

## Part I.—Original Articles.

### THE FOURTEENTH MAUDSLEY LECTURE: BRITISH INFLUENCES IN PSYCHIATRY AND MENTAL HYGIENE.

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It was with a deep sense of responsibility and of gratitude alike that I accepted the invitation to address you as your fourteenth Maudsley Lecturer; a sense of responsibility through the thought that, in a way, I come as a representative of American psychiatry; a sense of sincere gratitude for an opportunity to acknowledge a real personal indebtedness to British science and British medicine and British psychiatry, partly for what I received myself in the long years since my early post-graduate work in this country forty-three years ago, and partly for the influence British thought and work and practice has had upon certain developments, for which it is a pleasure to express our indebtedness and appreciation. Some of these relations and connections are little realized and little appreciated, and yet very illuminating and by no means only personal.

My direct indebtedness to your medical centres dates back to the year 1890, when at the age of 23 a spirit of inquiry and venture urged me to broaden my largely German-fed Swiss medical education by a semester with masters of French medicine—Potain, Brouardel, and especially Fournier, Pinard, the Déjerines and Charcot—followed by six months in the atmosphere of Edinburgh and London. In Edinburgh I had the privilege of working with John Wyllie, then a physician of the Royal Infirmary, keen on sound clinical methods, and probably best known through his work on speech disorders; Edinburgh also gave me a highly valued contact with Alexander Bruce, then beginning to make his mark in neurology, and to some extent with Byrom Bramwell, of specific note, both as general physician and as neurologist. And to be introduced by my warm friend Francis M. Caird to James Taylor, then Resident Physician at Queen Square, and through him to Hughlings Jackson, Horsley, Ferrier and Gowers, was indeed a great privilege for a young graduate. It was more than anything else the admirable account of the structure and function of the

spinal cord in Gowers's text-book that next made me wish for an equally good grasp of the anatomy of the brain, to gain which I chose for my thesis work an investigation into the forebrain of reptiles, carried out in August Forel's department at the University of Zürich. Deeply impressed by the English-speaking world, I returned after further work in Vienna and Berlin, in 1892, to spend another fertile month in England and Scotland on my way to the New World. I was then determined to devote my life to comparative neurology and to clinical neurological work, which soon led me further than I had planned, actually into psychiatry, with which I had as yet little experience and little contact, beyond what the regular teaching of Forel and natural human interest had provided. Even in 1890 I had heard in Edinburgh the second of Thomas Clouston's Morison Lectures on "The Neuroses of Development". In 1892 I received a great stimulus from the Second International Psychological Congress in London—to me a very memorable occasion. At the Nottingham meeting of the British Medical Association in 1892, I was stimulated by Dr. Edwin Goodall's demonstration of cortex sections by Bevan Lewis's methods. At the British Association meeting in Edinburgh I saw Louis Robinson's demonstration of the grasping reflex of the newborn, on which research work has since been done with us at the Henry Phipps Clinic. A report to my Swiss *confrères* on the organization of the care of mental patients in Scotland, under Sir John Macpherson, was the first published sign of the direction my later special interests were to take, when, just forty years ago, on May 1, I became pathologist in the large hospital for the insane at Kankakee, Illinois. My gratitude is due to the Scotch and English friends and teachers—for they were real friends as well as teachers—and especially to Francis M. Caird, then still a young surgeon, whose personal warmth and cordiality won me over to a lasting attachment to the English-speaking world through ties which I sense more deeply than ever on this occasion. And, to-day I beg to express before you and to you my profound indebtedness also for this present opportunity, incidentally, I might say, to account in a way for the digression from the general medical and neurological training here received, to the fields of psychiatry and of mental hygiene.

I hope you will forgive the semi-historical and semi-personal bias of this presentation. The preoccupation with your invitation and with the present occasion has more than ever made me realize the rôle played in the synthesis of psychiatry and mental hygiene by contacts with British soil and British thought. This rôle becomes more tangible and more humanly intelligible as part of the life experience and development of the thought and work of a definite person than merely as an abstract impersonal statement. What I describe is the experience, I am sure, of but one among many—you might say "one clinical case"—and what personal element creeps into the statement is an unavoidable feature of any truly psycho-biological topic. It

becomes more intelligible in human terms than as abstract factual or philosophical discussion.

I intend to single out and discuss (1) the genesis and meaning and importance of a psycho-biological rather than psycho-physical or psycho-physiological conception of man, and what this conception owes to British thought, and especially to Hughlings Jackson and Huxley ; (2) the meaning of the resulting truly *functional* formulation of pathology, in contrast to the traditional nosological medical thinking, and the help derived from a psycho-biologically open-minded science ; (3) the resulting interest in the individual, and the development of mental hygiene, with the interesting share of Henry Maudsley and Mary Everest Boole in an important phase of its initiation ; and (4) some essential perspectives of present-day psychiatry and mental hygiene.

To the son of a Swiss Zwinglian minister and nephew of a medical practitioner, the problem of the nature of man, of mind and body and of their integration was not a mere abstract problem ; nor was it altogether easy, or just casually treated ; nor would it have shaped itself as it did without British influence. The early helps that happened to be available in my father's library were in the direction of the rigid psycho-physical trend of German science, as laid down in the works of two leaders who had both for a time been professors at the University of Zürich—Lange, the historian and critic of materialism, whose book gave me valuable historical foundations, but no working solution ; and Wundt, Lange's successor, who in 1874 was called from the Chair of *Physiology* at Heidelberg to that of *Philosophy* at Zürich, but was soon called further to Leipzig, where he founded the first psycho-physical laboratory, and became the leader of German psychology along the lines initiated by the psychologically inspired physicist Fechner. Somehow both Lange and Wundt's essays had failed me in my quest for a satisfactory understanding of life and psyche—of what the philosophy of my environment and those speaking of psychology and psychiatry emphasize by the prefix "psycho", the soul and the soul concept, which I met in my extra-curricular browsing. I saw myself before a decision between theology with perhaps a philosophical and linguistic-historical preference related to my father's interests, and medicine with the possibility of a naturalistic career closer to the physician's world, as suggested by my maternal uncle. Eduard von Hartmann's *Philosophy of the Unconscious*, which I also found among my father's books, furnished me with the first live insight into basic studies of comparative-experimental physiology (in contrast to the elemental materialism reviewed by Lange), but also a provocative, critical review of human—supposedly idealistic—illusions, somehow without leading me into either agnosticism or pessimism. It offered a bold but vital philosophical presentation of a psycho-physical parallelism linking physiology and psychology together on a common functional ground, and it must have aroused in me a sense of real possibilities in naturalistic interests, since evidently its pessimism

did not overwhelm me, as might readily have been possible from such reading during one's teens. The positive naturalistic interests won out in favour of medicine, but without eclipsing the problem of the psyche during the practical years of medical study. Even with my pre-medical and early medical interests I was too practically minded and too familiar with hypnosis, as viewed from the start as a simple process of suggestion, to be quite satisfied with Forel's strongly monistic but unduly neurologizing neurokyme formulation of hypnosis and mental function. It was a neurophysiological, psychophysical attempt at solution that still left me unsatisfied, especially under the peculiar subjectivistic wave of the later 'eighties, that struck even the physicists in the form of Kantian epistemology as revived by Mach. A much more decisive constructive step forward in dealing with the pertinent issues came to me through the reading of Thomas Huxley's essays and Hughlings Jackson's neurological writings, through which an important aspect of British thought came to exert a definite, more than merely epistemological, influence upon me. Huxley's vital contribution to the gropings and readjustments was threefold: first, his definition of science as organized common sense; second, his presentation of both the theories of Darwin and the critical philosophy of Hume, with a tendency to give a *biological* background to the human problem in a spirit less bitterly controversial than that of the more physiologizing Continental evolutionists Haeckel and Carl Vogt, and our Zürich botanist Dodel-Port (I also had found the Catholic theologian Frohschammer's very tactful reservations against a naïve non-critical espousal of Darwinism); and, third, somehow negatively, through a provocative and no longer negligible challenge, in his extreme version of parallelism which made of mind a mere epiphenomenon—a theory which later I had to reintegrate to get my full satisfaction.

The clue came to me through a provocative neo-Kantian article by Morton Prince in *Brain*, 1891 (vol. xiv, p. 250), on "Hughlings Jackson on the connection between the Mind and the Brain", describing Jackson's clean-cut concept of concomitance, free of interaction, while Prince identified the principle of consciousness with the noumenon of Kant. It stimulated me to follow up the earlier personal impression of Hughlings Jackson during my Queen Square contact in 1890 with the reading of his writings and those of Huxley, while I was also occupied with the anatomical and physiological and psychiatric preoccupations of that period and the simultaneous empiro-critical influences of Mach of Vienna and Avenarius of Zürich (through Carl Hauptmann's analysis of the concepts of brain physiology), and also of Riehl's philosophical criticism, brought to my attention by my friend Rudolf Martin, the anthropologist (and later greatly helped by Höffding's *Moderne Philosophen* [1905]). Huxley's use of biological (life-dependent) rather than strictly physiological (organ and structure-dependent) concepts and, on the other hand, his provocative use of the boldly parallelistic contrast "no neurosis

without psychosis and no psychosis without neurosis", together with Hughlings Jackson's broad and inclusive concept of the hierarchy of evolution and dissolution processes, with a distinctive psychological level, called for correlations with my comparative neurological and neuropathological work, and my personal human interest in the causal efficiency of suggestion and mentation generally in psychiatric cases. The need of preparedness for practical medical life-work turned my attention to organismal and functional considerations, which, however, did not let me wipe out the mental functioning. In British thought there appeared as a rule a very definite biological comprehensiveness, in contrast to the Continental interest in the cell and the isolated organ, later also met in the contacts with leading American workers, who proved to be largely dominated by an overpowering influence of the German physiological school of Ludwig, and, in distinction from the English schools, somehow not particularly friendly to either neurology or psychology or psychiatry. Apart from Pavlov's later work, the only excursion of a Ludwig pupil into psychology and psychiatry was that of Flechsig, whose myelinization studies never made him a psychiatrist. Direct contact and work with genetic and comparative neurology, an experimental and not merely histological grasp on the data of the neurone concept, familiarity with Horsley's localizatory interests, and Hughlings Jackson's functional breadth and depth, all this began to blend and unify anatomy and physiology and psychology and actual practical life in a comprehensive biological setting, including also *all* those facts for which we have only psychological terms. It developed an orientation that later found itself on particularly congenial ground with the contributions of Sir Charles Sherrington, and especially with his concept of the integrative function of the nervous system, which coincided with my concept of the nature also of psycho-biological functioning as "*mentally integrated*". Having to do my first teaching in the Biological Department of the University of Chicago as Docent in Neurology (1893-1895), and from 1895 to 1902 before the graduate students of biology and psychology at Clark University as Docent in Psychiatry, may account in a further suggestive way for my giving psychiatry an inclusive biological frame. Biology and integration became natural resultants and integrators, with a satisfaction of doing justice both to human nature and to the demands of the sciences available in its study.

In the days of which I speak—the early 'nineties—psychiatry was just beginning to attract more than merely practical attention. It still was largely work with and in institutions, rather than medical work with special diseases and with individual patients. At that time it appeared, and in fact it still appears, to be a field somewhat disturbing, because it seemed to demand unusual talents of verbal formulation; and it is apt to be forbidding because even to-day it is almost unintelligibly obsessed by epistemological dogmatism. I remember that even in 1892 I definitely rejected the advice to take up psychiatry in Switzerland because I felt it required much more ability than

I had for verbal expression, rather than opportunity for concrete demonstration through action. The methods and techniques actually used were *rappport*, understanding, advice, reassurance and guidance of activity and of fancy and emotional life, and suggestion or explanation, with or without hypnosis, and with or without reference to the beginnings of neurological localization initiated by Broca, Hughlings Jackson, Hitzig, and demonstrated and so vividly brought before me by Horsley and Ferrier and Henschen at the 1892 Psychological Congress. Neither the hypnosis nor the localization concept was primarily and especially introduced or developed by psychiatrists, or perhaps directly important for them ; but as problems of correlation they formed a challenge especially under my energetic and critically aggressive teacher, Prof. Forel, the successor of v. Gudden and of Hitzig at Zürich, and in the British influences mentioned, and in Carl Hauptmann's critique of the brain-physiological concepts from the Avenarius angle—all of which played a real rôle in the efforts to find oneself philosophically, scientifically and humanly.

Somehow a really vital sense for the human individual or person was coming into its rights, and that especially through the English emphasis on biology in a scientific naturalism and the living unit, rather than an excessive assertion of selves of supernatural origin. Under the broadening contacts, man began to attain a biological naturalness approaching a pluralism rather than a Cartesian dualism with its parallelistic fear of "interaction". We no longer worked with a body that also happened to be complicated by a mind, or a mind that also happened to be hampered by a body. There was a growing sense of an intrinsic belonging together, notwithstanding the traditional contrasts, and a question why the terms "mind" and "soul" should continue to suggest substances or entities so disparate from the rest of our experience? Since that time there has been a steady urge for a unitary biological conception, with the result that to-day it is much more natural to think in terms of a live organism, the "he" or "she", or "you" or "I", asleep or awake, at rest or in action, in that "more or less" of a specific "state of function" we know as consciousness (comparable to a fluid "state of matter"). That the resulting conditions and functions had features not evident in the parts of the brain did not have to appear strange in a product of integration. We have come to speak of mind or soul as the person's *nature and function*, not as if we meant something detached ; nor were we or are we necessarily overawed by the terms "mind" and "soul" as suggesting "things" rather than functions, as long as we see in them the kind of traditional language which we also use when speaking of sunrise and sunset, guided by practical considerations of relativity or relationism, and out of respect for tradition. We sense a *complete person* with flesh and blood, a product of growth, cerebrally and functionally integrated, an active entity, exhibiting what was spoken of by Charles Mercier even in the 'nineties as *conduct*, and later by William McDougall and others as *behaviour*. The subjective economizing functioning of this entity we then came to call

*mentation* (*i.e.*, the minding-function) rather than "a mind", (or quasi-substance); while the term "soul" was used as applying to ultrabiological or suprabiological religious-eschatological relationships, perhaps with more of simple tradition and dogma behind them than a full and critical use of the really objective "facts"—the kind which would have to satisfy the demand of all science, *i.e.*, direct or indirect accessibility to the critical experience of all adequately trained and competent workers. There were beginnings of a naturalization of man, different from the schism of materialism and idealism and the old Cartesian contrast of body and soul, with the pineal body as the main point of contact of two worlds; a naturalization also different from a culturally destructive iconoclastic and aggressively agnostic materialism, and equally different from the later Watsonian behaviourism unnecessarily excluding subjective experience from objective consideration. There was no pejorative tendency in such a conception as there would have been in a reduction to "mere matter", nor any exaltation as in a reduction to "mere mind". We were learning to see how the structural and functional segregation of receptor function and effector function provides room in the delayed reflex for the differentiation of that wealth of symbolization or contact of consciousness, *i.e.*, sign and meaning function, which allows us to incorporate all that which is accessible to the senses, imagination and memory, and equally that which consists in preparedness for action, as part of the attitude, reaction or action of the moment as well as of the personality, as spread over the lifetime, allowing us thus to consider the whole of man's nature, including his religious, moral and evaluating capacities. Man's sense, involving both sensory and motor function, came to appear as if in a *solution*, a time-consuming flux, in a flow of more or less content or differentiation of consciousness that stands simultaneously for the now and here, and the past, and the future, and for fancy and emotion and reason through the general inherent function of *symbolization*. Symbolization or sign function or meaning function begins to be more than a mere logical figure; it becomes itself the characteristic psycho-biological function and activity that we call mentation or "a mind" in varying degrees of overt performance.

In the 'nineties, to be interested (as psychologist) in what everybody (and not only the introspectionist closeted by himself) might observe and sense as objective reality, in another man's or one's own nature, was not yet done or accepted as practicable, yet the problem and ways of solution answered more and more affirmatively the question: Does not all this bring knowing and feeling and fancy within the range of our life function, of our *biological performance*? Or is it left outside? Why make a puzzle of it? Why not "go to it", study it for what it is and does, as behaviour, and as mentation or implicit function where it occurs as such, in the sense of meaning function, *i.e.*, something to be understood by its specific context, its causes and reasons and its consequences and bearings and suggestive significance? If too much

dissection into sensations and neurones gets the facts too far from life, why not turn to the events that *are* life, a specific kind of order of meaningful function that will make experience telling and effective again if re-aroused (if we just take sufficiently telling developments), sometimes as a mere hint or thought, or fancy, or story or a dramatization, or a sufficiently obvious action in its setting? There is a sameness in essence, *viz.*, mentation or mentally integrated behaviour working with sign-function, the so-called content of consciousness, with definitely a "more or less" in degree from where it occurs as mere idea to where it is full-fledged action. Neither idealism nor materialism is illusion, they are mere contrasting emphases, each indicating specific biologically vital relationships, interesting to the inquirer. If *ideals* are present (and our concern as playing a rôle or as failing to do so), their presence or absence is just as natural and actual a problem of reality as that of the supposedly "purely physical" function or relation of our organismal being; they form more of a group phenomenon; moreover, ideals and all human doing, whether shown in thought and fancy or in plain action and reaction, will have to be viewed more as we view history, as a development in a life record, if it is to be understood, as a specific behaviour, or to use a Greek root, what I call an *ergasia*, a term for any mentally integrated working, constituting an *experiment of nature* fit for objective as well as subjective study. We arrive at a general habit and principle of all science dealing with function. Instead of puzzling, we want to know when and where the event, experience or function occurs or occurred; under what conditions and with what factors, with what working and effect, and what range of regularity and plasticity and modifiability.

We need a concept or conception of man that includes what in everyday practical life we recognize and know and feel man to be, to have and to do, as an organism or person with personality and personality-function or real human nature and conduct and behaviour. This activity of the person as a unit I call mentally integrated *ergasia*, using this new word in preference to "conduct" and "behaviour" merely because neither "conduct" nor "behaviour" lends itself to forming a plural or adjectives or compounds. Instead of a purely subjective detached mind, we find objectively observable performances or *ergasias* operative in the composure of sleep or in the height of human life and nature and attainment which one sees even in that life which Aristotle, in his *Nicomachean Ethics* extols as man's highest attainment and condition for happiness, his "*ἐνέργεια θεωρητική*", or "contemplative activity".\*

\* Described in Chapter X as based on the nature of virtue, friendship and pleasure, as our greatest happiness and man's best personal functioning: "If happiness consists in activity in accordance with virtue, it is reasonable that it should be activity in accordance with the highest virtue, and this will be the virtue of the best part of us. Whether, then, this be the intellect or whatever else it be that is thought to rule or lead us by nature and to have cognizance of what is noble or divine . . . it is the activity of this part of us in accord with the virtue proper to it that will constitute perfect happiness; and this activity is the activity of contemplation, "*ἡ ἐνέργεια θεωρητική*".



We see in it that which we might to-day call *our vision, our natural nature*, including our intuition and capacity for outlook, open to be studied as any actual part of nature and reality and actuality, as a functioning which a person either has or has not got. I am not afraid or disinclined to use common-sense terms such as the word *sense* as including both sensory and motor grasp and capacity, and the "story" of the situation, being more concerned with the working of the facts and but secondarily in the terms.

It is this type of being and this type of function to which we want to sensitize ourselves and the student and worker, through our personality-study and our objective psycho-biology and psycho-pathology.

These are conceptions which I am fairly certain would not have had an easy development on the European Continent, or perhaps later if I had lived only in America, without the influence of the British understanding of biology, that of mind, as not making of life and of mind something mysterious, but dealing frankly with living things to be accepted as found, and studied for what they are and do, without either dogmatic vitalistic obsession and/or dogmatic mechanistic arbitrary or negativistic limitation.

Common sense was naturally inclined toward such a practical and unifying attitude in a non-dogmatic Swiss atmosphere as anywhere else—I feel as if I never really could have thought differently; but when approached with scientific ambition in Continental academic thought, this really biological functioning somehow had to be harnessed in a physiologizing, actually psycho-*physical* parallelism, leaving us with a stipulation of merely ghost-like mental epiphenomena, a kind of shadow of the real man in action, with all the supposed horrors of a forbidden interaction. To-day we see it all much more clearly in terms of *psycho-biological integration*, as the integrative functions of the organism as a unit. J. B. Haldane also recognizes this integration concept in the nervous system, but does not extend it to the understanding of personality function, since he insists on stipulating three worlds—that of physics and chemistry, that of biology, and that of the mind; and he leaves them more as if they were superimposed layers or special detachable worlds, instead of sets of integrates, each higher integrate including the material of the simpler type, and constituting a product of differentiation and integration rather than mere addition of extraneous and possibly supernatural origin. Because the mentally integrated relations reach beyond the individual body and seem to imply exclusive subjectivity and eternal potentiality, Haldane seems to make too exceptional an issue not only of life, but especially of mind as ultra-organismal and as not just "naturally" conceivable, as unexplainable and as mystery—as if it were the duty and claim of "explanation" that it would account for the whole of new and specific existence or development by some kind of addition or extraneous origin. *Is the way to be through the mystery of supernaturalism? and if so, what kind? Or is it rather to be through organized sense, and the granting to nature also of all the spirituality it has and grows with and attains?*

We deal with that which, in a definitely biological substantial and functional form, returns to-day not any longer under the negative mark of Huxleyan "agnosticism", but in the positive concept of *integration*, developed also in General Smuts's holism, and in emergence, with the understanding, as Bertrand Russell states it, that "wholes have important properties not necessarily deducible from their constituents and the relations among these". This specific integrational concept holds particularly for such facts as life and consciousness—so long made a puzzle as something "beyond human ken". Attempts to meet data and questions of

this sort played their *rôle* in my first paper on psycho-pathology and psycho-therapy in 1893 and in my first Clark University Lectures in 1895-6, and I feel that it started as plain common sense, recognizing steps, with a kind of *natural* discontinuity, but also natural progression, corroborated and accepted without mystery in Hughlings Jackson's concept of concomitance and the functional formulations of the data of observation, and later in William James's pluralism. Integration or unit-formation constitutes a natural principle, permitting the reduction of the data to a genetic-dynamic reconstruction as objective "experiments of nature". We deal here, not with additions from the outside, but with differentiations with new specific categories. The greatest difficulty I have in conveying the result of natural conceptions is the widespread loss of faith not only in the supernatural, but in the natural as well, due to a false elementalism, and to the after-effects from exalted spirituality in feeling oneself giving up what seemed "all important" for something too long treated as insignificant, where, as a matter of fact, there is more gaining of active control than actual giving up.

Somehow in earlier German and French thought the idea of development and evolution had played a rôle that proved somewhat premature in the hands of keen but not naturalistically trained thinkers. It was based on the principle of plausibility, over-elaborate and dialectical, and with the German temperament it was destined to become a *Naturphilosophie*, *i.e.*, a system-formation running ahead of the facts or of experimental proof. A peculiar conservatism gave British thought that sober and critical progression from Baconian principles to the Darwinian method of collecting data, seeing and seeking long-term developments, with that world-embracing range of inquiry possible only to the trained traveller and collector not only of dead museum specimens, but also of events and their observations and records. It is easy to see how and with what results Germany and France developed their physiologists bent on physics and chemistry, and leaving man to the various philosophies and systems, and the English their physiology with physics and chemistry in natural biological settings. While German thought shaped its concept of parallelism as the way forward from Cartesian dualism, as a truce in matters of mind and matter and of man and nature, the thought of the English-speaking naturalists had in the *biological* principle a frame which did not make for a premature dogmatism and a premature rigidity, nor a demand for pan-psycho-logizing. It helped us to harmonize man and nature in a natural conception, without passing a large part of human nature to what would either belong to the realm of agnosticism, or at least to a segregated instead of an integrated world.

A good share of the problem of re-adjustment depends on the type of plasticity and dependability of the rank and file of the people. The English-speaking world has a record of stability and progressiveness in many directions. It has removed, within one century, one of the most deeply-rooted and tenacious mediæval creations, that of the duel, radically expunged from the British code of honour of manhood and of valour. When we come to freedom of belief, and to disposition to be hospitable and fair to new experience and new concepts, I am willing to give my confidence to the liberal tendencies—a biological social phenomenon or tendency of the first order.

I was strongly impressed by this inclusiveness and experiential preparedness having a sense of balance and correlation with normal phenomena in a problematic field when in 1892, at the Second International Psychological Congress in London, it frankly and inquiringly admitted the section for Psychic Research. To-day this plays a much greater rôle among Germans, in the same quarters which also gave biology the stamp of aggressive vitalism in Driesch, with all the German urge for system-formation and assumption of "psychons", etc. Why can we not study human nature as we study nature generally? Why not be prepared to determine where we find facts? Is it because we are not willing or allowed to give Nature credit that we are willing to give only to powers from which we expect magic in a highly anthropomorphic sense, satisfying the human capacity for anticipation by symbolization and resulting wish?

In all this we owe a great debt to Hughlings Jackson—the foremost representative of those who rose to the principle which Spencer made the central thought of his philosophy, and which reflected British scientific thought and work from the middle of the nineteenth century. Hughlings Jackson's capacity for observation, his use of the principle of evolution and dissolution rather than of a narrower concept of structure and function, and his caution in the use of psychological terms and concepts, all put a premium on observation, of great importance, and especially natural under conditions in which autopsy could not be obligatorily practised. Jackson was the functional pathologist *par excellence*, whose work had to be, and could quite naturally be, supplemented by the experimental physiologists without perpetuation of a mind-body split, and was a real experimental psychology and ordinary common sense. His clearness in a recognition of several levels appealed to me. With my interest in structure I was prompted to give the Jacksonian formulations also a structural expression as far as facts permitted with structural experimental methods, and yet in the end with a functional anatomy of the nervous system, willing to accept a truly "functional organicism", if such a blending of concepts is permitted. It is permissible—provided that we distinguish (physiological) part-functions and (psycho-biological) total-functions. My entrance into psychiatry was through the autopsy room, but with the temperament of the practitioner of medicine from my early clinical training, and through the functional thought of Jackson, supplemented by a frank acceptance also of the biographic relations of function or behaviour. I might sum it up in this way: Following up the stimulus from Gowers, and my earlier impressions from Forel and von Monakow and the Déjerines, put me in a mood or *capacity to assimilate a special structural, and at the same time also a functional orientation with a place also for the psycho-biological data or ergasias*, structural under the v. Gudden and Forel influence, and the impression of Roux's *Entwicklungsmechanik*, but definitely also with an open-minded interest in Hughlings Jackson's concerns and their application. In the psychological and general scientific orientation the influence of the empirio-critical philosophy of Hume, Riehl and Avenarius played a rôle. I agreed with Hughlings Jackson in keeping from loose identification of psychological and neurological data and concepts, but I saw a solution in the cultivation of objectivity in the field, also of psychology, and especially also in a need of a concrete and when necessary historical objectivity, rather than too complete a satisfaction with ever-ready analogy in either the post-Darwinian trend of British and early American psychiatry, or later in their ultimate, perhaps too exclusive and ready surrender to what, devoid of claims either to omniscience or to aggressive agnosticism, I consider as too mechanized and over-specialized, and too exclusive a "psychopathology of the unconscious". We may easily run into the effects of too ready and final hitching of one's waggon to a star, which then, when adjustments are needed, makes the realities look pale, and invites the

cultivation of a realm of the supernatural as extranatural, or as open only to analogizing inference from the unusual or pathological or the occult.

Binding oneself to be true to (1) structure when dealing with structure, and true to (2) structure-function when dealing with physiology or function of parts, gives free hand and free use of one's best experimentally tried sense in dealing also with a third set of relations, the total-functions and the intra-functional relations of the live organism, the individual, the person and the group, and therewith came a socializable objective psycho-biology and psycho-pathology doing justice also to all the objectively demonstrable subjectivity.

The subject is a natural object in a world of reality, calling for observation and formulation and obligatory test by re-observation or constructive experimentation open *to* and *in* thousands of others, and not only an introspectively accessible self, although with some of the valencies, as it were, closed in a subjective internal ring, comparable to the rings of organic chemistry. Charles Mercier's emphasis on conduct, and William McDougall's emphasis on behaviour—no other language has as good terms—were congenial developments giving an objective place also to subjectivity. The espousal of integration is in line with our having the courage of natural and Huxleyan and Baconian common sense, permitting the acceptance and study of experience or data as found in the formulation of man and his life and nature. It also gives a basis for a psycho-pathology and psychiatry, without a need of negatives and "un's", and seeing spontaneity only as compensation for conflict and trouble; and without John B. Watson's eliminating and telescoping of the sense for the historical-biological time-conscious method which is needed and used in psychiatry as in all study of mentally integrated organisms and their life. It favours a reduction of all the data to "experiments of nature", with more and more of a *rapprochement* of the systematic constructive science of the laboratory and the factual observation and test and retest of a quasi-historical biological-biographic method, and with a sufficient tolerance for the provisional acceptance of facts as found, as long as we make ourselves responsible for a pluralism with consistency and readiness to seek and see the facts that give us new links and new groupings or integrations.

Somehow psychiatry is too complex and too important a branch of human endeavour to leave the personality-function to chance or to mere casual exploitations of unrelated facts and concepts; to do better we need a natural understanding for the average human being as an organism or unit in function. It is not time lost to acquire this and to cultivate it. It is not immaterial whether we do or do *not* form a sensible and usable view of conduct or behaviour (or as I call it, concern for ergasias), instead of passing it on to dogmatic-dialectic traditional "metaphysics", for which those who use it as *alibi* usually do not make themselves responsible. There is a "logic of facts in experiment" and a "logic of word and experience", and finally a "logic of mere reasoning".

But it also is not wise to create either a superworld or an underworld of metaphysics with its iconoclasm and *autos-da-fé* and heresy trials. That which has lately led Charles S. Myers to speak of "the absurdity of a mind-body relation", similarly objects to the assumption that we should be just as happy with a ghost of a mind where we can meet a real person with all the flesh and blood that persons have to have; *i.e.*, a genuine integrate and not a mythological entity residing temporarily in a live corpse or soulless machine. It is not a mere fancy and play to establish a conception of the *meaning function* which makes man the being with subject-organization through symbolization; and it is not really a matter of indifference whether we do or do not form a working conception of the available facts. We call all that "fact" that does or can make a difference in our experimental formulations and tests, and our attempts to get close to reality and actuality, and in observation and experiment, *i.e.*, by letting the facts speak; and, in line with all the rest of science of objective data and relations, we study the "he" or "she" as the functioning integrate of structure, and that special group of functions that is humanly and mentally integrated. We accept a pluralism for whatever facts can prove themselves, including all the fancy and symbolization cultivated by the individual or group, as objective as well as subjective function, playing its rôle in the determination of the course of life.

Moreover, we need not think that nothing but the unusual or the abnormal is worth one's attention, any more than I should consider bankruptcy as the most interesting event of economics. Bertrand Russell is a keen observer when he intimates that man gets bored with what he knows. But is it not of the same order as the child gets "bored" with porridge and spinach? What and who makes us bored with the "ordinary"? Are we to be obligatorily infantile, or adolescent? How can we rise above it and avoid unnecessary distaste?

Anyone who does not sense the interest and individuality of even man's "ordinary" way of doing an ordinary thing should not pose as a student of man. No *absolutely* ordinary way of an ordinary thing *ever* occurs with such a highly individual being as the meaningfully functioning entity man. Here again we find intolerance of what is simple, leading to the creation of the "only thing that counts", and in turn to the disregard and peiorism for anything not directly of the order of the one star that shines. It is more than excusable that a student of physiology, *i.e.*, of structural parts, will want to forget the individual for a time in his experiment; he wants the privilege of studying structure-function; but a student of man, turning also to psychobiology, does not actually forget or cannot afford to forget the physiology, but rather will have to learn to think so naturally "physiologically", *i.e.*, essentially experimentally and dynamically and genetically, that he can turn as naturally to what is individual, personality function, function of the unit, the life-record and life-function of the "he" or "she", as naturally, I say, as the

physiologist does with the part function which he wants to speak to us through his recording apparatus.

There is evidently a specific point to heed, resting on, but going further than, Jackson's conception and the time-shy science of the past. Man is bound to be a history-making creature, living in the budding of his natural time, his specific lifetime with its contrast to the physicist's space-time, with a capacity to be always in the now and here attitude, absorbing the past in memory, and what is not present in fancy, and with anticipation absorbing the future. One of our most critical thinkers, George Mead, who died last summer in the midst of the struggle with the verbalization of his *Philosophy of the Present*, had in his teaching the full sense of the almost inexpressible significance of "the present", of the very essence of mentally integrated life, the meaning of the very moment of the *status nascendi* for which we have to be, and after a fashion naturally are, ever ready—the ever-passing now and here and what we bring into it; not merely as a specially mechanized unconscious, but as "what" and "who" we are, and what we do right then and there when the vital events are happening, with a natural psycho-biological type of spontaneity and plasticity, and calling for our interest and positive and creative study.

To sum it up: We grant the right to use what we know in everyday life of the nature of man and the factors playing a rôle in shaping life's course in terms of psycho-biologically integrated functioning or *ergasias*, *i.e.*, those objective events including symbolization or meaning function in determining and constituting behaviour and conduct—in reality exactly that which the person of sound and critical intelligence uses in daily life as well as in the strictly scientific pursuits. This allows an orderly integration of the apparently heterogeneous sciences and data we meet in the study of man. We need a definite *place for the formulation of the "story" of the events in terms of an objective psycho-biology*—an acceptance not only of the structure-function of *physiology* (as it limits itself to the study of the functioning of detachable parts), but also of the total functions of the biological organismal unit or individual, the "he" or "she", the organism as a person, in the service of its specific life-cycle, not merely as an addition of something extraneous, but as a differentiation and functioning containing all that is basic; the physics and chemistry and the organization by growth and the products of life-experience. This makes of *mind a mode of subject-organization*, functioning without destroying the relations (attitudes, reactions and actions), actually developed and activated or operative; it constitutes a biographic-historical and inter-functional and structure-functional reality record, using the best Huxleyan organized common sense, and freedom from obsessive puzzling and worries over interaction, and also freedom from supposedly "scientific" mechanization. We need a sound attitude toward the usual and the unusual, the normal and the less normal, what is structure-tied and habit-tied or more plastic; open

to study in terms of problems to be met and of the uses of assets and handicaps and resources of experience and creative activity. We learn to work with the physico-chemical and reflex conditions and functions, and with the flow of the more plastic meaning functions, or consciously integrated activity, the differentiation and building up of subject-organization and personality-formation and the type and range of preparedness for the now and here, for short-term and long-term adaptations and performances. In short, we deal with objectively formulated psycho-biology, with ergasias or performances or functioning of individuals and groups, operating with the help of or in the form of symbolization or meaning-function, subject to the same "reduction to experiments of nature" as constitutes all science of nature, including human nature and its working.

In the simple and direct words of the man in the street, objective psycho-biology occupies itself with performances, actions, reactions and attitudes, thoughts and expressions of a person or group, of sufficient importance to call for attention for the rôle it plays in the person's life, and to deserve being scrutinized for the conditions of its occurrence, the factors that enter, their working and their effects and results, and the range of their modifiability. This means that we need a balanced knowledge, sufficient to be able to foretell within reasonable limits what can be expected of the person in specific tasks and situations, and with regard to the individual's health, happiness and efficiency. And within this setting or knowledge it is the task of the observer (or of the subject, or both) to know how far he has to go into the distributive analysis to be in command of the facts for the understanding and management of the "experiment of nature".

#### BRITISH SHARE IN PSYCHIATRIC DEVELOPMENTS.

Turning now to the specific events in psychiatry, we have to remember that the 'nineties were the period when the English-speaking world let the urge for scientific methods in hospitals for mental diseases show in the introduction of laboratories as a supplement of usually unaided practice. Those were the days when Sir Frederick Mott, Ford-Robertson, Orr and Rows in Great Britain, Ira van Gieson in New York and some of us lesser known and less favoured beginners started their work. These men had their predecessors in the contributors to the *West Riding Reports* from which *Brain* arose—more or less contemporaneous were the rise of Meynert as a student of the cerebral cortex and brain generally, and also the rise of the Gudden school with Forel, Kraepelin and others. Frequent criticisms by outside physicians of the lack of productivity of the large hospital for the insane and a reproach of neglect of opportunity had played a rôle in this development. The need of a firm hold on the administration and all it

involved may have been behind the interesting fact that the improvement was largely of the nature of introducing non-interfering talent from the outside.

In the United States it was usually the *post-mortem* pathologist who became an entering wedge of supposed science, and gradually also the clinical microscopist and the chemist. Others brought in the experience and methods of the internist, and still others the interests of the surgeon. The crux lay in the determination of points and means for harnessing the facts at work, or perhaps oftener the introduction of extraneous tests and methods, while the central facts, the study of the live patient, remained under the control of the administrative staff, in face of the fact that only a psychiatrist also a specialist will ultimately be the creative central factor.

The problem was then, and still may be, that of *where* one had best make one's attack.

Sir Frederick Mott came into the field with a record of work on the sensory pathways. His first volume of studies turned on the invasions of the brain by syphilis, his later interests were with the endocrines, but he paid as yet little attention to the data in the rank and file of psychiatric observation and work. His clinical interests were at Charing Cross Hospital and not in the asylums. Similarly, Ford-Robertson began with his interests in the conditions for pachymeningitis, *i.e.*, literally more the outside of brains and organism than the intrinsic workings.

Even Ira van Gieson, in New York, best known in actual productive contribution through his staining method and the demonstration of artefacts in the removal of the spinal cord at autopsy, expanded his Institute so as to represent a "correlation of sciences", and included everything—except work with the living patients of the State Hospital. The McLean Hospital, made famous through the laboratory interests under Dr. Edward Cowles, who was inspired by the philosopher and psychologist Stanley Hall, an admirer and follower of the Leipzig physiologist Ludwig, had begun with research on the reflexes. Under Dr. August Hoch a study of the Kraepelinian work, curve psychology and the histology of the Nissl school were introduced, as well as Folin's studies of chemistry, but more and more, under Hoch, also the contact with the clinical study and treatment of the patient, which was still too jealously and narrowly kept in the hands of Dr. Cowles or the administrator. Our *Kankakee and Worcester plan* formed a contrast in that it started definitely from an organization of the rank and file of actual clinical work with the living patients as well as *post-mortem* and special laboratory studies, with more and more emphasis on the evolution of the disease as found, owing to a never-wavering interest in the specific "story" of the developments, the interest in the individual patient, and the biological point of view concerning both the nervous system and the clinical evolution of events.

It then was my good fortune in 1896 to spend six weeks of my first furlough



with Kraepelin just at the time he brought out his revolutionary concept of dementia præcox in contrast to manic-depressive insanity. Kraepelin had been aroused by a false route taken by German psychologizing psychiatry, culminating in the appearance of Ziehen's text-book reflecting a tremendous extension of the concept of paranoia as embracing all disorders of the intellect. In his revulsion against the disregard of the course and outcome in such a grouping that throws under one term of intellectual disorder any simple delirium and also the most chronic paranoias, Kraepelin went just as far in extending his own previous tendency to an ætiological grouping of his samples of psychiatric entities when he combined Morel's and Kahlbaum's consideration of the course and outcome and his own theory of a specific group of "metabolism diseases" subject to deterioration in 1896, and pooled such heterogeneous conditions as general paresis, dementia præcox and myxœdema in his new group.

Therewith began the contest between Kraepelinian prognostic-nosological *versus* the non-dogmatic genetic-dynamic psychiatry. The whole chapter of "dementia præcox" loomed large in my experience and concern because of my preference for a legitimate but non-dogmatic procedure, *i.e.*, the reduction of its facts to an experiment of Nature. There is in this a conspicuous item on which I should like to give due credit to a number of vital contacts with British thought and work and teaching. In the first place, I did not ignore the fact that the condition did not occur in just any kind of person. Constitutional precursors of the actual dementia præcox were too obvious to be neglected. In my continental training the question of types of constitution had been neglected for the advances in the study of tissues and specific factors, such as infective agents. It was not until 1890 that my attention was first seriously directed to this problem. In a clinical discussion I heard Sir Thomas Grainger Stewart in Edinburgh give a more than purely archæological review of the temperaments, constitutions and dispositions. I have already mentioned that I also heard Clouston's second Morison Lecture of 1890 on the "Neuroses of Development", with its interesting data stimulating the study of the special developments in growth and in the stigmata of degeneracy. And in the French school I had occasionally heard references to various diatheses. The problem of constitution asserted itself over and over again, and forced the issue of personality, and the life-experience in the attempts to understand the developments in the psychiatric patients, and the frequency with which specific and characteristic dispositional and also experience-determined and situational factors occurred as forerunners and apparently also as causal happenings. Three years before Freud's first communication, the urologist, Alexander Peyer, of Zürich, had published a small monograph dealing with frustrated sex-stimulation in anxiety reactions (*Der unvollständige Beischlaf*, 1890). Other developments, such as obsessional and dementia præcox cases, had fairly typical antecedents not to be ignored, but as yet hardly to be called the real "disease". Kraepelin, more interested in his basic laboratory studies on the work curve

and the effects of fatigue and the influence of alcohol and drugs thereon than in the history, and thereby the personality of his patients, had practically ignored, in his conceptions of dementia præcox, the constitutional and individual experience factor, which seemed to me paramount, and was one of the principal observations in my first communications on these questions, especially from 1903 on. When invited to take part in a symposium on dementia præcox before the British Medical Association in Toronto in 1906, I found my "Fundamental Conceptions of Dementia Præcox" perhaps rather sceptically received; it was published in the *British Medical Journal*, September, 1906. To Sir T. Grainger Stewart, and to the Huxleyan and Jacksonian biological viewpoint, which allowed me to integrate my common-sense experience with facts accessible to anyone, I owe a definite indebtedness for encouraging accidentally the constitutional link between common sense and science. I still have reasons to consider this paper, elicited by British medicine, the best I have contributed on the question, and on the general problem of genetic-dynamic principles in the determination of psychoses.

The paper was, however, apt to be misunderstood if interpreted as psychologizing in an old parallelistic sense or uncritical common sense instead of being taken for what it was—the upshot of an objective rather than merely subjective psycho-biology and a psycho-pathology free of any involvement in too exclusive a preoccupation with the unconscious, and without a separation of the mental and the physical processes, working much more in terms of a habit deterioration and disturbing determining factors than following any pattern like that of paresis (as claimed by Kraepelin, who, by the way, was not on any too sure a ground with his paresis diagnoses). With full attention to the *content of the story*, without losing sight of the organismal nature of human life, it was possible to avoid the fashion-like waves of diagnoses that had to be changed in the Kraepelin clinic.

About 1908 my friend and colleague E. E. Southard, also trained essentially from a pathological-anatomical angle, in the study of brains of schizophrenics thought he could, by palpation of the fresh brain, locate places of induration or of softening, and satisfy his Morgagni conscience, the question "*ubi est morbus*", in finding brain spots, which made him taunt me for insisting only on what he called mind twists. Later, my friend Cotton, who dropped dead ten days ago in the midst of active work, recorded his cures of patients by "defocalizing", without, to my mind, a sufficient cultivation of the total picture of the personality record and of what happened in the cures he reported. The last word may not be said on this point. In both these pursuits, and in the endocrinological contributions, I am ready to grant whatever can be gathered and used quasi-experimentally, provided all the facts are included. It is absolutely necessary to be clear on two points: speaking in terms of "function" does not in any way imply a fixed verdict as to the condition and rôle of the structure. If I have structural data and causal factors which can

express the problem of management and description better than the functional formulation, I use the formula speaking in terms of structure. If not, I feel in duty bound to speak in terms of the facts I have, *viz.*, the behaviour function. There the question arises as to what is incidental and what is leading. If there are both structural and functional data, which then came first—the disorder in function or the disorder in structure? (If they are viewed as one, they would be what St. Thomas Aquinas tells us of the body and the soul—the result of one act of creation.) If they are additions or deficits of either function or structure, or both, we want to reduce the facts to terms of an experiment of nature, to be studied according to the basic formula of all science, *viz.*, (1) observation, (2) formulation, and (3) test of whatever is singled out. We thus come to determine (a) the topic worthy of note with a name or distinctive description; (b) the condition under which it occurs; (c) the factors; (d) the working; (e) the results; and (f) the modifiability and the search for the command over the events and opportunities. There are those who divide psychiatrists into two camps—the organicists and the functionalists; if they mean by the latter a disregard of structure, they are wrong in assuming this contrast in my own case. I never tire in searching for what I call structure-function and inquiry into structure, but also never tire in the formulation of the functional and situational data of the total picture. I want to be clear when I am dealing with demonstrable and workable facts and when with pure hypothesis. Southard's brain-spots have not been demonstrated adequately either in terms of their presence or in terms of their nature, or as a usable working hypothesis. The functional data *have* been, whatever their structural content may prove to be.

Sir Frederick Mott, as *post-mortem* pathologist with physiological training, and with clinical interests not centred in the patients of the asylum or mental hospital ward, was differently oriented. As mentioned above, like Southard, he also attacked the field of psychiatry from the outside, beginning his publications with the rôle of the syphilitic processes in the insanities, and expanding his interest in the direction of heredity and of endocrinology, so that at the beginning of the war he was more interested in the organic nature of shell-shock than its functional psycho-biological settings. Yet in the end, as far as the practical formulation went, our data concerning the general formulations of dementia præcox did not differ fundamentally, and in our conversations we were able to speak the same language with the same facts, although he claimed more for the gonadal findings than I was able to accept.

With the integrational concepts of man and the genetic-dynamic functional pathology and the respect for the content (or meaning) of mentation, with the recognition of the "symptoms" as facts of behaviour or ergasias, it was but a natural step to the concept of "reaction sets" or pathergasias—a psycho-pathology as behaviour disorders, not a strange terminology, but a simple use of the behaviour or ergasia or function concepts:

The anergasias, with the memory and judgment defects characteristic of organic structure loss.

The dysergasias, or malsupport with but largely nutritionally disorganized disorders as in deliria.

The par- (or odd) ergasias, more or less disorganizing, frequently constitutionally, psycho-biologically and interfunctionally determined, including also the paranoias.

The thymergasias, the sweeping involvements largely of pure affects.

The kakergasias, or minor psychoses as "badly using oneself" (also called merergasias as part-pathergasia), not always sweeping (psycho-neuroses); and—

The oligergasias or defective developments, closing the ring by leading over to the acquired defects again.

These groupings are definitely *not* meant as a classification of *patients*, but of pathological *principles* at work *in* patients, to be obligatorily specified according to the nature of the factors: exogenic, organogenic, neurogenic, psychogenic and constitutional.

There was no tendency to neglect anatomical histological studies of these days of transformation. A condition practically untouched by the German histopathologists even to-day had been observed by me in 1897, and soon after described as a special form of dementia by John Turner, and in 1901 fully recognized as a "central neuritis" (*Brain*, 1901, xxiv, pp. 47-115), which has since been clearly related to a nutrition deficit akin to what occurs in pellagra. For dementia præcox we have no similar data as yet. On the other hand, the same volume of *Brain* (xxiv, pp. 345 to 409) brought a study by Sir Henry Head, one of those characteristic masterly inquiries into the mental reactions related by him to referred pains and the discomforts in the average general hospital patient—a paper that should, in its broader significance, have become a much more noticed link between general medicine and psychiatry, and that contributed in my own psychiatric thinking to the growing tendency to use the experience with the normal and the minor disorders for the understanding also of more sweeping conditions. It was a stimulating British example of a link in the direction of using the common experience with average and special human nature in the understanding and investigation of personality disease, the same spirit which allows an open mind in respect to the rôle of life-experience so strongly emphasized by contemporary psycho-dynamic trends. The way was through a more intimate attention to the individual, the offering of possibilities in such provisions as the Maudsley Hospital or the Phipps Clinic, and the kind of concern so much stressed in the present-day liaison work between psychiatry and the other branches of medicine and the training of the medical student, in the work of Ralph A. Noble and Franklin G. Ebaugh. Responsibility for personality-function ceased to be the task only

of the psychiatric specialty. It becomes a necessary and legitimate part of all medical work and education.

#### THE INTEREST IN THE INDIVIDUAL AND MENTAL HYGIENE.

This brings us closely to the next question, namely, the evolution of the *interest in the normal or at least not definitely psychotic and its relation to what is seen in disease*.

A member of the Illinois Association for Child Study as early as 1894, and with a neighbourly though critical interest in Stanley Hall's life-work of child-study in Worcester from 1895 to 1902, I was constantly confronted with the evolution of constitutional factors, fully published in the *American Journal of Psychology*, 1903, xiv, pp. 90-103, in "An Attempt at Analysis of the Neurotic Constitution". It was my urge to understand and guide, and not only to describe and dissect the patient; I was also personally sensitized concerning the blending and differentiation of possible heredity and constitutional factors with definitely psychogenic, *i.e.*, life-experienced, and somatic ones on account of an attack of depression in my mother shortly after my emigration to the United States, and so I was bound to cultivate a very concrete and intimate concern for the genetic-dynamic developments in the individual patient and life-situations. From 1903 I had the active and sympathetic co-operation of a volunteer helper through her visiting the homes of my patients, and in her active interest in the therapeutic occupation and entertainment of the patients themselves. A proposal of Miss Louise Schuyler in 1905 to introduce the European, largely eleemosynary, after-care principles into the New York State Service, made it possible to add our experience with something forming part of the real pathology and therapy of psychiatry. It paved the way to a new venture, the appointment of the first official psychiatric social worker in 1906, and that of drawing practical consequences from the fundamental conceptions of dementia præcox, by asking, "What do the Histories of Cases of Insanity Teach Us Concerning Preventive Mental Hygiene during the Years of School Life?" (*Psychol. Clinic*, 1908, ii, pp. 89-101), and various "after-care" studies. There proved to be as much need of extra-mural work on Fifth Avenue as on the East side of New York.

When, in 1908, Mr. Beers came to turn his energy to the reform of mental hospitals he was urged to do it on a basis of mental hygiene, which in due time proved to find an ally who brought in an additional link with British thought, in the entrance of well-directed lay spirit in sensing needs and opportunity—that of Mrs. Ethel Dummer, more strongly influenced by Mrs. Mary Everest Boole and by Dr. Maudsley's writing than may be generally known.

At the same time as the developments in the direction of social work and therapeutic formulation proceeded in our New York work, there developed in Chicago a vital determination to meet the problems of the juvenile court,

also with a definite interrelation with a British help, through a contact between the inspired and inspiring and activating leader and a friend of Dr. Henry Maudsley. There was in Chicago a Juvenile Protective Association, interested in the Juvenile Court. Mrs. Ethel Dummer, the daughter of the lady who with far-reaching foresight had provided the funds for the first probation officers of the court, accepted service on the executive committee in 1907.

The development cannot be better stated than in her own words :

“ I was shocked beyond measure at the realities of life revealed to me. To one brought up in an atmosphere pervaded by the Golden Rule, and in which life was largely pleasure and joy, the contrast of squalor, poverty and evil offered a problem which at one time I feared was wrecking my mind.

“ My reaction was—These children are not bad. Any normal child deprived of all right opportunities would behave in the same way. There were, however, certain exceptions : A deaf-mute boy maturing physically, but lacking education, who was corrupting various groups as he went from one neighbourhood to another, and a few girls showing distinctly amoral behaviour, who at the time seemed far removed from normal mentality. There I found myself unable to condemn that which I had always been taught abstractly was evil.

“ Perhaps my contribution might be said to be those months of acute suffering which preceded the establishment of the Juvenile Psychopathic Institute. Emotion is said to tend toward action. I can wonder whether the result is not in some way proportional to the keenness of the experience. The success of the clinic might so indicate in this case.

“ In the midst of this wrestling of the spirit, there came in the mail a little book intended for another. It was *The Preparation of the Child for Science*, by Mary Everest Boole. In the preface, and later in her *Mathematical Psychology of Boole and Grady*, her interpretation of George Boole's laws of thought illuminated the whole subject for me. He taught that for a complete judgment an alternating attitude of mind was necessary, that one must grasp whatever truth there was in the thought antagonistic to one's own, before being sure of one's position ; that for any unit of discourse beside that which one held, or felt one knew, there was a field unknown, or held to be false. This one must understand before reaching the right decision, Boole's equation for this being  $X$  plus, not  $X = 1$ . Here I found that my withholding condemnation had been logical, not illogical, that my mind was following the right path.\*

“ This struggle carried me beyond all sense of good and evil and punishment. They appeared but as stages of development. The children were not to be helped by blame. The responsibility lay with those having leisure and intelligence to bring about better environment. The unsolved problem then was the atypical child. With this understanding came peace and courage, and a strangely keener consciousness, a new mental process. Recently this experience has been further clarified for me by Dr. William A. White in his hypothesis, that through conflict, higher integrations are attained.

“ It is clear what happened. A dispassionate view was not possible without a change from terms of good and evil to one of understanding.

“ Mrs. Boole had written, ' Progress occurs in crises, a crisis taking place when the science making most rapid advance turns its attention to the class of humanity most in need '. She prophesied twenty-five years ago that the next great step would be taken when psychology studied the criminal and the insane. Reading at the same time in Valéry-Radot's *Life of Pasteur* how one after another he discovered and controlled the germs which were ruining plants, animals, and at last

\* It is the same equation which holds in my thinking of life in terms of units or wholes and of fractions.—A. M.

man, there flashed into my mind—' In some psychological laboratory there must even now be at work the man who shall prevent much crime and insanity '. On making inquiry, I found that although progress was being made in the care of the insane, nowhere in the world was the atypical delinquent child being specially studied. My early attempts to persuade the Juvenile Protective Association that this was the most necessary step in their work in studying the causes of delinquency fell on deaf ears. I still recall the torrent of legal phraseology poured out upon me by Judge Mack, even after the establishment of the clinic, when I suggested that a wise physician, rather than a man trained in the law, would be of value in a juvenile court. However, my interest discovered others who were on the trail. A children's association, on whose board were Dr. Frank Churchill and Mrs. George R. Dean, desired a study of the atypical child, though not with delinquency in mind, and at last a meeting was called at Hull House, and a committee named to seek a man for the work. I had turned for help to Miss Julia C. Lathrop, the head of the Children's Bureau of the Government Department of Labour. She it was who acted as chairman of the committee to find a director, and it was her wisdom which selected Dr. William Healy, who already in private practice was showing marked ability with the atypical child."

The practical alternative at that time lay between the following-up of standardized statistical psychological research, as recommended by an interested university group, and the choice of a person closer to the facts as found. The choice fell upon Dr. Healy, and therewith came a realization much closer to the common sense of the situation than to a formal scientific approach in its narrow technical sense, such as was tried later in a much more expensive venture in an Eastern reformatory (see J. Widensall, *The Mentality of Criminal Women*, 1916).

The well-known basic work of Dr. William Healy and Dr. Augusta Bronner shaped its methods according to the facts and the goals within reach and open to action.

When, after the war, Dr. Thomas W. Salmon returned to his work as Director of the Committee for Mental Hygiene, there started those negotiations with Mr. Max Farrand of the Commonwealth Fund and later his successor, Mr. Barry Smith, that blossomed into the child guidance movement, in which England is to-day participating with its own practical contributions.

#### MENTAL HYGIENE.

It may be that the term " mental hygiene " has been used in a spirit unduly comprehensive and somewhat tendentious, since Mr. Beers was urged to use it to give his lay movement, that of the National Committee for Mental Hygiene, a term carrying associations away from mere reform of psychiatric hospitals and mainly official legislative investigation, when we needed really constructive interests. As long as the director of the Committee was a psychiatrist, the functions of the Committee could be broadly psychiatric as well as humanitarian. Yet, as outlined in my report to the 1930 Congress for Mental Hygiene, there are in the title " mental hygiene " strong ambitions implied in the direction of something different from mere child psychiatry and a diluted general

psychiatry—namely, an intimate study and public education in favour of those factors which make for mental health in a positive, creative, and not merely a passive or mending way. How little the medical leaders were prepared for such a view and for the fundamental work needed is best illustrated by the fact that the most remarkable and comprehensive creation of a medical research organization (the Rockefeller Institute), opened in 1903—and even the School of Hygiene of Johns Hopkins University, started in 1919—included no provisions for the study of personality functions and psychiatry, and even the nervous system as a major topic of concern, largely due to the parallelistic and mind-shy attitude of our leaders trained under the influence of the German school of physiology and pathology. (Or was it because of a realization that research in this field had to be carried on where the patients were?). Similarly the National Research Council, founded in 1917 (with the Social Science Research Council and the Council of Learned Societies as the other national organizations for the planning and co-ordination of research interests), in its medical division, including all the specialities, had up to 1931 no representation of psychiatry, that field of medicine that maintains a larger number of public hospital beds than all the other diseases taken together—it is true on the cheapest possible level of expense and with pitifully little provision for progressive research. Mental hygiene had its beginnings in strangely isolated medical and scientific efforts and lay interests rather than under scientifically far-sighted support. It nevertheless was carried into action in a fairly effective way, first as after-care and attention to the social situations of patients and as child psychiatry or child guidance, and as a means of popularization of principles much needed when even general literature began to be flooded from not always clearly oriented propagandist quarters.

In these intensely human problems it is wise to avoid hair-splitting. We should only consider broader principles—in this case the emphasis on the constructive, preventive interest, in contrast to the essentially and primarily curative ones, which should be left in the hands or at any rate under the guidance of adequately-trained physicians. As a matter of fact both theory and practice prosper best where there is ample natural interpenetration. The fact remains that both individual and general preventive principles in professional and lay participation are bound to be a borderland of contact between all those interested in health, with or also without direct familiarity or preoccupation with what is to be prevented, focused more and more on what constitutes creative effort on behalf of health, happiness and efficiency. The freer the emphasis can be of reminders of pathology and therapy, the closer we are to what we should like to offer to practical life as mental hygiene, as personality and group guidance. On the other hand, it must be the ambition of a movement of this sort to reduce the widespread unwillingness to give simple and natural attention to ill-health and disease by eliminating morbid preoccupation.

In due credit to the medical world be it said that Mrs. Dummer had also been influenced by her family physician, who used to carry in his overcoat a volume of Henry Maudsley's *Pathology of Mind*, and would quote from it; she also read part of the 1895 edition of the work and made annotations; but the real impetus and understanding of Maudsley's and other British influences came to her in the language of Mary Everest Boole, more in harmony with the spirituality



that characterized her bringing up and her temperament. Moreover modern psychiatry and conceptions of man appealed to her more through the emphasis on the interplay between the unconscious and the conscious and the intuitive aspects of life and education, than through any perhaps too exclusively naturalistic or even frankly common-sense type of views of man. We see here again how those who hitch their wagon to a star, to use Emerson's metaphor, are apt to be for life in need of the same spiritual and intuitional formulation; and we also know that but few of those trained scientifically and medically emerge free from some stultification of their imagination when there is a question of human beings and human life in its real meaning. On the other hand, it is unfortunate that so many of those who follow a star, find such great difficulty in accepting again as worth while and as sufficiently real and necessary the facts that have to be sought and mastered, when intuition and revelation and elaboration of aspiring tradition fail to give us the facts needed for substantial achievement in the rank and file of reality. Why is it so hard to grant our best minds a start with which to use both feet and both arms and a clear and balanced head and personality and vision? Is it not evidence that science cannot afford to disregard its obligations in keeping its contact with the neighbouring workers? In this respect the masters of British science have set a remarkable example in their lectures and demonstrations to the man in the street. The difficulty in our own field lies in the fact that most of our data are far less novel than those in the sciences dealing with less generally known and practised matters. To make up for this fact by propaganda and lay discussion of hypnosis and psycho-analysis, and by popularization largely of pathology, is a serious question.

Mental hygiene clearly has its investigational and its educational emphases and goals in shaping attitudes as well as specific activities, and that for every period or phase of the human life-cycle.

Both the investigative activities and the inventive and propaganda activities can, to a large extent, deal with matters starting altogether from the health end, and the more this can be done the better. It is the ambition of the hygienist to think and speak in terms of the natural opportunities and resources of life with a balance in favour of the hale and whole conception of life, and without a stirring up of morbid fear by reminders of the threat of disease. Here, as in all human interest, balance insists on frank recognition of contrasts, but as good *and* evil instead of good *or* evil; health *and* disease instead of health *or* disease. The conjunctive of choice in the language and thought of psychiatry and mental hygiene is "and", not "or" or "but". There has to be common ground.

In a field so fluid and dependent on the persons and the right combination of inspiration, training and practical support one hesitates to make pronouncements of principles. We deal here with a call for the soundest possible psychiatry and equally sound public opinion and ready adaptation to the necessities and opportunities. The more it can be part of the community, and the expression of real work, the sounder its theory and its practice. There are two ways of procedure that may readily be used side by side: on the one hand a systematic and well-balanced attention to the human (psycho-biological) health issues dependent on a sound evaluation and testing out of intuitions and emotions, and the peculiarity of individual organismal as well as the

social contributing factors, with a practical accounting of the activities and their results ; and at the same time a most thorough and critically constructive control of the strictly professional work, wherever possible pushing the possibilities of intensive investigation not merely as child study, but also as study of the share of the adult problems. This requires practical work carried on with a sufficient margin of time and encouragement to develop methods of intensive study and creative ventures. The goal must not lie in the direction of mere leaflets of instruction ; and yet it should aim at such formulations as will favour well-directed thought and practice. Where there are as yet no ideal institutes combining practical work and freedom for research as we see it in the Maudsley Hospital and its laboratory division, one has to do as well as one can.

Hygiene has to deal to-day with a precipitous wiping-out of the distinction between child, adolescent and adult, and in so doing is working with reciprocities. There was a time when undue pressure was put on the child ; letting up on this pressure not only in the child but simultaneously on the morals and institutions of the adult, who should not have to be spared, is creating new difficulties. Mankind is only too ready to be led ; but it takes leaders of leaders to prevent more dissolution than solution. The hesitation concerning an unhampered experimental attitude in matters of human life must not be lightly thrown aside. Will the civilized world of to-day prove civilized enough to maintain the results of costly revolutions, and realize that human life is not a matter of mere thought and good intentions, but of actual time-consuming and time-requiring living ? Will our civilization learn to take the time for growth and respect not only the space-time of physics, but also that specific though elastic quantity " life-time ", adjusted, not to eternity alone, but also to the fact that we live by co-existing generations, and that facilities of locomotion and of communication of word and picture must not be expected to remove the laws of living in life-times ?

We have to abandon any excessive cultivation of anticipatory as well as traditional *credit systems*. Neither the economic nor the spiritual credit systems of to-day have been equal to the pace created by one-sided progress in means of stimulation. Will a 30-hours a week programme take adequate care of the remaining 138 hours ? Is life an industry ? What is the relation of individual and group to industry ? to salesmanship ? to man's fate as consumer ? to man as a shaper of opportunity ? There will be no revelations merely from above. We have the choice of socialized or non-socialized dictatorships, or a pulling together of the elements that are able to listen to the language of reality. It would not do to translate Kipling's *Envoi of the Seven Seas* into our technical terms. Let us furnish the prose of word and deed out of which new inspiration can arise.

The greatest and most difficult task in psychiatry is that of balancing the concreteness and profuseness of its data, and what is needed to keep order among the mass of data.

Human beings have to face the fact of limitation of their capacity of attention and grasp and memory and resourcefulness in themselves, and in those with whom they have to work. Unless our *sciences can concentrate* and bring to focus as well as differentiate their data, their general effect with the average will be chaos or sham. We have to pay respect to the methods of gathering and digesting data as well as to their novelty and discovery. The art lies in

one's being able to preserve concreteness and specificity and comprehensiveness alike, if possible without having to resort to systems too largely of inference and generalization. We have to honour and cultivate above all things a capacity to bring unity into both dispersion and concentration. This must not remain an abstract systematization. Our ambition must be to maintain and further centres of work with a good margin of time and energy for the digestion of the experience gathered and developed ; work, teaching and research with enough leisure and order, but also adequate pressure, to make sure that the interests are clear enough to counteract distractions or mere dictatorial dogmatism. *Even the best can only be a sample of its own potentialities. The whole will never be more than the aggregate and the integrate of contemporaneous effort and outlook.*

#### THE FUTURE WITHIN REACH.

We are to-day in a period in which we do well to consider concentration after a period of great expansion—a period of revision of excessive exploitations of credit. I therefore considered it opportune that we should take stock, and discuss the developments in psychiatry and mental hygiene in the light of a lifetime of experience and the trends and outlook of the present status and the future within reach, rather than speculations largely about eternity.

I am specially interested in the relation of practical needs and immediate possibilities, and the cultivation of records potentially valuable in not too remote a future—a future that is reasonably well planned. We cannot profitably indulge in experiments of perfection, nor will and shall the future be expected to live through all the details of the past. The past should be accessible, but if it is to function it has to be a usable part of the ever-progressing present.

From being a mere necessity and a cleaning-up of a terrible blot on the history of human welfare, or a dark corner of cruelty of nature and of man, the work with mental disorders has become a centre of unprecedented attention, sound only if cultivated with a good balance of the normal and less normal. In contrast to most of the other fields of medicine and hygiene, psychiatry has only rarely spectacular results to offer. Science still has to catch up first with centuries of practical and intuitional creativeness. This it is doing, but here again it should keep in advance of propaganda rather than be its servant. Psychiatry and neurology are not as immediately and as spectacularly helpful as sanitation based on Pasteur's simple experiment disproving abiogenesis, and on the arduous constructive work that followed. They deal with an organ, and with functions laid down for an individual's entire lifetime. Its problems and solutions operate in terms of generations, as well as in terms of preparedness to act to the best of one's ability in the emergencies of the now and here. To integrate the thoughtfulness and the actual work on these extremes requires

stability and a foresight of unusual scope. The progress of mankind depends on it.

In the first place, we are prepared to be liberal in respecting a variety of sciences and not only one science. With sufficient liberality science can readily pay more serious and more practical attention to man and to things human. Instead of the mediæval interest largely in eternity, we do well to give scientific historical attention particularly to the fifty or sixty centuries during which records of culture supplement the palæontological finds of geology. We can thus focus on what may be possible within the span of contemporary generations. Besides the cultural interest of the study of language and the history of philosophies and of political and social life and education, there is a growing human interest shown in research into the use man makes of all these disciplines. This must be in harmony with the facts as they are, including also human nature and the way man uses himself and his assets. The awakening of a cultivation of "basic English" is not a mere whim of to-day. A study of the evolution of language brings us nearer to a history of psychology and of man-function than any other search, and that along two reciprocal lines: a biological account of the *verbal* differentiation of ergasia or mentally integrated function of man; and a possibility to trace, and to learn to avoid, many of the good and false leads passed on through language and in habits in our thinking concerning man and the rest of nature, and of the human opportunity of *using* thought as forerunner of action and creation. The study of linguistics and semantics as a part of the history, palæontology and evolution of human intelligence promises untold additions to our knowledge of man in his individual and social functioning, in the control and use of his discriminating tool, with a better knowledge of both form and content of what may become available. Logic is the science of reason in the use of the *logos*, of the word and of the verbal *sense*.

Then there comes the gain from the systematic study of man's development, from the differentiation of the fertilized cell into the adult being. So far science has sought and obtained means of study of the structure and the cultural results, too largely from bankruptcies, and with only meagre beginnings with detailed study of successes in the successive phases of individual and generations through which man passes, and which create one of the greatest problems for any civilization; the living together "side by side" of the immature and the mature and super-mature, the young and the old, the cultured and the uncultured. These are but meagre beginnings of ways and means to secure and use and store the facts, not to speak of planned invention and creation, not by mere chance, but with all the available organized common sense. This is where the Laura Spellman Rockefeller Foundation and the Commonwealth Fund have done remarkable pioneer work. And this is where pathology has brought much material, and probably also much premature theorizing. This is natural enough, because too little has been done to earn the confidence of the average person that would allow the willingness to make an open book of human life under conditions less prefixed than those of the psycho-analytic partnership of patient and physician.

What we have gained in our own generation is, to say the least, encouraging, and will be more and more so as man learns to live more on what is at hand than on credit, be it the credit borrowed from eternity expressed in religion, and terms that are intelligible to the child and to the person of limited endowment and opportunity and at the same time to the erudite, or the credit borrowed along economic speculation. The problem of credits is one of the matters the world has to straighten out; and it is here that the world is looking,

not so much for a Moses, as for samples of development, and means of contact and comparison.

The study of the feeble-minded led to improved methods of teaching by Mme. Montessori and many others. The interest in degeneracy fostered the idea of eugenics, reminding us constantly of the inter-relation of individual and race. The study of the pathology of the living and the dead will, I trust, grow more contributive without turning the whole world into a pathological laboratory. Therapy is more and more interested in the powers of health. The interest in sin and crime has turned into a curiosity for more knowledge of the normal, with less confidence in baiting the devil. From preaching abstract psychology and abstract ethics and from treating human life as a meagre precursor of eternity, we have come to ask psychiatry and mental hygiene to help in filling gaps in our knowledge, and to assemble the experiments of Nature and of man in a way that allows us to put the samples before those fit to choose and to create a public consensus of opinion rather than dogma or dictatorship.

The world will always want to come and learn and to compare notes with the initiators of Magna Charta, of Bacon's experimental philosophy, of Shakespeare's dramatic genius. Those of us who have been favoured with visitors and co-workers from among you value highly what you bring to us in training and outlook. The United States is sometimes looked upon as an experimental ground, still behaving as the land of unlimited possibilities, but beginning to sense its limitations. We look to you as a country at work with all its cultural and economic and industrial and social and individual problems, with a liveable climate and soil, sufficiently varied and sufficiently harmonized races, and a fascinating blend of present-day practical sense and respect for the past and mindfulness of the immediate future. Those who know how to come and learn will always have cause and reason to cherish the contacts and the working together in well-proved personal and professional friendship.

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