

failed to comply with my request. Mr. Lloyd is no doubt correct in attributing the decrease in attendance at a number of the institutions to the financial and industrial depression of the preceding year.

I might point out in this connection that it seems rather unfortunate that separate enrolment figures for the technological schools are not given in the annual reports of the United States Commissioner of Education, such as are given, for example, for theology, law, medicine, dentistry, pharmacy, etc. I appreciate the difficulty of distinguishing between pure technological students and academic students who are candidates for a degree in science, but it seems to me that it would be eminently worth while to prevail upon the reporting institutions to make this distinction in future. A table illustrating the changes in the attendance on the engineering schools of our country similar to that found on page 777 of volume 2 of the Report of the Commissioner of Education for 1908, which covers theology, law, medicine, dentistry and pharmacy, would be of great value and deep interest.

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SCIENTIFIC BOOKS

Psychotherapy. By H. MÜNSTERBERG, M.D., Ph.D., Litt.D., LL.D. New York, Moffat, Yard & Co. 1909. Pp. 401.

In an article touching on the popular propaganda for child-study, Münsterberg wrote ten years ago in the *Atlantic Monthly*¹

I have always found psychology silent as a sphinx when I came to her with the question of what we ought to do in the walks of practical life.

He has now turned to a very different attitude. In a series of books he discusses, for a wider public, the practical applications of modern psychology. The present volume deals with the relations of psychology to medicine, and aims to reach a wider public, physicians, ministers and all who are in practical contact with the important question of psychotherapy. It is not meant to have the form of loose popular essays, a form preferred where wide attention is to be attracted to a new topic, as in last

¹ Vol. 85, p. 661.

year's presentation of the work of Stern and Jung and others as psychology applied to witenesses. It is to deal with the whole cycle of the over-popularized problems of psychotherapy "in a serious systematic way and to emphasize the aspect of scientific psychological theory." A worthy aim is to strengthen the public feeling that the time has come when every physician should systematically study psychology, the normal psychology in the college years and the abnormal in the medical school. Scientific medicine should take hold of psychotherapeutics now, or a most deplorable disorganization will set in.

This is a rather complex and difficult problem. Psychotherapy is in the air and wildly exploited in the book-market and in magazines. Every new book is devoured with avidity by a heterogeneous set of readers prompted as a rule by curiosity or eagerness to get a few helps to bolster up their own theories and exploitations. I see the book in the hands of utterly untrained persons, whose "practical contact with these important questions" is chiefly the desire for self-help or the promptings of curiosity. This is inevitable for a series of books "for a wider public."

Münsterberg says in his preface:

To those who seek a discussion of life facts alone, the whole first part will, of course, appear to be a tedious way around; they may turn directly to the second and third parts.

I can not help feeling that the average reader will go directly at the chapters with the records of cases only, so that we should really review the book from three standpoints: Its efficiency (1) as a serious unit; (2) as a presentation of facts for those who would as well forego the trouble of a careful digestion of the real principles, and pass over a really most valuable part of the book, and (3) the efficiency of the book from the point of view of a collection of case records.

This may make the author responsible for the inevitable. But where the author himself realizes that he invites certain readers to make a partial use of the book only, his responsibility is admitted. I must leave the verdict to him and the critical readers.

Instead of starting from the simpler facts which everybody can experience, and possibly try, to the more complex phenomena which the majority will have to be satisfied to be able to merely "understand"—or let alone—Münsterberg takes the reader first through a "pains-taking and perhaps fatiguing inquiry into principles, before the facts are reached"; chapters on the aim of psychology, mind and brain, psychology and medicine, a chapter on suggestion and hypnotism and a discussion of the subconscious (which is rather dramatically eliminated by the three words "there is none," but after all rather fully discussed). A statement of the simple and plain facts and then a reply to the probable queries of the unsophisticated and the sophisticated varieties of readers would have been more illuminative and more likely to bring home necessary principles to readers who should get them in direct proportion to their eagerness to take in the stories and facts.

In the second part Münsterberg discusses first the field of psychotherapy, the general and special methods, and only after that the mental and bodily symptoms (or facts to be dealt with); he introduces the concrete instances as mere examples instead of a starting point of demonstration and analysis and the principal reason for a discussion.

The third part is devoted to the discussion of the place of psychotherapy in its relation to the church, to the physician and to the community, with a thoroughly sane standpoint and with interesting perspectives.

The effect of the book on physicians, from what I have gathered from a number of inquiries, has been somewhat disappointing. The book has not the breadth of the presentations by physicians like Forel, Moll, Löwenfeld and others; the examples of psychotherapy are chiefly enumerations of cures with profuse expressions of gratitude, without enough reference to failures and to their number and reasons, and without always satisfying the physician to the point of helpfulness. We can safely say that the *medical* contribution is chiefly that of great optimism, and the somewhat dramatic examples frequently a comment

on the narrowness and limitation of the therapeutic fund of most physicians, but too exclusively selected from among the successes. The *theoretical* discussions are in the main sound and in many points unusually helpful and suggestive, but unnecessarily loaded with difficulties of Münsterberg's own making. To some of us it must seem unfortunate to see the undue contrast between psychiatry and psychotherapy ("psychotherapy is sharply to be separated from psychiatry," whereas the fact is that just now many psychopathologists know little psychiatry and many psychiatrists little psychopathology, but for reasons extraneous to the real principles), and the over-emphasis of the contrast of "the attitude of appreciation" and "the attitude of physical explanation," the contrast of the subjective and objective, of the purposive and the causal view—which is raising a string of difficulties which might be dispelled rather than emphasized; further such claims as:

Whatever belongs to the psychical world can never be linked by a real insight into necessity. Causality there remains an empty name without promise of a real explanation (p. 32).

We are practically made to believe (p. 43) that translation of the facts into neurological terms furnishes the only real explanatory ground. Is not the rôle of the psychophysical doctrine chiefly that of eliminating *harmful features* of a dualistic standpoint which hardly would present itself to a well-guided observer of the simple and plain facts? Does it not call for mere neurologizing tautologies unless we know much more about neuro-physiology?

A plausible and attractive presentation of the problem of attention relieves the start with sensationalism and association psychology. In the "psychophysical" scheme (p. 50) the *quality* of the "elements" is traced to the local position and connection of the brain cells, the *intensity* corresponds to the energy of the excitement; and the *vividness* to the relation of motor channels. But then the reader must wrestle with the claim that "psychology must destroy unity and freedom of our personality" (p. 51)—probably because "any will which is not understood as deter-

mined by causes is simply an unsolved problem"? Owing to the *possible* confusion of morality and mentality the reader is forced to see that the physician and psychotherapist must use his weapons quite irrespective of what he knows chiefly from the *purposive* point of view of experience; a word of encouragement, such as "my friend, be courageous and faithful," is said to be used differently by the physician from what the layman or the minister has in mind, viz., merely as natural and psychophysical material to secure a certain effect, just as sodium bromide would be used. Why this appearance of insincere elimination of the inevitable human feature of a useful reaction, and this reduction to a cold-blooded "scientific" spirit? I grant that "The highest moral appeal may be even a most unfit method of treatment and the religious emotion may just as well do harm as good from the point of view of the physician" (p. 84); but may not equally miscalculated "causal" use of mental suggestion and similarly uncritical uses of supposedly "efficient stimuli" be as harmful? It is not so much the standpoint that makes the trouble, but certain improprieties and the possible disregard of experience. Difficulties concerning the relation of the morbid manifestations and the "underlying" factors are awkwardly introduced in the frequent emphasis of the contrast between "disease" and "symptom":

The mind reflects only symptoms of the disease; the disease itself belongs always to the organism.

How about the mind and the symptoms? What does this contrast mean in hysteria? Are not the "symptoms" the factors to be handled and practically all we know of the "disease"? I do not deny that a certain medical attitude gets a useful background through these distinctions. But it is an attitude which creates more confusion than good, and which some of us are trying to make unnecessary without surrender of scientific principles. A distinction between leading or essential facts and incidental or accidental ones does more for clearness than the distinction of disease and symptoms.

The chapters on suggestion and hypnotism

and on the subconscious are the climax of the introductory part. In the former the actual constructive material is very profitable and might have been given the lead to the extent that the negative character of the key-note of the latter chapter—"There is no subconsciousness" might readily have become the inevitable conclusion, instead of appearing like a quibbling over terms, to one who may have used the expression in a sense more justified than the one criticized by Münsterberg. The positive contribution of these two chapters belongs to the best the book offers. It reduces suggestion to the principle of suppression of opposite tendencies and impulses and wishes, shows that there is no action which has not its definite opposite, and that the induction of opposite mental states constitutes the eliminative and curative power in suggestion. Münsterberg shows how this same principle holds also for attention; how attention leads to making the object clearer, while in suggestion we change it in adapting ourselves to the new situation in which we believe (since *actions* and *beliefs* are the only possible material of any suggestion). He shows that there is nowhere a sharp line between receiving communications and receiving suggestions, just as attention shades over into neutral perception.

It is in the highest interests of psychotherapy that this intimate connection between suggestion and ordinary talk and intercourse, between suggestion and ordinary choice of motives, between suggestion and attention be steadily kept in view and that suggestion is not transformed into a kind of mysterious agency.

This discussion is most admirable. The same form of constructive procedure might very efficiently have kept out the contrasts of moral and mental, etc., criticized above, where only a *wrong method* of dealing with the contrasted matters is the issue (see also p. 374), and the contrast as such is relatively unessential.

The subconscious is done away with. Subconscious mental facts are either not mental but physiological, or mental but not subconscious. Too much emphasis is put on the

"conscious" which evidently is after all used merely as a synonym of "mental." Too little is made of the nature and mode of dissociation and the biology of dissociated complexes, to give the average reader matter for a less misleading reconstruction of what he now stores in the subconscious. With a frank acceptance of biological principles the interesting but probably somewhat bewildering discussion could be greatly simplified. When the reader has successfully divested himself of the over-emphasis of the concept of consciousness—which as we know can hardly be found discussed in modern text-books on psychology—he is again brought up to it on p. 154:

But again we have even in such most complex and exceptional cases only an alternation in the contents, not an alternation in the consciousness itself.

If consciousness denotes chiefly the mental character of the reaction, why should we go on contrasting "contents" and "consciousness"? If it designates degrees of connections, why deny the alternations? Notwithstanding these criticisms, the two chapters are a most excellent *pièce de résistance* of the book.

The second part of the book, the field of psychotherapy, its general and special methods, and the mental and bodily symptoms, is better than similar popularizations. To the physician and even more to the layman, the casuistic material brings much encouragement, but probably also a false perspective, although no doubt less so than many other attempts of propaganda. To one familiar with what has been achieved during the last twenty-five years, psychotherapy must appear rather broader than is depicted in the case-records. The book makes it a point to abstain from everything which is exceptional or even unusual; yet, it does not make plain in the cases, how much can be corrected by a simple adjustment of conduct and attitude (without hypnotism or other very specific methods); or why the method employed is necessarily cogent. After all the book claims

to sketch the whole field of disturbances in which psychotherapeutic influences might be possible and all the methods available.

There lies a great danger in such an attempt of writing popularly about a matter of action and procedure without a full discussion of the principles and factors to be handled. What should we think of a book on drug-treatment for a general public unless it analyzed the things to be treated and some indications of *why* the matter and choice of method must after all be left to the physician? Münsterberg urges that these matters be left to the physician and he even condemns the running of a "psychological clinic" by a non-medical psychologist. Why then discuss the whole procedure before the wider public?

It might be easy to misinterpret the protestations that the writer would never use hypnotism experimentally (p. 380). They tend to give an idea that there must be something wrong or dangerous or queer in it, after all, even in the hands of a competent M.D. We certainly should not hesitate to try drugs on ourselves or others to study physiological effects and especially their harmlessness. This feature of the third part of the book, and such sentences as "It is never the task of the minister to heal a mind and never the task of a physician to uplift a mind. One moves in the purposive sphere, the other in the causal sphere"—and the continual dogmatic discrimination against psychiatry in which psychotherapy (though not merely hypnotism and tricks) is daily more essential, might well be modified in further editions.

It is a pity that the book is intended to serve for propaganda to so many classes. A book frankly addressed to physicians, and another frankly addressed to the layman would have been safer and more acceptable.

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Anwendung elementarer Mathematik auf biologische Probleme. H. PRZIBRAM. Leipzig, Engelmann. 1908. Pp. vi + 84. (Forming Heft III. of Vorträge und Aufsätze über Entwicklungsmechanik der Organismen.)