeplitz & Deuticke, Vienna.)

H Bernheim, Die Suggestion und ihre Heilwirkung. (Fr. Deuticke, Vienna.) (Second Edition, 1896.)

H Bernheim, Neue Studien über Hypnotismus, Suggestion und Psychotherapie. (Fr. Deuticke, Vienna.)

J.-M Charcot, Poliklinische Vorträge. Vol. I. (Leçons du Mardi.) With notes by the translator. (Fr. Deuticke, Vienna.)