THE PSYCHOLOGICAL BULLETIN

A FEW TRENDS IN MODERN PSYCHIATRY.¹

I.

Psychiatry has had a peculiar fate owing to the great difficulty in finding a proper place in the sphere of experience for what had been so one-sidedly elaborated as soul and mind for religious-philosophical schemes before man became an object of biological investigation. Psychologists always took a certain interest in the peculiar phenomena and frequently exerted a strong direct or indirect influence on the presentations of the facts of observation. But the lack of actual experience on the side of the mental philosopher, and the lack of training in psychology on the part of most physicians, were two factors which added considerable difficulty to the anyhow complex problem. To this day further reasons conspired so as to give psychiatry a poorly defined position especially in Anglo-Saxon countries; and in order to bring about a fair understanding between physicians and psychologists a review of orientation of the principal issues of modern psychology naturally suggested itself.

Before psychology was one of the biological sciences, psychiatry shared its manifold vicissitudes.

Kant declared that the diseases of the mind were a topic for the philosopher, not one for the physician. Since then, a remarkable transformation has taken place, both in philosophy and in medicine. The extreme faith in verbal wisdom and in 'the absolute' had to be pushed to the extreme by the German philosophers, before a really powerful reaction could take place. An essentially speculative philosophy of a Hegel had to show the futility of a method which did not shape thought according to actual experience, but, on the contrary, created a set of methods of thought which it forced on the facts, without any consideration for the pluralism or multiplicity of experience.

¹ This number has been prepared under the editorial care of Dr. Adolf Meyer.

The pendulum of interest was bound to swing back in the direction of higher appreciation of simple experience, perhaps again to an extreme, but merely to pass into a much better balanced phase of peaceful and fruitful collaboration of empiricism and critical methods of thought and research. After a period of the crude materialism in medical circles of the middle of the last century, the creation of a sounder psychology led safely and strongly to a sounder relation between philosophy and medicine and science. Their interdependence became clearer again. The conflict of science and religion, in which philosophy had to play a part, gradually lost its importance, although, curiously enough, again in Germany, a certain faction of the clergy not more than ten years ago seriously endeavored to force the physicians out of psychiatry, and to claim the diseases of the mind for the moral and religious adviser. These extremes must seem preposterous to the Anglo-Saxon; but they deserve the attention of the student of psychiatric development.

In the Anglo-Saxon countries psychiatry was an essentially practical proposition. The question was how to care for those whom the law had stamped as incompetent to care for themselves, and who were considered unsafe in the hands of even their own family or immediate community. The business instinct of the race, economic issues, and the love for large enterprises, led to the foundation of huge hospitals, usually sparingly provided with physicians, and out of touch with the interests of learning and research of medical centers. Psychiatry was taught but little, and chiefly *ex cathedra*. It was too difficult a topic to be dealt with in the same way as many other diseases. As there was no time in the medical curriculum to teach the methods of 'theory and practice' of psychiatry in practical work, as surgery and the theory and practice of medicine are taught in actual work, simplicity of presentation and plausibility of statement became more important in lectures and treatises than an unbiased and painstaking consideration of actual experience. There was more concern about classification than about investigation. Psychiatry worked out more statistics than methods of recording the actual facts, and to this day the illusion is apt to crop out that a systematic scheme of nomenclature and a classification of all the cases should first be demanded as an ideal achievement, while hardly any adequate effort is made to ensure sufficient value and accuracy of the facts to be classified.

The psychiatric literature in the English language has nevertheless matured very creditable works, partly direct elaborations of personal experience, partly elaborations along the lines of French and German

pioneers. For some reason there is, however, a rather striking uniformity and an absence of definite schools of research which not only would bring out stimulating contrasts, but also would prompt individuals to concentration on specially fruitful topics, in preference to endless generalities. We find especially prominent therapeutic ambitions, but unfortunately too often in fields in which the object of treatment is bound to be vague and hypothetical. This explains why a high development in many of the practical measures goes side by side with a striking traditionalism and nominalism, and why the psychiatry of most writers cannot escape the comment that it is much more concerned with the adaptation of the mass of facts to a limited traditional set of terms than with a free and unprejudiced analysis and progressive grouping of the facts as they are. This is not as severe a criticism as it may seem at first sight. Under the formal shell, a sound practical sense exists, just as there is much sound instinct and appreciation of the actual world under the shell of much abstruse religious dogmatism. Yet, for a scientific development, these disharmonies between theory and practice must vanish, and the knowledge of facts must precede the shaping of the nomenclature.

The historical way of looking at the nature of things which has matured the theory of evolution, and which has modified traditional dogmatism generally, has also done remarkable service in psychiatry. After a period of purely ontological and narrowly descriptive work — Pinel, Esquirol and their pupils — Morel initiated the momentous study of the problem of degeneration, so creditably continued especially by French and Italian followers, and brought to perhaps an extreme climax by the school of Lombroso. Among the Anglo-Saxons the principle of evolution became the illuminating factor, in a more theoretical way it is true, to quite an extent, so that the facts were used as illustrations of the *a priori* plausible principle and so that difficulties in the explanation of the facts were made less painful by the free use of mere analogies in evolution and dissolution. The great merit of a Maudsley lies in this direction of the introduction of sounder and more plausible views; but works of this type have done remarkably little to stimulate to productive work. In the hands of Hughlings-Jackson, the greatest philosopher and investigator among Anglo-Saxon neurologists, the principle has been most highly and most fruitfully developed. His way of using the principles of evolution and dissolution as a setting for keen discrimination stands among the best products of Anglo-Saxon medical thought and work, and has been truly stimulating on the rare occasions when he touched on the

field of psychiatry, as in 'The Factors of Insanities' (*Med. Press and Circ.*, 1894, p. 615-619), where among other points he makes clear that so many symptoms are the function of normal parts without the guidance of highest level mechanisms. His work has lately been reviewed by Sir William Broadbent, in *Brain*, autumn, 1903.

A few facts from the official statistics of the State of New York are here presented as an instance of how the Anglo-Saxon psychiatric literature was echoed in practical life. They aimed at such a presentation of the facts as appeared compatible with the state of psychiatry since 1888.

Form of Disease.	Number.	Per Cent. of Total.	Number Recovered.	Per Cent. Recovered in Each Form.
Mania, acute delirious.	181	.25	32	18
Mania, acute.	11,239	15.5	4,849	43
Mania, recurrent.	1,559	2.2	499	32
Mania, chronic.	4,733	6.55	236	5
Melancholia, acute.	17,525	24	6,132	35
Melancholia, simple.	1,164	1.6	329	28
Melancholia, chronic.	5,935	8.2	333	5.6
Alternating (circular) insanity.	266	.35	18	6.8
Paranoia.	974	1.35	31	3.2
General paralysis.	4,799	6.64	1	...
Dementia, primary.	1,568	2.17	450	29
Dementia, terminal.	15,951	22.1	116	.72
Epilepsy with insanity.	2,861	4	53	1.85
Imbecility with maniacal attacks.	1,776	2.46	30	1.7
Idiocy.	189	.26	...	...
Not insane. ¹	571	.8	...	...
Unascertained.	937	1.3	...	...
Totals,	72,228		13,109	18.1 %

They are, unfortunately, not statistics of individuals, but of admissions from 1888-1902, including also mere transfers from one institution to another. The main types recognized are mania, melancholia, paranoia and dementia, general paralysis, epilepsy and imbecility. Mania means excitement, melancholia-depression, but only a certain number of cases are plainly the one or the other. The specifications are also little explicit. The groups mean little from the point of view of final outcome, as is seen from the percentages of recovery, which are, of course, not to be taken as final either, since many cases are transferred or discharged before they have reached recovery or the final stage. A comparison of the numbers from year to year and in the various hospitals shows obvious differences in the use of the terms, and the same holds for the various attacks in individual cases.

¹ Includes cases of alcoholism, drug habit, etc.

II.

Among the German writers, we see an interesting adaptation of the various stages of more or less dogmatic current systems of psychology, and a great development of experimental physiology and pathology. We find greater extremes, owing to the indomitable longing for logical consistency and the feeling of moral obligation to take a stand with one of the divergent schools of psychological thought of the period. There has, however, been a *growing confidence* in the paramount importance of more accurate observation of the actual facts of insanity, *the clinical evidence*, and its analysis along the lines of the psychological experiment and of the knowledge of aphasia and other topics of brain-pathology, and the result has been a wave of interest from which all the other countries are drawing fresh inspiration. The French had probably been the most patient guardians of a clinical method with which they laid the foundation for so many advances in general medicine and pathological anatomy; but apart from the necessarily somewhat dogmatic interest in hereditary conditions (Magnan) and in the somewhat limited field of neuroses (as in the noteworthy and classical studies of Ribot and Janet) and in the hazy auto-intoxication theory, there was an undeniable lull in the productivity of fruitful problems.

In the center of the modern movement of psychiatry we find before all others two German alienists, Kraepelin and Wernicke, who have given the most fruitful impetus to a revival in active interest in psychiatry. As an important factor we must further mention Ziehen, and also Sommer. These men have emancipated psychiatry from the peculiar position of an adjunct to neurology which was so prominent when technical advances attracted the attention to the virgin fields of spinal cord lesions and other nervous disorders. In those days it was possible that the chair of psychiatry was given to an anatomist, because he had published a very valuable study of the maturation of the tracts of the spinal cord and brain-stem; and that the main interest of the alienists in charge of the university clinics was directed largely to nervous diseases. Kraepelin has been faithful to psychiatry as such and to its immediate correlate, experimental psychology, without feeling a desire to adorn his position with the easily obtained laurels in neurohistology, and his faith has been rewarded amply. Wernicke, on the other hand, has grown into psychiatry from the neurological side, but also with high credit on account of his most scrupulous discriminations in symptomatology. Both these men had received a strong inspiration from Kahlbaum, and Wernicke also from his predecessor

Neumann, two writers who had been too painstaking for their times and unable to stem the tide of tradition and of microscopical and 'spinal' psychiatry, but who deserve to be mentioned among the classics of psychopathology even more prominently than Griesinger.

Kraepelin, under the influence of v. Gudden and Wundt, developed along two closely allied directions of work: *the clinical observation and the experiment*. At a time when others thought they could get at the nature of disease by arduous section-cutting and microscopy, Kraepelin realized that the great need was a careful sifting of the symptoms of the diseases according to their importance as determining the nature of the disorder; and that the real school of training for the clinical observation (continued observation such as can only be carried out in a well organized hospital or 'clinic') was the artificially produced abnormality, the experiment, in which we can determine accurately the make-up of the individual and his usual trend of reactivity and activity, and in which we can vary at will the etiological modifications, such as the quantity of poisons, or influences like fatigue, sleep, hunger, etc. From 1880 to 1895 this experimental work had, however, hardly brought out a very profound departure from current lines in psychiatry. A contrast liberated the strength of this position very emphatically. Ziehen, a former assistant, but not a follower of Kahlbaum, an extremely systematic worker, known by numerous contributions in the most heterogeneous fields, from anatomy, through experiments on epilepsy, to clinical studies on the pulse and on the gastric functions in the insane, and to a text-book of psychology—a writer who has, to-day, covered the whole field of anatomy, physiology and pathology of the brain, psychiatry, psychology, and even epistemology, and who has just been appointed to the most prominent chair of psychiatry in Germany—Ziehen was more or less responsible for bringing out the contrast which has given the school of Kraepelin a peculiar importance in psychiatry.

In Ziehen's *Textbook on Psychiatry*, 1894, he has made his psychology the foundation of psychopathology. His general psychopathology follows quite closely the chapters of his normal psychology, and matters which the physician is in a habit to see combined into symptom-complexes are here torn apart, for theoretical and systematic reasons. This would hardly have brought out the crisis, since the same can be said of Kraepelin's general psychopathology, which is also arranged in the form of a normal psychology—disorders of perceptions, of intellectual processes, of the emotional life and of will and action being dealt with successively, just as Ziehen deals with disorders of sensa-

tion, of concepts or memories, of the intellectual tones of feeling and affects, of association of ideas, and of activity. The chief distinction is the schematic associationism of Ziehen, and the freer adherence to Wundt on the part of Kraepelin. The actual clash occurred on the practical field, in the 'special psychopathology,' in which Ziehen's thorough-going consistency gave psychological distinctions an undue prominence at the expense of practical experience and a truly medical conception of disease.

Ziehen recognized affective psychoses (mania, melancholia, neurasthenia), intellectual psychoses (stupor, paranoia, obsessions), and compound psychoses (secondary hallucinatory paranoia, post-manic and post-melancholic stupor, post-neurasthenic hypochondriacal melancholy and paranoia, post-melancholy hypochondriacal paranoia, melancholic-manic insanity and catatonia). These affections 'without intellectual defect' he opposed to the defect psychoses — congenital (idiocy, imbecility, debility), and acquired (dementia paralytica, senilis, secundaria following focal disease of the brain, secundaria following functional psychoses, epileptica and alcoholica). Anyone familiar with actual groups of patients realizes that this scheme tears apart many well-established units, and puts side by side essentially heterogeneous entities, mainly to satisfy a psychological system—a fact which comes out even more strongly in the new edition of 1903.

Kraepelin in a review of Ziehen's book made front against this defect. He sees in the use of the association psychology an intentional neglect of important inner experiences which are forced regardlessly into a uniform pattern. The cortex is populated with concepts and nets of memories, beside which affects, character ('the sum of all the ethical tones of feeling'), and voluntary impulses have little space. He sees the greatest confusion in the chapter on paranoia. We find there side by side the chronic incurable states of delusions of persecution and grandeur, lasting the entire life, and the acute curable exhaustive puerperal psychoses, delirium tremens, periodic and circular disorders, and even the transitory deliria of epileptics. "We evidently stand here on the ground of hot and cold fevers, as they were spoken of before the days of stethoscope, thermometer and pure culture." Such a symptomatic grouping puts together similar temporary conditions, but not disease-forms. Everywhere, even in psychiatry, one should consider that the same causes have the same effects, and that wherever exceptions appear we must conclude that there is a difference in the factors at work. Kraepelin turns against the looseness of nosology resulting from Ziehen's emphasis on the

components of the symptom-complexes and the dogmatic tendency to explain entire diseases as combinations of elementary symptoms. Symptomatology of the type of associationist analysis cannot possibly be more than a part of psychiatry. More emphasis must be put on the other facts of nosology. To show this it would take a book, and he promises to write it.

Far be it from me to imply that Ziehen had neglected to make actual experience with the insane the foundation of his descriptions. The method, however, is one borrowed from psychology of a more didactic than practical character. Ziehen operated throughout with a constructive association-psychology, not with an essentially experimental attitude. A predetermined set of elements offers the material for permutations, while Kraepelin is somewhat more ready to give the facts of observation their rank according to their importance, more or less independent of traditional psychology, indeed with a very strong bias to more purely biological traits of reactions, the *form of the stream of events*, and a certain neglect of what is apt to preoccupy the philosophical (and logic) mind, *i. e.*, of the 'contents' of the psychic events.

III.

I have to ask the psychologist to be patient with the material which must be discussed here for a real understanding of the situation. It might seem that matters were involved here which have little to do with the field of interest of the pure psychologist. He is interested in the psychic manifestations, not in what a physician may want to stamp as a disease. But just those issues are the ones on which modern psychiatry turns and which must be understood if there shall be any common ground between psychologists and alienists. A great part of traditional *psychology* is unintelligible to the physician and biologist without some knowledge of the *philosophical* ground on which it grew. If he wishes to grasp it, he must make the sacrifice of certain collateral studies, which may appear abstruse and little gratifying, but are the only avenue by which to find out how it came that many an important 'law' of psychology has been created, for which he would hardly see a demand in his experience. The same demand meets him who wants to get acquainted with *psychiatry*; and we may say in favor of many recent efforts that psychiatry invites an increasing attention to actual events rather than to opinions. On the basis of empiricism, the student must get acquainted with the events in the life of the patients just as they happen, in order not to fall at once into mere imaginative constructions, or into the deplorable way of picking

out of its proper connections that which lends itself to startling illustrations of pet theories. Psychiatric facts, like all facts of natural science and especially of biology, should first be studied in their proper and natural setting.

Kraepelin, from his first edition, aimed to adopt as much as possible Wundt's standpoint in psychology, in his introductory part. In discussing the types of actual cases, he spoke of states of depression (simple melancholia and melancholia with delusions), dreamy states (hypnotism, somnambulism, lethargy, epileptic and hysterical dreamy states, stupor and ecstasis, and acute dementia), states of excitement (melancholia activa (1), mania, deliria, febrile and alcoholic), periodic psychoses (mania, melancholia and circular forms), primary paranoia, paralytic dementia, and states of mental defect, developmental idiocy, cretinism, anergic and erethic imbecility, sexual psychopathia, moral insanity, and querulant paranoia, neurasthenic states (folie du doute, mysophobia, agoraphobia, imperative impulses), senile dementia and states of secondary dementia (secondary paranoia and secondary dementia such as recovery with defect, agitated dementia and apathetic dementia). This plan shows a striking independence in the position of 'active (or agitated) melancholia' as an excitement and the position of senile dementia, but in the main a symptomatic attitude.

From a small volume of 384 pages the book grew to a large volume of 814 pages by 1895, and the seventh edition consists of two volumes of altogether 1,370 pages, and a totally different arrangement, at least in the 'special pathology,' which rubs most directly against the world as it is, whereas the plan of the general introductory psychopathology, the theoretical development, kept at least the general form with which it started.

In the special pathology, the third edition recognized deliria, states of acute exhaustion, mania, melancholia (simplex, activa and attonita), Wahnsinn (hallucinatory, depressive, expansive and catatonic), periodic and circular psychoses, paranoia (depressive and expansive), neurasthenic hysterical and epileptic psychoses, the chronic intoxications (seven forms of alcoholic psychoses, morphinism and cocaineism); paralytic dementia, acquired dementias (senile dementia, dementia with organic brain disease and secondary dementias), and anomalies of psychic development (idiocy, cretinism, imbecility and sexual perversion). We find here distinctly a tendency towards a systematic recognition of etiological groups, but also many symptomatic groups.

The fourth edition brings the beginnings of a fundamental change not in the general part (etiology and general psychopathology), but

in the recasting of types of disease. The effects of the teachings of Kahlbaum and Hecker come to the front, peculiarly enough in a form which is given them to this day by many opponents of the subsequent teaching of Kraepelin. The melancholia attonita remains as in the third edition: Wahnsinn forms a large group, but without a catatonic variety; Verrücktheit (paranoia) keeps its catatonic variety. But a new chapter is inserted as 'Processes of psychic degeneration': dementia præcox, katatonia and dementia paranoides. On the other hand, the paragraphs on secondary dementia are omitted.

The fifth edition is the book which Kraepelin promised to write as evidence in favor of his criticism of Ziehen. The 'special pathology' changed radically. We find the following disease groups:

I. The group of exhaustive and infective origin (post-febrile and collapse deliria; amentia).

II. The group of intoxication (alcohol, morphin, cocain).

III. The processes of disorder of metabolism (myxædema, dementia præcox, general paralysis).

IV. Insanity due to cerebral disease.

V. The disorders characteristic of the period of involution (melancholia, senile dementia).

VI. Constitutional disorders (manic-depressive insanity, paranoia, disorders accompanying the neuroses, idiocy).

Wahnsinn disappears completely, and a great process of symplification takes place.

The terms of a tradition of over 2,000 years are overthrown. The psychologist finds few of the old standbys left. The departures appear all to be away from psychological concepts. *Mental symptoms are dethroned unless they are characteristic of etiology, course and outcome.*

General paralysis, a hundred years ago a mere 'complication' of mental disease, now receives the position of a paradigm of mental disease as its most definite form. In the New York statistics, it is the one disease of definite outcome: it stands out as practically *uniformly* hopeless as to recovery. It not only implies invariably a progressive dementia, but also such organic disorders as will usually lead to death within a few years. Very probably it occurs only on ground of previous syphilitic infection. The mental symptoms are classed as fundamental as far as they demonstrate the characteristic deterioration; besides this, there are numerous temporary 'Zustandsbilder,' temporary pictures of a more accidental character, and relatively unessential for diagnosis and prognosis, although they are apt to impress the layman much more than the fundamental symptoms, and even to obscure the diagnosis by distracting the attention of the physician.

This disease is sized up as an *auto-intoxication* together with the rare thyreogenous insanity, and with *dementia præcox*, which is boldly extended so as to include all those cases of mental disease which lead to a peculiar deterioration usually termed secondary dementia, and *taken away from the concept of degeneracy* to that of a special 'disease process.' A more complete revolution of tradition has hardly ever been attempted.

Melancholia is again divided completely (see the first edition), but in a different manner. The agitated melancholia, which there was classed with mania, is recognized as a disease of the involution period, while simple melancholia, and recurrent melancholia and the non-deteriorating forms of excitement form one great unit, manic-depressive insanity. Degeneracy as such does not imply deterioration (because deficient endowment would only explain *arrest* of development, and any retrogression would have to be explained as a special disease-process; Vol. II., p. 270). In some etiological units, such as alcoholic insanity, there are, of course, many types of disorder and many types of outcome. Among the acute febrile and exhaustive disorders Kraepelin includes the cases with favorable outcome, and those leading to dementia join the group of cases with disorder of metabolism, dementia præcox. This latter disease may occur at any age, up to the fifties, and wherever a 'melancholia' or 'mania' passes into dementia, we should recognize that the disease was a disease process different from the start from those forms which never end in dementia.

These radical changes were mitigated somewhat in the later editions, but the main lines have remained fixed. On reading the successive editions one cannot help but deplore the fact that Kraepelin never published the clinical material on which his book is based, so that one might get at first hand an explanation of what led to the changes, and how the observations of the past appeared in the new light. Kraepelin uses a presentation in composite pictures which makes all control impossible. The contrast to Ziehen seems to me to explain part of the abruptness between the fourth and fifth edition, which tempts one to raise many a question.

IV.

My review limits me to the consideration of the psychological gain of Kraepelin's psychiatry. The alienist has to overcome two standpoints to become emancipated and an unbiased observer; that of the layman who follows the rules of mere plausibility and explains all

the actions of the patient in terms of possible motives of every-day life, with free admixtures of sympathy, or of annoyance, according to what the patient does, and that of the hardened dogmatic champion of tradition who forces the facts into a small list of antiquated names and fills in the gaps with vague patter of heredity, degeneracy, or anatomical theories.

Certain distinctions, which have become the first things one thinks of, lose their importance in view of a broader vista of events. *Depression* and *elation* are such contrasts; they determine the distinction between mania and melancholia, the chief units of our statistics. But depression is not necessarily characteristic of any special disorder. It may occur as part of a delirium, or of a delusional state, or of general paralysis, or of alcoholic insanity, etc. Unless we distinguish special types of depression we are not any wiser for speaking of it. To be sure several types are described under the heading 'Melancholia' of every text-book. But are they types which mean something definite in the entire working of the disorder? Kraepelin has the merit of having exploded the fascination of the general term and of having replaced it by more specific characterizations, which, in turn, are subordinated to *special types of course and outcome*. Depressions of the same etiology (or lack of definite etiology) and of the same type of course or setting are indeed found to present very characteristic traits of fundamental importance. The same holds for excitements (see Baldwin's *Dictionary*, articles 'Mania' and 'Melancholia'). Under manic-depressive insanity he describes the fundamental characteristics of those cases which present a number of attacks in a lifetime, but no essential deterioration, however severe the attack may be. Here, then, we see an instance of how Kraepelin's clinical attitude shapes a ground on which mental symptom-groups are subjected to *the consideration of events in the light of the outcome*, the very principle which makes experimentation what it is to us in scientific and ordinary life. Recurrent conditions which do not lead to deterioration are most probably events of a special type, and most likely a biological entity standing for a special kind of 'disease-process' or disease-principle. This one fact on which Kraepelin first insisted emphatically brings more definition into our knowledge than many a long analysis on principles of plausibility which are burdened with innumerable hazy considerations for heredity, severity of the attack and exaggerated claims of therapeutics. Many cases that are diagnosed as mania or melancholia are on careful investigation mere phases of this broad entity of manic-depressive insanity. The next

problem is to review the cases of recurrent insanity generally, to see to what extent the above picture needs extension to include all the non-deteriorating cases, running in attacks; further to study the cases with but one or two attacks and complete recovery; and the result has been the establishment of an extremely characteristic entity where before there was great confusion, as is shown in a case which appears perfectly plain and simple, as having attacks of this entity of manic-depressive insanity without deterioration, but which, in the eight successive attacks has given rise to the following diagnoses: Melancholia, mania, mania recurrent, melancholia chronic, mania chronic, dementia secondary to acute mania, mania acute, paranoia, chronic melancholia. This is an excellent illustration of the haziness of the older nomenclature and the lack of a larger view which would have given a correct grasp on the case even in the first attack: that the patient suffered of an essentially recurrent psychosis apt to appear in certain definite equivalents, with free intervals or more or less permanent recovery and without any tendency to deterioration.

Other depressions, of a fundamentally different character, are the depressions of the involution period, the alcoholic and epileptic depressions, and depressions of the deterioration processes. The latter, as we have seen, have been classed together by Kraepelin under the heading of dementia præcox, a much less definitely settled entity than manic-depressive insanity, also responding largely to the test of course and outcome, viz., the very frequent development of definite and unmistakable deterioration: emotional shallowness and apathy and intellectual dilapidation with often strikingly little memory defect, being at the bottom of the whole disorder. For a fuller statement of the characterizations of both manic-depressive insanity and dementia præcox, I must refer the reader to an abstract in Church and Peterson's *Nervous and Mental Diseases*, pp. 666-673. The perusal of the notes on dementia præcox shows that Kraepelin has boldly wiped out the old concept of secondary dementia; that he has made use of the undeniable experience that most cases of secondary dementia are not so invariably characterized by heredity, early constitutional defects in their start, or the 'severity' of an attack of 'melancholia' or 'mania,' as they are stamped by a peculiar cast of symptoms of a special form of deterioration. Many cases are perfectly characteristic from the onset of the disorder; and Kraepelin makes it plausible that this holds for practically all the cases which take the final course to 'secondary' dementia of the type defined above. This again shapes a definite problem for psychological investigation of a special type of developments.

In this group, which includes 14-15 per cent. of the admissions to Kraepelin's clinic, the dilapidation of thought and judgment, the emotional indifference, the development of old mannerisms, stereotypics, negativism and catalepsy, and a number of physical symptoms are referred to. As in manic-depressive insanity, we are relieved of the absurdity of changing the name of the disease successively from melancholia, to mania, confusion, paranoia, and finally dementia in various steps of the disease, where it is possible to form an estimate of the entire type of events at the outset, and where we can prove that it is a melancholia, mania, etc., different from types belonging to another entity.

We have not left the symptomatic ground, but instead of putting the weight on formal divisions of types, we see here efforts to get at the broad equation of the working behind the depressions, etc. That which looks alike but furnishes different results, is a topic of renewed investigation and expected to show factors formerly overlooked.

Kraepelin's great merit is to have reduced a number of dogmatic general considerations to their actual *value in the stream of events in the life of definite patients*. With an extremely sound instinct, he started from the field of experimental investigations and furnished excellent material for the type of psychology which medicine needs, a psychology which may be a hybrid of physiology, general biology and a certain utilization of introspection, but aims at the determination of the value or bearing of definite reactions and events in the stream of biological regulations. In this respect psychiatry, like comparative psychology, must learn to submerge the introspective method to the position of a mere help for the greater end; that of doing justice to mentation in terms of biological regulations, and of studying the possibilities of modifying these regulations. The 'elements of the contents' as they often are called, the usual elements of psychology, and hallucinations and delusions, count merely for what they are worth in the stream of events, be they of medical, or educational, or other practical bearing.

The chief directions in which Kraepelin has stimulated his associates to work psychologically, are a number of more biological than purely psychological reaction-types, such as retardation and inhibition, flight of ideas, etc. In this frame, he has utilized his methods of psychological analysis of functional efficiency (see the review of his work and that of his followers, by Dr. Hoch). In his own psychological work he has very wisely limited himself to the fundamental workable topics, and in his book his experimental work is given a

very modest position in the midst of the more roughly empirical issues. A few of his followers have been more strongly bent on more hazy issues, such as the explanation of catatonic symptoms or the fundamental disorders of deterioration (Stransky, Vogt, etc., in the *Centralbl. f. Nervenheilkunde*) with some success. But they have not dispelled the feeling that the fundamental traits of Kraepelin's 'disease-processes' are much more descriptive evidence of the *fait accompli* than illustrations of the working of the disorder in that form which above all satisfies our mind, in terms of cause and effect, and that it discourages such attempts as rather hopeless—which no doubt most of them are at present. A systematic trying and trying over again of what causal chains one has ground to suspect, would, however, be better than a dogmatic rebuff. There is something in the whole plan which raises the satisfaction with a dogmatic 'diagnosis' above the desire of a causal understanding. To allow practical advantages, a promise of a definite prognosis of course and outcome, to play such a fundamental rôle in nosological and pathological hypotheses implies a danger for sober consideration.

Yet he has brought home the importance of large frames for the details of analysis. He has shown the undesirability, if not futility, of experimentation with psychological methods which do not serve in the elucidation of some broader process. This is not the place to enter upon a criticism of the indirectness of much of Kraepelin's argumentation (see, for instance, his vindication of 'melancholia' in his last edition, Vol. II., p. 460), of the scanty differentiation of many points which are called fundamentally different, and of the question why general paralysis, and not some less uniformly working disease-process, should be the paradigm of psychiatry.

V.

A totally different impetus for psychiatric analysis comes from Wernicke. Kraepelin formulates his pictures in something like the terms of an experiment—certainly the most stimulating frame of human knowledge. He keeps the determining factors and the result in evidence, and for want of accurate and workable facts, he leaves the *detail* of the working as a matter to be taken for granted. Kraepelin evidently does not aim to settle the question how and why delusions and hallucinations and the various symptom-complexes arise. They are matters given by experience, and what concerns us is: under what conditions do disorders arise, and what do the manifestations tell us concerning the probable outcome and the means of modifying

the stream of events favorably. Our ignorance of the working of the details is a matter of regret, an inconvenience. It will be taken up when its time comes, as chemistry was taken up when physics was well advanced. Wernicke remains much more closely in a field of construction of a more geometrical world, not so much a world in a steady motion and development of experiments, but a study of the machinery itself. He aims to learn how to explain the symptoms of insanity out of the disorders of function of definite organs, in an essentially materialistic sense. Kraepelin certainly uses what facts there are, but his instinct of work makes him avoid a purely hypothetical field, such as the explanation of nervous and mental functions out of the fragments of anatomical knowledge will continue to be for a long time to come.

In Meynert's foot-steps, Wernicke starts from his own investigations on aphasia and he is strongly inclined to present all mental disorders in terms taken from the theory of aphasia. This anatomical bent is, however, excellently balanced by a strong sense for clinical observation, a keen eye for events in the patient's life and a remarkable freedom from the psychiatric common-places. Perfectly unbiased, he looks for his entities of description, absolutely unconcerned about tradition with its uncontrollable use of heredity and vague etiological factors, and of schemes of psychology and of nomenclature. Wernicke comes, indeed, nearest creating a psychology for his own needs.

For a sketch of his work, I must refer the reader to Church and Peterson, pp. 652-660 and 676-686. I shall attempt to review the most vital points here.

All mental disorders are to him disorders of identification (in some such sense as deviations from doing or thinking or feeling the right or adequate thing in presence of a special fact to be 'identified,' or, as I should prefer to say, reacted to properly). He speaks of disorders chiefly in the sensory sphere (sensory identification) or in the intrapsychic sphere (intrapsychic identification) or essentially motor disorders (of psychomotor identification.)

Primary identification, the simple perception of a sound as sound, is distinguished from secondary identification, which demands the co-operation of the mechanisms of the concept. The stimulation of the latter leads to intrapsychic adjustments (from the simple concept to a purposive concept), and these find their equilibration in the reaction of the psychomotor elements. In the psychosensory path or sphere we may experience anæsthesia, hyperæsthesia, or paræsthesia, in the

intrapsychic sphere afunction, hyperfunction and parafunction, and in the psychomotor sphere, akinesis, hyperkinesis and and parakinesis. Under the spell of Meynert's teachings of cells and association paths, Wernicke does not resist the temptation of identifying special concepts or 'memories' with definite cells, without much scruple about the fact that the term cell has no sufficient scientific definition in functional neurology to-day. Wernicke's main point in the acquisition of memories is that the cells which are directly connected with the apparatus of projection (*i. e.*, the path from sense-organ to cortex, or from cortex to muscle or gland), are connected with one another by association fibers. The constant or frequent simultaneous excitation of definite sets leads to the formation of concepts, and (*Grundriss der Psychiatrie*, p. 35) these psychological units might be represented by some anatomical units, cells of definite strata of the cortex. He favors the view that the cell-layer nearest to the white matter, the first layer to be reached by impressions, is the representative of somatic consciousness, the impressions from the body (p. 47). The next step is the coördination of sensations of motion and position, innervation and memory, touch-sensation and touch-concept out of these organic responses, and a final step the elaboration of the consciousness of the personality, presented as a function of the consciousness of the external world and of the body. The organ of consciousness is thus populated with a sum of potential energies, memory-pictures and complex memories. These *contents* of consciousness belong to three natural fields: the external world, the body and the personality. This machine of numerous potentialities is next studied from the point of view of *activity*, the preformed order of associations, the concentration of consciousness, attention and will, the capacity of registration (*Merkfähigkeit*), the affects and the normal and abnormal values of concepts; but, here again, it is not the broad sweep of events, but the detail that absorbs Wernicke's attention.

This attempt at a medical psychology gets most of its material from the needs of clinical analysis of symptoms. It is full of hypothetical constructions, but on the whole, on the ground of well-founded analogies. It is a consistent elaboration on neurological hypotheses.

His views have been discussed before in the *PSYCHOLOGICAL REVIEW* (Vol III., p. 512) and especially by Professor James (Vol. IV., p. 225). I shall attempt here to outline Wernicke's position in the actual working of psychiatry and the recognition of types of psychic reactions.

Wernicke begins his descriptions of patients with types which show very little disturbance of the form of mental activity, but essentially disorders of the contents. He gives his theory of sejunction as the common link of many psychopathological states and of what we know of brain pathology: the severing of association, either in analogy with the focal lesions which usually underlie aphasia, or in analogy with degenerative neuritis in which the degeneration takes place with a selection of functionally differentiated associative elements.

Under this group of disorders, essentially of the 'contents,' he describes the paranoic conditions, and he opposes to them the acute psychoses in which the disorder of the *activity* of consciousness is uppermost. Throughout he chooses the very excellent plan of starting from one or more actual cases, which are well described and then analyzed. This gives the whole work a much more direct character than Kraepelin's composite pictures. He feels free to pick out the essential traits of disorder according to essentially medical needs. His descriptions have no equal in the entire literature of psychiatry. Everywhere we see a presentation of a palpable observation, and only that which is expressed by a patient and actually established is used for analysis. There is no resorting, either, to assumed anæmias or hereditary predisposition or to degeneracy. And perhaps even too much care is taken to avoid the grounds of etiology, course and outcome, fully as safe as that of hypothetical psychological constructions, however carefully held down to facts.

The actual needs in the analysis of special cases lead Wernicke to emphasize a number of points which are valuable additions to psychopathological terminology and concepts. He speaks of dominant ideas, imperative ideas, 'autochthonous ideas,' and phonemata, as a series of disorders of correlations of memories and 'Merksysteme,' under the principle of sejunction. He ascribes them to the sphere of the patient's personality, his body and the outside world, as autopsychic, somatopsychic, or allopsychic. He does full justice not only to the sensory components of difficulties, but also to the motor side (in pseudo-spontaneous motion, motility psychoses, etc.). He is apt to group together cases that have in common a special prominent symptom (the group of *anxiety* and *somatopsychic disorders*), then the disorders essentially of the *autopsychic sphere*, including the types beautifully described as simple mania, and as affective melancholia, identical with what Kraepelin would include in manic-depressive insanity. Further, he points to the *allopsychoses*, such as alcoholic deliria, acute hallucinosis, etc., and to the *motility psychoses*, in which the

fundamental disorder would seem to be one of the higher muscular coördinations.

The difference of standpoint comes out most strongly in connection with general paralysis, which he admits as an etiological complex, but in which he takes pains to point carefully to the great *variety* of mental disorders on the ground of the fundamental deterioration. He carefully analyzes types which Kraepelin is inclined to submerge, and looks forward hopefully to a utilization of such analyses in efforts to determine more carefully the localization of disorders which express themselves in special symptom-complexes.

He distinguishes the following mental disorders in general paralysis:

1. The expansive autopsychosis (the megalomania of older writers).

2. Paralytic mania (not always distinguishable from pure mania, and frequently passing into the expansive autopsychosis, or at times into a remission).

3. Affective melancholia (depression with feeling of insufficiency), rarely pure, usually with an admixture of delusions of reference or with symptoms of an anxious psychosis.

4. Depressive melancholia (akinetic or hypokinetic depression), also often with admixtures of delusions of reference.

5. Among paralytic allopsychoses we meet frequently a paralytic delirium, which may occur at any phase of the disease, and at times resembles closely a delirium tremens, but more frequently a stupor with disturbed sensorium; or

6. The presbyophrenic complex occurs, or a chronic hallucinosis, or dream-states, resembling epilepsy, although but rarely, whereas the anxiety psychosis is not infrequently of paralytic origin; also hyperkinetic and akinetic motility psychoses (akin to catatonia) are represented.

The results of Wernicke's work coincide in many points with results of Kraepelin's totally different method. We may well say that the two writers supplement each other, as I have tried to show in my review in Church and Peterson.

To be sure, Wernicke's subdivisions are to a large extent pure empiricism with a rather artificial and not sufficiently founded brain-pathology and psychopathology as a leading thread in the labyrinth of facts. He unnecessarily slights the issues of outcome of which Kraepelin makes so much. But no one can read his book or even the abstract of his work without coming across a wealth of well-chosen

points which would have remained in the unclassified residuum but for the bold breaking away from tradition, a strict adherence to what is at hand in the patient and as good a utilization of brain pathology and natural subdivisions as is available to-day. Wernicke's honesty in admitting that he cannot do justice to more than one half of the cases he meets, is another grand step away from the hit or miss classifications which governed psychiatry so far.

Concerning strictly psychological gains, Wernicke will probably exert a rather strong influence through his pupils Liepmann and Storch.

Storch is developing a deepened psychological utilization of the neurological data which shall form the subject of a later review.

VI.

A final contrast may bring out the present situation of psychiatric investigation. Professor Ziehen¹ points to the futility of expecting an absolute classification of the facts of psychiatry. Whatever division is used ranks according to the extent to which it does justice to the two issues of an intelligible terminology and its adaptation to the progress of investigation. He, to my mind very justly, questions the feasibility of a uniform classification from only one point of view. Groups may be formed according to the course of the entire symptom-complex, according to etiology, pathological-anatomical data, etc. Each may have its advantages without excluding the other. For educational purposes it is decidedly advantageous to view the facts from more than one point of view. For instance, to review on one day all the psychoses which originate on the ground of chronic alcoholism; and another day all the etiological factors of a certain psychosis of usually alcoholic origin, such as acute hallucinatory paranoia (hallucinoses or amentia). We thus may come across monopsychic and polypsychic etiological factors (*i. e.*, etiologies producing but one disease-type, and etiologies entering as a component into many different pictures), and monoetiological or monogenous and polyetiological or polygenous psychoses.

Far more important than the *uniformity* of divisions is the *completeness* of our method of grouping, with due consideration of the *types* and of the *transition forms*. Not to recognize the latter has led to many errors. Such 'convergences' of two psychoses are illustrated by the so-called delirium acutum (to my mind not the best instance, inasmuch as acute delirium is merely a peracute form of

¹ 'Ueber einige Lücken und Schwierigkeiten der Gruppierung der Geisteskrankheiten,' *Monat. f. Psychiatrie und Neurologie*, Vol. XV., No. 2, 1904, p. 147.

almost any mental disorder, without actually being a transition form leaving the original ground). He strongly favors more careful consideration of individual characteristics referable to individual peculiarities. Ziehen promises to analyze his great collection of 700 puberty psychoses from these points of view.

Nissl,¹ a follower of Kraepelin, takes this programme for a starting-point of a scathing criticism, which shows what an extreme and exclusive elaboration of a monoideistic scheme, however good it may be, would lead to. Ziehen's reasonable conclusion that more than one point of view is needed to do justice to psychiatry, forces Nissl to the conclusion that psychiatry could not be a medical science, because the possibility of grouping the facts from *one* point of view is a 'self-evident' requirement of medical science. He claims that we are practically ignorant of the real cause of mental disease; that our methods for the study of the symptom-complexes are altogether too rough to properly differentiate the criteria of similar symptom-complexes in various disease-forms. In pathological anatomy we are about ready to begin with the beginning; hence, there is only one chance, that is to group the psychoses according to — the clinical picture. To us that would mean the sum of our evidence, including etiology, course and outcome, and, in case of death, what a careful anatomical study reveals. But Nissl² anchors on pathological anatomical hypotheses, with the following dogmatic climax: "In almost all the functional psychoses it is possible to demonstrate anatomical findings in the cortex. As soon as we agree to see in all mental derangements the clinical expression of definite disease-processes of the cortex, we remove the obstacle which to-day makes impossible all agreement among alienists." Yet, when we look for facts, it becomes plain enough that anatomy has so far furnished too few decisive facts, and that those hypotheses are the best which are based on evident and controllable facts in a field easily brought to a test of experience or experiment; and such experiments are more likely to be fruitful along functional lines than along simple anatomy, in most of the diseases with which we deal. What does an anatomical dogma help?

Ganser's description of random replies in a peculiar mental state of prisoners had given rise to a controversy as to their 'hysterical' or 'catatonic' nature. Owing to the difficulty of defining absolutely

¹ Kritische Bemerkungen zu Ziehen's Aufsatz: 'Ueber einige Lücken und Schwierigkeiten der Gruppierung der Geisteskrankheiten.' *Cent. f. Nervenheilkunde u. Psychiatrie*, No. 170, March, 1904, p. 171.

² 'Hysterische Symptome bei einfachen Seelenstörungen,' *Centralblatt f. Nervenheilkunde u. Psychiatrie*, Neue Folge, 13, 1902, p. 2.

what distinctions are at issue, Nissl takes a dogmatic anatomical standpoint. Kraepelin, for excellent practical reasons, urges that one should only speak of hysteria where there is 'a chronic constitutional condition with paroxysms presenting throughout a condition of increased influence to emotional reactions on the body.' Such a statement is quite justifiable as long as one keeps in mind that it leaves the 'formes frustes' and episodic forms unaccounted for. In some of these 'formes frustes' it is obviously best to submerge the *hysteriform* character of the symptom-complex in favor of a broader concept of disease-forms of a definite course and outcome, which may be different from true hysteria, and are therefore to be kept apart for practical and possibly even strictly pathological reasons. In order to make that which is perfectly true and most helpful in his propositions bear the air of dogmatic assurances, Nissl brings in his anatomical prestige, and claims, 'we understand by hysteria a congenital disease which brings with it a peculiar condition of *the nervous system*, which shows clinically by the development of the so-called hysterical character and is lastingly active inasmuch as at any time transitory physical disorders and various forms of a specific insanity may be produced by strongly emotive ideas.'

Ganser saw in random replies a hysterical symptom; Raecke a hysterical stigma; but since some of the cases showed evidences of some deterioration, Nissl claims the symptom as one of 'catatonic negativism,' because no case of true hysteria deteriorates. According to the law of the outcome, deterioration processes are most frequently dementia præcox (including catatonia). The analgesia, abasia and aphonia in these cases is nothing but catatonic negativism (p. 20), and the fiasco of the symptomatological method is obvious (p. 24). Its advocates or habitués are naturally not conscious of their folly; their very method, the symptomatological method, has a serious defect of character (p. 26); there is, according to Nissl, no objective measure for the test of its hypotheses; hence it lacks the possibility of a correction of the error. This feature does not seem to him sufficiently appreciated. The 'clinical' method dispenses with all psychological explanation and hypotheses. It uses altogether the general principles of natural science investigation. He enters on a peculiar crusade against the supposed folly of building any conclusions on the psychic activity of a diseased brain, an attitude which would naturally appeal to those who do not see yet how psychology *can* be a field for pathology.

In a very recent article Ganser assures us that he is familiar with Kraepelin's katatonia concept, and that he nevertheless stands by the

hysterical nature of the majority of his cases of random reply. As things stand, we obviously are forced to admit that the symptom of random answer is not necessarily negativism as Nissl claims, nor necessarily a hysterical stigma as Raecke says, but a symptom of relative value only, like most psychiatric symptoms.

This whole discussion may be of little interest to the psychologist, but it illustrates vividly the great difficulty of the alienist. He is confronted with so many relatively uncorrelated and heterogeneous trends of experience; yet, most of the training given us in our education is built on the theory that one or two series of facts must suffice, and all the heterogeneous experiences must be forced into a statement of a single or double series of data. This is, for the present at least, an utterly untenable working hypothesis. Unless one has a chance to use with ease, and with a feeling of justification, a free pluralistic method of dealing with things, dogmatic restrictions kill off many a possibility of seeing things for what they are worth. The greatest need we alienists have is a general recognition of sound pluralistic principles of experimentation, and in this direction the Anglo-Saxon mind with its empiricism seems to have a strong interest. The logic of a sound empiricism has no set form of classification, and is free to recognize the unfinished character of many of our stipulations. The value of things is determined by their working value rather than by the logical harmony of the picture, within certain limits at least. The emphasis of one point or another appears as the personal contribution of the temperament of individual observers. And while every one is given full chance to carry into the field the best array of facts, nobody is expected to make a finally exhaustive and still less an exclusive system.

Gaupp, a former pupil of Wernicke, now a pupil of Kraepelin, although strongly under Kraepelin's influence, has published two noteworthy papers¹ which show a much more conciliatory attitude. Everything tends towards a less exclusive appreciation of anatomical facts; etiology, development of symptoms and outcome are recognized as points to be considered in every case, but only for what they are worth, and yield in the way of furnishing facts for a presentation of any disorder in terms of cause and effect, in a measure as they point to means with which the course of events may be turned into favorable currents (therapeutics), and to principles of a more correct understanding of the actual events (pathology).

¹ 'Ueber die Grenzen psychiatrischer Erkenntnis,' *Centralblatt f. Nervenerkrankung u. Psychiatrie*, Neue Folge, XIV., January, 1903, p. 1. 'Zur Frage der combinirten Psychosen, *ibid.*, p. 766.

In this large frame psychology is bound to play an important part, but it must be a psychology in line with the broad psychiatric postulates. The demand for an absolute explanation of all abnormal mental activity is modified and given more workable shape in the study of the nature of determining conditions and the nature of the value or meaning of a definite mental state for the further development of the life of the patient. The charm of hypothetical correlations of definite brain states with definite abnormalities of mental reaction becomes reduced to its heuristic value in the study of nature's experiment; and the study of nature's experiment is best carried out with helps of the character of an experiment.

Breaking away from the soporific influence of tradition, Kraepelin has pointed to the relations of broad clinical pictures to fundamental symptoms, and he has given us very valuable perspectives for the formation of a broad frame of events for detail studies. Wernicke has kept alive certain interests in localizatory correlation (sejunction theory, etc.), and pushed his symptomatic differentiations in the direction of picking out the central events of several symptom-complexes (anxiety psychoses, motility psychoses, etc.). Janet, who has worked on a field much more accessible to the psychology of hypnotism, has given definition to an important group of neuroses, and to certain possibilities of synthetic reconstruction. There is, of course, everywhere a tendency to exaggerate a principle of work into undue proportions, and thus to stifle in a way the cropping out of new interests. But with proper organization of places for careful observation and study of patients, and with the necessary helps from the contributing biological and general pathological sciences, a more planful and at the same time more specializing spirit of experimentation can arise without too great danger of fragmentation.

Psychology contributes essentially in the problem of symptomatic differentiation; and to some extent as the cardinal force of therapeutics. The study of mental disorders in gross brain lesions on the one hand, the study of the bearing of definite physiological, toxic or pathological states of the mechanisms of the physical household, and the study of the weight of special mental attitudes and habits in the life of persons of various make-up assist in shaping a special medical psychology.

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