

Archives of Neurology and Psychiatry

Vol. 8

AUGUST, 1922

No. 2

INTER-RELATIONS OF THE DOMAIN OF NEUROPSYCHIATRY *

ADOLF MEYER, M.D.

BALTIMORE

The fact that the American Neurological Association entrusted to me the chairmanship of this forty-eighth annual meeting places on me the responsibility of opening the session with some pertinent remarks. I would have these take the form of an attempt to answer a question which I consider of great importance to us, namely: How can we state clearly and simply what constitutes the field of neuropsychiatry?

At this time there is especial need for clearness on this subject. Ours has always been a very responsible field, but today it is all the more responsible since the war has added large numbers of victims of neuropsychiatric disorders. Members of this organization, among them Thomas W. Salmon and our much lamented Pearce Bailey, shaped a definite neuropsychiatric domain. For the first time in the history of the country psychiatrists and neurologists cast their lot together in a remarkable unitary organization. Noteworthy immediate services were rendered at the front and in this country during the war. Now, as lies in the nature of our field, we shall for years to come have to help maintain a worthy follow-up service for the country and for the men and women who rose to meet the great emergency. What can be held out to the public and to the medical profession as the foundation, scope and goal of neuropsychiatry?

THE DOMAIN OF NEUROPSYCHIATRY

The task is not only the care of paralyzed legs and arms and troublesome nerve growths and brain lesions accompanied by impaired speech and other disorders; it is especially the so-called mental aspect, including the understanding of the *person*; of that aspect of the person which is likely to guide or misguide public opinion—that which constitutes the moods and morale of the patients, and the willingness and capacity to accept and use assistance, and to develop a real *conscience* about *health*. All this is the domain of neuropsychiatry.

* President's address read at the Forty-Eighth Annual Meeting of the American Neurological Association, May, 1922, Washington, D. C.

My principal appeal in an effort to formulate a generally intelligible and yet scientifically valid and practically suggestive delineation of the main aspects of our work leads me to the following considerations:

Every domain of medicine has, generally speaking, two problems: the study and management of the special *organ or function* on its own ground, and the study and management of the patient as an *individual personality* and member of a group, as it affects the special organ or function.

Neuropsychiatry is quite specifically responsible in both lines, because the very organ of concern to us is also the principal organ for the integration of the individual as a personality. It is, however, equally essential that we should recognize that some familiarity with the science of man as a personality is as necessary for the gastro-enterologist or surgeon or any physician or student of any problems pertaining to man, as it is for the psychiatrist and neurologist. But it behooves the neuropsychiatrist to know the psychobiologic methods and facts especially well, because he deals with the principal integrating organ. Unfortunately, there are many who want to make a puzzle out of this simple proposition.

My principal claim is that there is no call for the traditional attitude of bewilderment over how to fit the personality-facts into the scheme of objective sciences and practical medical data. The interesting reasons for the difficulty of physicians and laity in the presence of psychiatry, so admirably outlined by Lewellys F. Barker in his Bloomingdale address¹ and what we note from our own experience, resolve themselves into this: There is too much of the bad habit of expecting that the mental problems and mental conditions should be intelligible out of one's understanding of mere words and ponderings, when, as a matter of fact, one should have some first-hand experience with real and tangible human reactions and life factors and the methods of work with them.

THE PATIENT AS A UNIT

It so happens that the leaders of medical organizations largely familiar only with other aspects, such as bacteriology, i. e., facts outside of man, and with physiopathologic part-functions, have treated with undue suspicion the effort of those who see in psychology frankly and directly the study of the patient as a unit or personality, and we find ourselves today confronted with the demands of an intelligent public to furnish trained neuropsychiatrists fit to be social psychiatrists and neuropsychiatrists, with the alternative that the public may have to go elsewhere, outside of medicine, for help.

1. Barker, L. F.: Psychiatry in General Medicine: A Psychiatric Milestone. Bloomingdale Hospital Centenary. Privately printed by the New York Hospital, 1921, pp. 59-75.

Neglect of the simple common-sense way of recognizing the study of the function of the whole individual or the patient in addition to the function of the parts is largely responsible for much confusion on the part of the medical profession and the public, whereas, as I hope to show, its recognition in terms of plain critical common-sense gives us a sound approach, scientifically and logically, on safe ground and standing the test of direct and simple applicability, objective and constructive.

Unfortunately the public, and even the medical profession, gropes for unsound types of psychology and many a would-be neuropsychiatrist is apt to talk confusingly to the profession and to the public. A frank acceptance of psychology as the study and control of the functions and behavior of the individual organism as a unit or personality gives us a perfectly sound objective basis and sound methods of procedure. The concept of integration and the understanding of the principle of symbolization give us the orderly natural-history view of man which allows us to do justice to the whole personality and the parts, and to the demands of sound medical and hygienic practice.²

The principle is not difficult to grasp. We find that the universe of which we are a part presents a vast problem of science, that is, of systematic formulation and experimental and practical control. The all-pervading realm of fact and of method of approach is that of physics and chemistry. But the masses or entities we meet are specifically integrated. From a certain level of complexity, they show more or less individuation and constitute finally what we call biologic units and groups of units. The special types of this whole large group can be presented in terms of a fraction, the denominator being the formulation of the facts of life in general—metabolism, growth and organization and reproduction. The numerator is one or another type or degree of development of the general biologic type: the purely vegetative type with only limited and incidental motion; then the branch of life characterized by motion and all that which goes with the animal type of life forming the numerator of our fraction. Within this we have first the forms with a type of behavior possible without a nervous system, and other forms in which the numerator crystallizes a definite nervous system with a literal *organization of reflex* process. It is within this that another specialization occurs, namely, that of symbol activity and what in ourselves we know and describe as integration in more or less of consciousness. The swinging in of a nervous system brings us an organ working essentially as an integrator, with no special meaning and value as such, remarkably economizing, little energy-consuming and

2. Contributions of Psychiatry to the Understanding of Life Problems, in *A Psychiatric Milestone*, pp. 21-54.

with little fatigability, unable to live and work by itself but serving the task of unification in the form of reflexes and their combinations. On this ground, among the many exigencies of life there expands a special type of *organization not only of structure but specifically of function*, an organization in what we know as more or less "conscious" activity. This organization takes place through that tremendous development which has as its essence the *use of symbols*, or symbolization, in the form of sensation standing for certain facts, perception and images, memories, picture-formation, and language, all unified in subject-organization and psychobiologic integration. Thus human behavior becomes the behavior of an integrated individual brought into psychobiologic organization with the help of all that which makes up man's specifically "mental" equipment and symbolizing or representative reactions hanging together in more or less consciousness. This realm of function is justly combined into a special topic of psychology or psychobiology, in contrast to or in addition to the science of *reflexes* which do not involve symbolization, and do not depend on integration with the help of signs. But in distinction from tradition we do not treat the "mental" or "conscious" data as a detached and special purely subjective realm of facts; we study them as a special incident of the objectively observable behavior.

As soon as sensations and perceptions, memories, images and ideas, fancy and reasoning, forecasting and deliberation, are involved in reaction and actions, we find a type of function or behavior which constitutes itself as "function or behavior of the *individual*," in what I call *subject-organization*, not merely as an abstract mind, as tradition has it, but as a specifically integrated type of activity of the cerebrally integrated *organism*; not as a part of a detached world but as the natural form of a psychobiologically integrated life and behavior—physics and chemistry, if you please, but biologically, vegetatively, reflexly and psychobiologically integrated physics and chemistry, not only dealing with new words but with specific functions and coordinations and discriminations of behavior of definite kinds of organisms. Psychobiologically integrated activity, or behavior with the help of *mentation*, or we might say in an even more telling manner, "behavior with the help of *imagination*," implies naturally and inevitably this new development: the inclusion or insertion in the *reflex-type* of function, of *symbolizing functions* of the highest possible saving in energy consumption; it *implies* the "*mental*" activity, which, however, is definitely recognized as cerebrally integrated activity of the organism, but making possible a *new "state of function"*, the organization as an "individual in action as an agent or subject," as the "he" or "she," the "you" or "I" we know as a biologic individual and social entity. Just as *metabolism*

constitutes the special feature of the domain of physics and chemistry that makes up biology, so *symbolization*, the development of sign-function, establishes the psychobiologically integrated types of organism and function. Instead of acting as an ordinary mechanistic reflex-machine, the organism constitutes itself as a *subject*, with all the mind and soul that our anthropomorphic parlance chooses to emphasize, attained through the incorporation of symbolization among the other biologic or life-dependent functions and activities.

SYMBOLIZATION

The concept of symbolization, that is, treating the mentally integrated states and activities as brought about with the help of sign activity and its organization, is not difficult to grasp. It shows in the production of sign reactions from simple sensations up, that is, activity not necessarily of any special potency of effectiveness by itself through the actual physical energy-display it contains or implies, but *getting its meaning and potency through its service in an associative system*, a system which constitutes itself concretely as the variously adapted *subject or personality*. It shows in part individually and in part socially, as in the form of gesture, emotional display and language and their silent forms, built up out of perceptive-cognitive-discriminative and affective and conative assets of response and construction. It brings about something that activity *not* integrated with this help could not produce with such a degree of differential adaptation. Just as logarithms and algebraic notations bring in simplifications and new possibilities of operation, so the introduction of the sensory-cognitive and conative and affective assets in overt form or overt behavior, or in their economizing so-called "mental" type experienced as mental activity or mentation, gives us means of psychobiologic integration, so remarkably organized as *using on the same level reality and fancy, past, present and future, one's own ideas and those of others, in overt effective and expressive action* or in the specifically economizing form of implicit symbolization.

Jelliffe and White in their "Textbook of Neurology and Psychiatry" recognize this formulation and give us the data of neuropsychiatry in three long chapters on the physico-chemical systems with the *vegetative* nervous system, the *sensorimotor* systems, and the psychic or *symbolic* systems. They give us a very concise and essentially American conception in a pithy paragraph (p. 21): "The *hormone* is the type of tool at the physico-chemical level, the *reflex* at the 'sensori-motor' level, and finally the *symbol* at the psychic level." My own conceptions are very similar, only I prefer to speak outright of the vegetative, the reflex and the psychobiologic types of function or levels, and I prefer to claim

as frankly unnecessary the confusing contrast of physical and psychic, as indicated in various older discussions of mine.³

We have, then, a formulation of the facts we deal with that keeps us on the ground of *objective data*, with our eyes clearly open to the specific precautions needed in this field of relativities, with methods correspondingly adapted and safeguarded and without any call for mystical notions on the one hand or neurologizing psychophobia so confusing to common sense on the other hand.

With such a philosophical and practical conception, one learns to subordinate the exaggerated contrast of mind and body, and to speak of reactions of the internal or visceral organs, the nervous segmental and suprasegmental organs and functions as such, or as parts of the reactions of the cerebrally integrated *person*. The nightmare of neuropsychiatric dilemma has no place. What the patient does, feels and thinks ceases to be made a puzzle; one either finds objective facts calling for one's attention or one does not.

How do these general conceptions present themselves concretely? Our objective psychobiology expresses itself concretely and simply in certain definite aims in our medical curriculum. It is my ambition to organize the essentials as a scheme of neuropsychiatric work that will give us a right to insist on a comprehensive picture of the entire domain and on absolute clearness of the essential *lines* so that they may become usable in *all* medical practice. All our medical schools of today train the student to include a minimal number of neurologic routine tests in any medical examination. But how many medical teachers of today and how many neurologists make it an acknowledged practice to include planfully the minimal number of questions and tests that will draw out the reactions disclosing at least the most tangible psychobiologic problems? There is no difficulty in this. One simply has to be at least as familiar with *some ordinary human problems and standards of adaptation* as one is with the facts of reflexes, ataxia, tremor and palsies, anesthetics and decerebrate rigidity and fits. After testing the principal reflexes, one should ascertain how the patient reacts and responds to a minimal number of simple questions: What difficulties do you want help for? What is your work and how does it agree with you? Have you had any special experiences, or moods or fancies, fears or worries, or imaginations which you could not throw off? Does fate and everybody treat you all right? How does your memory serve you?

3. Especially in the review of Moebius: The Hopelessness of All Psychology, Psychol. Bull. 4: No. 6 (June 15) 1907; an article in J. Insanity 65: pp. 39-52; and in a later article that may have sounded strange with its provocative title: "Objective Psychology or Psychobiology with Subordination of the Medically Useless Contrast of Mental and Physical," J. A. M. A. 65:860 (Sept. 4) 1915.

Wherever evidence calls for it, a small number of performance tests give us the memory data.

We add today to a reasoned scheme of working in anatomic and clinical neurology a gradual working out of a general and special psychobiology and psychopathology for the student, beginning with the technic and practice of the simple life-study of an average person and average problems of psychobiology, and extending it to the work with the fundamental reaction-types and problems of psychopathology and psychiatry.

Instead of considering psychiatry a field of asylum diseases, let us see what we find wrong in behavior and mentation, without damning it at the outset by a terminology derived from merely possible terminal developments. The personality-reactions present themselves to us concretely in terms of reaction-groups: mood disorders, fears, obsessions, states of panic, seclusiveness, fancy states, simple or disorganizing, and memory, retention, judgment and behavior disorders—plain facts which do not necessitate any very learned or bewildering vocabulary. We look for concrete mismanagement of home situations, for discrepancies of ambition and performance, existing difficulties and failures, problems of adaptation and problems of desensitization; and doing so, we shall be helpful to our patient instead of sacrificing him at the altar of vocabularies dealing with terminal states and with fixed fatalistic “constitutions” and too dogmatically fixed “disease entities.”

THE SCOPE OF THE EXAMINATION

We must get away from the idea that one examines only for some all-inclusive asylum diseases like dementia praecox and manic-depressive insanity and paresis. One examines primarily for the range of personal capacity to help in an examination and to cooperate in any plan for treatment, that is, assets as shown in plain life problems and successes and failures. If there *are* any failures, one determines whether there are any toxic or infectious intruders, any disorders of the internal organs and their functions, any neurologic disorders (including the suprasegmental as well as the segmental symptoms); and finally any disorders of behavior or of mental reactions, not in the abstract but in terms of what the patient does with the jobs, with the family, with other people, and with his own worries, and feelings, and notions and moods, the thoughts he cannot throw off, the memory and judgment, and the speech and writing, and the management of his eliminative functions and sleep and appetite. One does not fish merely for a few so-called “frontal lobe symptoms.”

I am more concerned with having the best possible understanding of the condition and needs of the patient at the *time*, than with the customary relatively uncertain guesses as to the ultimate fate. I want

to make sure that my attention is focused on all the points which might make a difference in the immediate treatment and guidance of the patient, *without* therefore losing sight of the long-term problems, the future and the ultimate fate. In some conditions, such as delirium, agitation, depression, or states of panic, the immediate problems are as clear and urgent as in any acute disease of general medicine; in other cases the broad long-term problems must lead us rather than the immediate appearance, as in the temporary spurts or temporary improvements of paresis or of paranoic or deterioration or psychoneurotic states. In all cases we need a sane elastic balancing of the facts, and I feel that we can show that this is possible with a theoretically and practically sound scheme, without leading the student first through a stage of dogmatic cocksureness of ultimately unattainable nosology and general pathologic assumptions.

I am told that when I outlined a similar point of view at the Bloomingdale centenary, one of our colleagues turned to his neighbor with the remark: "How is this to help us in a case of brain tumor?" It is true I did not then discuss brain tumors specifically, but the "Contributions of Psychiatry to the understanding of Life Problems." But does not the plan of attack bring a certain clearness into the study of any patient? Assume that even the brain tumor patient, like E. W. Taylor's case, is one who has for years been troubled by obsessions; or that the condition is one of a korsakow-like colossal syndrome. In the former case we must know that the mental disorder is *not*, and in the latter that the mental disorder *is*, naturally accounted for by a focal disorder. In either case an examination and study of the facts as we find them in mental or psychobiologic terms are necessary before we dismember the data.

It is clearly important that we should guide the public to recognize quite frankly a call for an obligatory practical pluralism in the use of the facts and methods required in the understanding and treatment of our patients. The layman understands at once what we mean by a study of the special organs and the study of general conduct and behavior and mentally organized functions. We study not an abstract "mind" but the functions and *activities* which constitute the facts of mind—just as we might study water and not "wetness," and living *things* and not life as a detached problem. To be sure, the public with its ideas of a detached mind is today as much as ever under the influence of one-sided fads, all kinds of one-sided faith-healing, and all kinds of temporarily successful cults; even physicians send patients deliberately and without further guidance to the healing cults and to consultants and healers inadequately trained—apparently without knowledge of or trust in the conscientious efforts of physicians with all-round training. As a compensatory reaction still others refer the public to a one-sided

infection theory, or to a one-sided endocrinology, or the patient takes refuge with the osteopath or other types of chiropractor's work because of their grossly tangible display of curative efforts—their doing something with their hands, that which gives the surgeon his name. Our responsibility is great. As neurologists let us profess frankly that we are *really neuropsychiatrists*, that is, physicians with a comprehensive scope of interests and methods; and let us also see to it that the spreading of frank and intelligible views of the nature of the life problems and the psychobiologic symbolizing level becomes a necessary and obligatory concern of the rank and file of physicians, appreciated in its right importance by both physician and patient.

A NEUROPSYCHIATRIC ASSOCIATION

Whether, in view of the practical exigencies, and for the sake of greater clearness in the mind of the public, our Association should, on the occasion of its fiftieth meeting, call itself the American Neuropsychiatric Association, in keeping with the composition of its programs, and in memory of Pearce Bailey and those who did and do the war work, is a question worth raising. This would not mean any submerging of either neurology or psychopathology. There will but rarely be physicians who can cover the whole field, and each investigator will have his own choice of problems. But one thing is certain: We do demand of every one a reasonable training in the *entire domain*, including the functions of the organism constituting the personality. We want neuropsychiatrists—not merely neurologists and not merely psychologists, but primarily physicians able to study the entire organism and its functions and behavior and more especially the share of the nervous system and of the general problems of adaptation.

As we deal with the policy of the care of the war veterans, let us not enhance the inevitable traditional and personal difficulties and confusion among physicians and patients by overemphasizing a split between the neuroses, psychoneuroses and psychoses, and the like. Let us remember that many psychoneuroses as problems of general adaptation are infinitely more problematic and difficult to treat than the frank psychoses. The maintenance of the necessary self-discipline and the practical use of judgment is often much more difficult to obtain in the so-called psychoneuroses. The actual work of study and readjustment requires a high degree of cooperation on the part of the patient. Let us do our best not to give cause for outcries of indifference on the part of the physician through disregard of the personality facts, and for the patient's untimely and arbitrary withdrawal from experienced guidance. Let us see that the policies can be shaped by those who are able to study and master the facts about the parts as well as the personality, by those who know *best* and work *most*, rather than by the sensational magazine

literature and the exploiters of dissension in the neuropsychiatric camps. To attain this we have to be creative and constructive and in the front line, and we cannot trust the old policy of mere following and drifting when we come to the psychobiologic problems. We must travel under one flag and with a clear aim.

There may be a few among us who feel that neurology should maintain its exclusive and dominant attitude by pointing to psychiatry as an extraneous and practically negligible asylum and sanatorium field, and that what can be handled at large should be handled under a vernacular of general medical and neurologic camouflage sparing the public's feelings about the mind. Neither the conscience of the profession nor the state of public opinion can drift profitably in this manner. The most practical step toward the solution of our problem is the rounding off of our training among ourselves and in our general medical curriculums by giving the student and worker good foundations for the simple and every-day tasks of psychobiology and understanding of ordinary personalities and their problems and needs. Let us realize among ourselves that neuropsychiatry stands for making organized and critical medicine a field of work with personalities as well as with the part-organs and functions, and that while there *must* be special workers devoted to special research in the special fields, no physician and no intelligent lay person can afford to disregard the gains by the modern readjustment: the recognition of life problems on the psychobiologic level of integration, the promotion of a training in medicine dealing with the defective and unusual child, the growth of interest in the minor difficulties of human behavior and mentation, and the humanizing of the work with all states and conditions of disease and maladaptation.

You may think me visionary for expecting very much from a broadcast recommendation of apparently a kindergarten measure, yet my long experience convinces me that even simple and practical working habits mean more than long reasoning. In every ordinary medical examination today we require a summary examination of reflexes and fundamental sensorimotor functions, and we now add to this, as equally obligatory, an inquiry into the patient's feeling of content or discontent, mood or spirits, special preoccupations and strains, the sex-adaptations and the essential points of life-problems calling for proper hygienic regulation. We recognize in these inquiries into the assets and tendencies and problems of the personality the basic and necessary rounding off of the study of any patient.

In the patients in whom psychobiologic problems *predominate*, we study the reactions and resources of the person as simply and as fully as we study the reflexes, accepting the data frankly as psychobiologically integrated facts or data of behavior of the individual as a person.

We work with a reasonably limited number of reaction sets, that is, groups of facts that have a specific meaning to us. These may be of

the nature of part-disorders—the irritable weakness type, the anxiety-reactions, the hypochondriacal, the dysmnestic-hysterical, the obsessive-ruminative and the simple defect type of facts; or we consider the more sweeping reaction sets, the thymergastic or affective, the parergastic or twist, the dysergastic or toxic, and the anergastic or organic defect complexes, always remembering that any *one* patient can present *more* than one of these sets of facts. We study the factors entering into the disorders, the poisons and infections (exogenic), the metabolic (organogenic) components, and then the constitutional and the more definitely modifiable and adjustable psychogenic experience-determined factors and special function-tendencies.

The fundamental inter-relations of neurology as the study of the part-functions of the nervous system, and of psychobiology as the study of the total reactions of the individual integrated by the cerebrum, are only one example of the general call for study of the functions of the parts and the functions of the whole.

Since the nervous system forms the essential basis of neurology and psychobiology or personality-function, neuropsychiatry furnishes the general science of man and medicine with the simple as well as the detailed methods needed for the study of structures and parts and the study of the patient as an individual.

In all this we are turning into a planful technic and philosophy that which physicians and patients have always *needed* and physicians have sometimes *practiced*. Neuropsychiatry must work out general methods and principles to be of service in the practice of medicine as a whole; and with growing simplicity and clearness neuropsychiatry may furnish the veteran and the rank and file of humanity a safe and sane conception of human life and its health, and of the range of medical helpfulness.

It is easy to put it quite simply:

We consider it obligatory in the study of the reactions of man not only to test the pupil and patellar reflex, but also a few essential reactions to life problems and the essential ways of using and adapting one's self. Let us trust that such a conception of neuropsychiatry may become a general one in practice and in teaching.

The public will then learn how to use the neuropsychiatrist, and especially how to cooperate and what to expect. That the medical profession appreciates the change is, I believe, adequately shown by the frequency with which not only long mismanaged cases but acute cases are given the benefit of timely neuropsychiatric discussion and study among the junior members of our medical staffs. Let us show the world that even we of the older generation have some of the plasticity and vigor of ever-growing youth.