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The Journal of Abnormal Psychology

Volume 10

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THE JOURNAL OF ABNORMAL PSYCHOLOGY

HYSTERIA AS A WEAPON IN MARITAL CONFLICTS

BY A. MYERSON, M.D.

THE progress in our understanding of hysteria has come largely through the elaboration of the so-called mechanisms by which the symptoms arise. These mechanisms have been declared to reside or to have their origin in the subconsciousness or coconsciousness. The mechanisms range all the way from the conception of Janet that the personality is disintegrated owing to lowering of the psychical tension to that of Freud, who conceives all hysterical symptoms as a result of dissociation arising through conflicts between repressed sexual desires and experiences and the various censors organized by the social life. Without in any way intending to set up any other general mechanism or to enter into the controversy raging concerning the Freudian mechanism, which at present is the storm center, the writer reports a case in which the origin of the symptoms can be traced to a more simple and fairly familiar mechanism, one which, in its essence, is merely an intensification of a normal reaction of many women to marital difficulties. In other words, women frequently resort to measures which bring about an acute discomfort upon the part of their mate, through his pity, compassion and self-accusation. They resort to tears as their proverbial weapon for gaining their point. In this case the hysterical symptoms seem to have been the substitute for tears in a domestic battle.

Case History—Patient is a woman, aged thirty-eight, of American birth and ancestry. Family history is negative so far as mental disease is concerned, but there seems to have been a decadence of stock as manifested in the steady dropping of her family in the social scale. She is one of two children, there being a brother, who, from all accounts, is a fairly industrious, but poverty-stricken farmer. Her early childhood was spent in a small village in Massachusetts. She received but little education, largely because she had no desire to study and no aptitude for learning, although she is by no means feeble-minded. The menstrual periods started at fourteen, and have been without any noteworthy accompanying phenomena ever since. History is negative so far as other diseases are concerned. She worked as a domestic and in factories until she was married for the first time at the age of twenty. She had no children by this marriage. It is stated on good authority that she took preventive measures against conception and if pregnant induced abortion by drugs and mechanical measures. At the end of eight years there was a divorce. Just which one of the partners was at fault is impossible to state, but that there was more than mere incompatibility is evident by the reticence of all concerned. Shortly afterward, she married her present husband with whom she has lived for about nine years. He is a steady drinker, but is a good workman, has never been discharged, and, apparently, his drinking habits do not interfere with the main tenor of his life. He lives with the patient in a small house of which they occupy two garret rooms, meagerly furnished, though without evidence of dire poverty.

From her fifteenth year the patient has been subject to fainting spells. By all accounts they come on usually after quarrels, disagreements or disappointments. They are not accompanied by blanching, by clonic or tonic movements of any kind, they last for uncertain periods ranging from five minutes to an hour or more, and consciousness does not seem to be totally lost. In addition she has vomiting spells, these likewise occurring when balked in her desires. She is subject to headaches, usually on one half of the head, but frequently frontal. There is no regular period of occurrence of these headaches except that there is also some relation to quarrels, etc. On several occasions the patient has lost her voice for short periods ranging from a few minutes to several hours following particularly stormy domestic scenes.

On July 29 of this year she was suddenly paralyzed. That is to say, she was unable to move the right arm, the right leg, the right side of the face, and she lost the power of speech entirely; there was complete aphonia. This "stroke" was not accompanied by unconsciousness, but was preceded by severe headache and much nausea. During the three weeks that followed she remained in bed, recovering only the function of the arm. Her husband fed her by forcing open her mouth with a spoon. She did not lose control of the sphincters. As she manifested no other progress to recovery despite the administration of drugs, numerous-rubbings and liniments, the physician in charge called the writer into consultation.

Physical Examination Aug. 20—A well-developed, fairly well nourished woman, appearing to be about thirty-five years of age. Face wears an anxious expression and she shuns the examiner's direct gaze. Movements of the right hand and arm are now fairly free. There is no appreciable difficulty in any of its functions according to tests made for ataxia, strength, recognition of form, finer movements, etc., in fact, she uses this hand to write with, as she cannot talk at all. Such writing is free, unaccompanied by errors in spelling, there is no elision of syllables and no difficulty in finding the words desired. The face is symmetrical on the two sides. There is no evidence of paralysis of the facial muscles. In fact, the cranial nerves, by detailed examination, are intact, except in so far as respiration and speech are concerned. The right leg is held entirely spastic, the muscles on both sides of the joints, that is, flexors and extensors, being equally contracted. It is impossible to bend this leg at any joint except by the use of very great force. The reflexes everywhere are lively but are equal on the two sides, and none of the abnormal reflexes is present, including in this term Babinski, Gordon and Oppenheim.

Sensation—There is very markedly diminished reaction to pin prick all over the right side, including face, arm, chest, leg and tongue. In some places complete analgesia obtains. Reaction to touch is likewise diminished and recognition of heat and cold is impaired.

Speech—There is complete loss of the ability to make any sound, either voiced or whispered; that is to say, there is complete aphonia,— there is loss of all voice. The patient understands everything, however, and writes her answers to questions rapidly and correctly. She can read whatever is written, there is no difficulty in the recognition of objects, no evidence of any aphasia whatever.

The diagnosis—hysteria—can hardly be doubted. The history of headaches, fainting spells without marked impairment of consciousness, vomiting spells, hemianaesthesia, hemianalgesia, complete aphonia and an exaggerated paralysis, not only of the right leg, but of the ability to thrust out the tongue, while at the same time all other cranial functions were unimpaired together with the apparent health of the individual in every other respect, make up a syndrome hardly to pass unrecognized.

Treatment—The patient was entirely inaccessible to direct suggestion, for no amount of assurance that her leg was all right enabled her to move it. When such suggestions were made, she shook her head firmly and conclusively, and this is true of suggestions concerning speech. This point is of importance in the consideration of the mechanism. Attempts at hypnotism failed ingloriously. Psychoanalysis was deferred for the time, and recourse was had to indirect suggestion and re-education.

The first function to be restored was the power of bending the leg which hitherto had been held entirely spastic. The patient was assured that while she had lost the power of using the limb, a little relaxation of the muscles of the front of the leg would permit it to be bent. Her attention was distracted while at the same time a firm, steady pressure was put upon the leg above and below the knee joint and advantage taken of every change in the tone of the muscles involved in keeping the leg extended. Little by little the leg was bent until finally it was completely flexed, this for the first time in three weeks. Her attention was called to this fact and she was assured that upon the physician's next attempt to bend her leg, resistance would be lessened and she would be able to aid somewhat as well. This proved true. Then the leg was only partly supported by the physician while the patient was assured that with his help she would be able to bend it more freely. From this, she passed on to the ability to move the leg without any assistance on the part of the writer. After having been given exercise in bending the leg for some twenty or thirty times, with complete restoration of this ability, she was induced to get out of bed, and while standing erect she was suddenly released by the physician. She swayed to and fro in a rather perilous manner but did not fall. Finally, by gradation of tasks set, by a judicious combination of encouragement and command, she was enabled to walk. She was then put to bed and assured that upon the physician's next visit she would be taught to walk freely. Meanwhile, the husband was instructed that he must not allow her to stay in bed more than an hour at a time and that she must come to the table for her meals.

On the physician's next visit, two days later, it was found that the husband had not been able to induce his wife to come to the table, and that he had been unable to get her to walk. The physician then commanded her to get out of bed, which she did with great effort. She was then put back to bed and instructed to get up more freely and without such effort, demonstration being a visual one, in that she was shown how best to accomplish the task set. Finally, at the end of the visit, she was walking quite freely and promised in writing, for she had not as yet learned to talk, that she would eat at the table.

The next day instruction was commenced along the lines of speech. Upon being asked to thrust out her tongue, that organ was protruded only a short distance, and she claimed, in writing, to be unable to protrude it further. Thereupon it was taken hold of by a towel and alternately withdrawn from and replaced into the mouth. After a short period of such exercise she was enabled to thrust the tongue in and out. She was then instructed to breathe more freely; that is to say, to take short inspirations and to make long expirations, this in preparation for speech. She was unable to do this, the expiration being short, jerky and interrupted. Thereupon the examiner placed his two hands, one on each side of her chest, instructed her to inspire, and when she was instructed to expire forced his hands against her ribs in order to complete the expiratory act. After about fifteen or twenty minutes of this combination of instruction and help the patient was able to breathe by herself and freely. She was then instructed to make the sound "e" at the end of expiration. This she was unable to do at first, but upon persistence and passive placing of her mouth in the proper position for the sound, she was able to whisper "e." From this she rapidly went on to the other vowel sounds. Then the aspirate "h" was added, later the explosives, "p," etc., until at the end of about two hours she was enabled to whisper anything desired. Her husband was instructed not to allow her to use her pencil any more, and she promised faithfully to enter into whispered conversation with him, although it was evident that she promised this with reluctance.

Upon the next visit, two days later, she was still whispering, and when asked if she could talk aloud, shook her head and whispered "No," that she was sure she could not. Efforts to have her make the sound "a," or any of the vowels in a voiced manner failed completely. She was then instructed to cough. Although it is evident that a cough is a voiced sound, she was able to do this, in a very low and indistinct manner. She was then instructed to add the sound "e" at the end of her cough. This she did, but with difficulty. Finally, after much the same manoeuvring which has been indicated in the account of how she was instructed to whisper, she talked freely and well. When this was accomplished the husband was instructed to have her dress herself and to take her to: some place of amusement, and to keep her out of doors almost continuously.

At all times the patient had complained of a pain in her side which she claimed was the root of all her trouble. It had been "doctored," to use her term, by all the physicians in the city and, it was alleged, came after she had been lifting a paralyzed old lady in the house across the way. Despite all treatment this pain had not disappeared and the various diagnoses made—strain, liver trouble, nervous ache had not sufficed to console the patient or to relieve her. There was no local tenderness, no pain upon movement, but merely a steady ache. No physical basis whatever for this trouble could be found. Her medicine for the relief of it was discontinued, and so, too, were certain medicines she had been obtaining for sleep.

Upon each visit the husband and wife had been informed by the physician that he did not believe the trouble was organic in its nature, that he believed it depended upon some ideas that the patient had, and that, furthermore, it was the result of some mental irritation, compared for the purpose of fixing the point to a festering sore and which, if removed, would permanently eliminate the liability of such seizures. The patient and her husband were informed that the physician intended to delve to the bottom of this trouble and, by deferring investigation as to its exact nature until the symptoms had practically disappeared, a way was cleared to obtain their complete confidence, and at the same time to overcome any unwillingness to accept a psychical explanation for such palpable physical ills. This latter point is of importance in dealing with uneducated persons. For the most part, they are intensely practical and materialistic, and a mere idea does not seem to them to account for paralysis although, of course, such skepticism is usually accompanied by superstitious credulity along other lines. Moreover, by establishing himself as a sort of miracle worker (for so the cure was regarded), it would be understood that curiosity was not the basis for the investigation into the domestic life of the patient and her husband, but that a desire to do more good inspired it.

The physician started his investigation with the statement that he knew from past experience that some conflict was going on between husband and wife; that there was some source of irritation which caused these outbursts of symptoms on the part of the patient, and that unless they told him what was behind the matter his help would be limited to the relief of the present symptoms. It was firmly stated that any denial of such discord would not be believed, and that only a complete confidence would be helpful.

The patient, who had been listening to this statement with lowered eyes and nervously intertwining fingers, then burst out as follows: There WAS trouble between them and there always would be until it was settled right,—this with much emphasis and emotional manifestation. So long as he insisted on living where they did, just so long would she quarrel with him. She did not like the neighbors, especially the woman downstairs, she did not like the room, she did not like anything about the place or the neighborhood, hated the very sight of it and would never cease attempting to move from there. It came out on further questioning that the woman downstairs, whom the patient particularly disliked, was a storm center in that the wife was jealous of her, although she adduced no very good reasons for her attitude. Moreover, the patient stated that she wished to move to a district where she had friends, though other sources of information showed that these friends were of a rather unsavory character. Her husband was absolutely determined not to move from his house. He stated that he would rather have her go away and stay away than move from there; that the rent was too high in the place where she wanted to move, and that the rent was suitable where they were. Moreover, for his part, he hated his wife's desired neighborhood and would never consent to changing his residence from the present place to the other. It came out that her fainting and vomiting spells and headaches usually followed bitter quarrels, and on other matters these symptoms usually placed the victory on her side. On this particular point, however, her husband had remained obdurate. It was shown that the present attack of paralysis and aphonia, symptoms of an unusually severe character, followed an unusually bitter quarrel which had lasted for a whole day and into the night of the attack.

The question arises at this point, "Why did this attack take the form of a paralysis?" At first this seemed unaccountable, but later it was found that the old woman for whom the patient had been caring had a "stroke" with loss of the power to speak, though no aphonia. The patient had gone to work as a sort of nurse for the old woman under protest, for she did not wish to do anything outside of her own light housekeeping, although the added income was sorely needed since work was slack in her

husband's place of employment. The pain in her side caused her to quit work as nurse, much to her husband's dissatisfaction until she convinced him that her pain and disability were marked. It was evident that despite the controversies and quarrels that prevailed in the household, her husband sincerely loved her, for he stayed away from his work during the three weeks of her illness to act as her nurse. Moreover, he spent his earnings quite freely in consulting various physicians in order to cure her.

It was shown from what both the patient and her husband said, and from the whole history of their marital life, that she had used as a weapon, though not with definite conscious purpose, for the gaining of her point in whatever quarrel came up, symptoms that are usually called hysterical; that is to say, vomiting, fainting spells and pains without definite physical cause. This method usually assured her victory by playing upon her husband's alarm and concern as well as by causing him intense dissatisfaction. With the advent of a disagreement which could not be settled her way by her usual symptoms, there followed, not by any means through her volition or conscious purpose, more severe symptoms; namely, spastic paralysis and aphonia, which, in a general way, were suggested by her patient. There seems to have been, and there undoubtedly was, a sexual element entering into this last quarrel; namely, that she was jealous of the woman who lived downstairs, though without any proof of her husband's infidelity.

Both patient and her husband finally agreed to the physician's statement that the symptoms were directly referable to the quarrels, although both claimed that it had never occurred to them before, a fact made evident by their questions and objections. No psychoanalysis was possible in this case, for the man and woman belong to that class of people who feel that they are cured when their symptoms are relieved. It may be argued, without any possibility of contradiction, that a psychoanalysis would have revealed a deeper reaching mechanism and that a closer relationship and connection between the paralysis and other symptoms with the past sexual experiences of the patient could have been established. This last claim may be doubted, however, for there is always a gap between the alleged "conversion" of mental states into physical symptoms, and this gap can in no case be bridged over even by Freud's own accounts. The conversion always remains as a mere statement and is a logical connection between the appearance of physical symptoms and the so-called conflicts; in other words, it is an explanation and not a FACT. Compared with the complex Freudian mechanism, with its repressions, compressions, censors, dreams, etc., the conception of hysterical symptoms as a marital weapon as comparable with the tears of more normal women seems very simple and probably too simple. In fact, it does not explain the hysteria, it merely gives a USE for its symptoms, and the writer is driven back to the statement that the neuropathic person is characterized by his or her bizarre and prolonged emotional reactions, which, in turn, brings us back to a defect ab origine. And the Freudians, starting out to prove that the experiences of the individual ALONE cause hysteria, by pushing back the TIME of those experiences to INFANCY (and lately to foetal life), have proved the contrary, that is, the inborn nature of the disease.

THE ANALYSIS OF A NIGHTMARE

BY RAYMOND BELLAMY

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A FEW nights ago I experienced a very interesting nightmare, and, immediately on awakening, I got up and recorded it, analyzing it as fully as I was able. This is the first nightmare I have had for several years, and I never was especially addicted to them. Two years ago I made an introductory study of dreams,[1] and at that time dreamed profusely, but recently I have been dreaming very rarely, and when I do dream the experiences are not at all vivid. I use the term "nightmare" in a somewhat popular sense to mean a painful or frightful dream accompanied by physical disturbances, such as heart flutter and disturbances of breathing, and followed on awakening by a certain amount of the painful emotion which was a part of the dream. Accepting this definition, the experience which I have to relate was a typical nightmare. A few words of explanation are necessary to give the proper setting for the experience. At present I am teaching in the summer school at this place and my wife is visiting her folks; during her absence, in order to keep from getting too lonesome, I invited one of the young men in the summer school to come and room with me and keep me company. With this as an explanation, I shall copy the original account of the dream as nearly as possible, making a few corrections of the barbarous language I used in the half-asleep state.

[1] At Clark University, 1912-1913.

On the night of August 9, 1914, I went to bed at 11.40 o'clock and was soon asleep. About 3.40 in the

morning, the young man, F. K. S., roused me and I awoke weak, scared, and with a fluttering heart; he said I had been making a distressing sort of noise, but he could not distinguish any words. Immediately, I judged that the dream was caused by my lying on my back, and in an uncomfortable position. As a rule I do not sleep on my back, but for some reason I had gone to sleep that way this time. Also, it had been raining when I went to bed, and I had put the windows down, and the ventilation was bad.

The dream, as nearly as it was remembered, was as follows: I was with somebody in a buggy and we drove down a hill, across a little stream, and up the other hill, where we arrived at our destination. I seemed to find trouble in getting a place to hitch, and I had to take the horse out of the buggy and I think take the harness off. I distinctly remember that in the dream this was a hardship to me, as it would have been in waking life, for I am not a good hand with horses, and do not like to work with them. All this is very hazy to me, and I do not know with whom I was driving, but think it was a lady, possibly my wife. There were other people at this place and other horses and buggies. (Could it be called a case of reversion to childhood, in that there were only horses and buggies and no automobiles?) There is a break in the dream here, and we were within some kind of a building where there was a crowd of people. As it seems now, we were around some kind of a rotunda, but this is very vague. The important part seems to be that there were two people, a man and a woman, who were talking very stealthily and earnestly to each other, and they soon drew me into the conversation. It runs in my head now that the man was my father (who has been dead for some years), though I am not sure about this, while there is no recollection of who the woman was. Now it appeared that there was some woman in the crowd who had some peculiar evil influence over every one and whom everybody feared. This man and woman were planning to slip off from this wicked woman and meet me and the one with me on the road, and in some way, which is not now clear, we were to circumvent this bad woman and break her power. The man explained and explained to me that we were to meet at certain springs which were at the side of the road, but it seemed that I could not get it into my head where they were, and I was afraid I would not stop at the right place. At last I thought I knew where he meant, and told him that I would stop there and wait until he came up, but then I happened to think that he might be ahead of me anyhow, and could stop and wait for me; then I was sure he would be ahead, for I remembered that I had to harness and hitch up the horse and his was all ready. And now we seemed to be getting our horses, and I remarked to him that I was not a bit good hand at working with horses, and he expressed his sympathy that I had this work to do.

Here was a second break in the dream, and I was standing in a hallway, looking through a window into a room. In this room sat my wife and the evil woman whom everybody feared. She had learned our play (I was conscious of this in the dream), and was determined to have her revenge, and prevent us carrying out our plan. She had hypnotized my wife, and had her scared so that she was in great mental agony. I heard her saying, "Now you are a big black cat," or something much like this, at any rate making her think she was a cat and at the same time leaving her partly conscious of who she was. This woman looked exactly like a woman who lives in the neighborhood where my wife is now visiting and of whom she has always been somewhat afraid because of her sharp tongue and unpleasant ways. Immediately, I was filled with a great fear for my wife and with a raging anger against the woman. I broke out into calling her all kinds of names, especially saying, "You devil, you devil," and trying to get through the window to her. I tore out the screen, but had a great deal of difficulty in doing so. When I had finally succeeded in tearing the screen out, I threw it at her head, but she did not dodge, but sat boldly upright and seemed to defy me. Then I tried to jump through the window to get to her, but was so weak that I could not do so; this seems strange since the window was not more than three feet from the floor. I was making unsuccessful attempts to get through, and was railing at the woman when S. awoke me. I awoke weak, and for some time continued to feel frightened, though not enough so to keep me from talking and writing out the dream. I got up and put up the windows (since the rain had stopped), and about this time a very fair explanation of parts of the dream came to me. I immediately told it to S., in order to keep from forgetting it, and then decided to write it down, which I proceeded to do.

Parts of the dream seem to analyze very nicely, but there are parts which seem to resist analysis; I did not try to force the analysis but gave only the part which came spontaneously. In the first part of the dream I was driving in a buggy, I crossed a creek and had trouble with unharnessing a horse. Several times recently, I have mentioned the fact that I never liked to work with horses, even when on the farm at home. I do not remember of having mentioned this fact on the day of the dream, but Mr. C. had stopped in to call on me that evening and had mentioned that he drove in in a buggy. I had not seen the buggy and had wondered what he did with it, and had not remembered to ask him. He had also told me that he was going to a place called Yellow Springs; I knew about where Yellow Springs are, but could not quite place them and had tried to figure out what direction he would go. This seemed to come out very clearly in the dream, when I was trying to find out where these unknown springs by the side of the road were. I had related during the evening how I recently fell into a creek with my clothes on and this probably accounted for the creek over which I drove in the dream. In the dim second part of

the dream, the rotunda seems to have resembled the chapel of the new college building which is being builded, and about which I was talking that afternoon.

The last part of the dream seems to have been the important part, and in it several of the Freudian mechanisms show up very plainly. Just before going to bed, I had read an article about Vera Cheberiak, the Russian murderess of the Mendel Beilis case, and how she is now engaged in suing different people for slander. The article had described her as coolly and impudently sitting up in court and seeming to realize her power over her enemies, and it had also made a point of the great fear in which she is held. I had read another article about the city of Salem, which has recently burned, and I had remembered that it was the "witch" town of colonial days where people were supposed to be turned into black cats. I had read still another article, descriptive of country life, which described how a man had climbed a tree after a cat which was eating young robins. I had just a day or two before received a letter from my wife, which contained the news that she was going to visit this woman whom she fears, but whom she must visit because of their social relation. As already mentioned, the woman in the dream looked just like this one, and it will readily be recognized that the dream woman was a condensation of Vera Cheberiak, a Salem "witch," and the woman whom my wife fears. The fact that she was hypnotized into thinking she was a cat would naturally accompany the Salem witch, and the cat in the apple tree, concerning which I had read, might also have entered the dream. Aside from these, there is another element which may have been instrumental in causing my wife to be punished by thinking she was a cat. I once saw a woman who was suffering from melancholia who thought she was a cat, and her mental suffering seemed to me to be about the keenest of any that I have ever observed, this possibly caused the dream-making factor to represent her as thinking she was a cat. The hall, window and screen are also easy of explanation. That evening I had examined a window which opens from our bedroom into a hall, and had wondered whether we would continue to keep it curtained this year or take the curtains away. When I put down the windows to keep out the driving rain, I had had trouble with a screen much as I did in the dream.

The heart of the dream seems to be in this last scene. That morning (it was Sunday) I had very unwillingly, and from a sense of duty, gone to a tiresome and long-drawn-out church service. I had become so fatigued during the service, and so disagreed with some of the things the preacher said, that I was conscious of a mild desire to swear and throw something. I had humorously mentioned this fact after the service, but there was quite an element of truth in the jest. The dream gave me the chance of my life to fulfil this desire, and I seized the opportunity by breaking into a stream of profanity (not very successful profanity, I fear, as I never use it when awake and therefore was not in good practice) and throwing the screen at the woman. But was there not a deeper meaning than this in the dream? I think so decidedly; it seems that it would be a lot of trouble to construct such a tremendous nightmare just to give me an opportunity to swear and throw something, because a preacher had been somewhat tiresome. There was evidently a deeper and more subtle wish which was also fulfilled. That evening I had walked up the railroad track with a crowd of young people and where the paths crossed we had all split up and gone different directions. Two young ladies had gone back to their boarding places across the campus, and I had suggested to the young fellow with me that we go along with them. However, he objected, and we walked back down the railroad track. Now, it had occurred to me that he probably thought I was not within my bounds as a married man when I wanted to walk back with these young ladies; something of the same idea had come to me that day when some one had said in a conversation, "Professor B. is the most satisfied man on the campus whose wife is away." I had wondered if they thought I did not care for my wife and vaguely wished I had some way of showing my love for her, and, more than that, these suggestions had very naturally made me wonder if I really care for her as much as I should. I could not have asked for a better opportunity to serve and show my love for my wife than the dream gave me, and at the same time it assured me of my affection for her. There is still another element of repression in this and that is that I have for some time been wanting to forcibly express myself against the unpleasant ways of this lady whom my wife so fears. In the dream, I very freely and fully followed this desire.

This far I can go in the analysis and feel sure of my ground. It will be noticed that I have not resorted to symbolism, and have made very little technical use even of the Freudian mechanisms. I could very easily plunge into symbolism and more elaborate analysis, but should I do so I fear I would be in the same condition as a bright young scholar who made an elaborate study of Freudian theories. He expressed himself by saying that it was a "chaotic inferno." This analysis will seem very unfinished to many of the well-trained readers of the JOURNAL, and so, in a way, it does to me, but it may be interesting as the work of a layman rather than a trained physician. I have not used the word "sexual" in this paper, but the reader can judge for himself if the impulses would come under this heading, either in the more narrow use of the term or in the broader meaning which Freud has given it. For myself, I see no possible objection in employing the word "sexual" in this connection.

The uncertain parts of the dream are as interesting in a way as the others. Why did I not know with

whom I was riding, and why were the persons with whom I talked more certain in their identity? Here, of course, is the place where it would be easy to find a repression if such existed and—I believe—if it did not exist. Whether there is such a repression there or not I do not know, but I see no necessity for considering that there is one there just because there is a dim place in the dream. In the study which I made of dreams a year or so ago, I became convinced that there is a principle of dream-making which has not been noticed. I will throw out a suggestion here in the hope that some one will study it further, but will give no elaborate discussion in this paper. Briefly, it is that only those things appear in a dream which are necessary to express the meaning of the dream. A few illustrations may make this clear. Every one has noticed the rarity with which colors and sunshine appear in dreams; I have found, however, that colors and sunshine always appear if there is any necessity for their doing so. Some one dreams of a melon and looks to see if it is ripe; he sees the red color; he dreams of a stream which he thinks is a sewer and smells it to see if it gives off an odor and finds that it does; he dreams of pulling his fishing line to see if there is a fish on it and senses the pull of the fish; I have examples in abundance which go to indicate that taste, smell, tactual, kinaesthetic, color sensation or any other kind will appear in a dream when they are called for to complete the meaning of the dream, but they are not common because they are very rarely needed. Even in waking life we rarely think in these terms. If this little principle prove true, it would be easy to understand why certain parts of a dream are dim without going to the doubtful process of positing a repression. The persons in the dream were not recognized simply because there was no need for them to be; the dream expressed the pertinent meaning just as well without them as with them. They were observed just as many of us would observe the occupants of a street car in waking life; we could possibly not describe, even partly, any one of the occupants of the car which we used on our way to the office or home.

Before leaving this nightmare, I want to call attention again to the somatic elements. I was lying on my back and in a cramped position, the air was closer than usual, and my circulation was naturally deranged. When I awoke I was strongly inclined to give the physical elements a large amount of the responsibility for the dream, and I have not found occasion to change my mind in this matter. I think that even the inability to jump through the window in the dream was caused by the weak and exhausted state of my body, due to the poor circulation and cramped position.

ANALYSIS OF A SINGLE DREAM AS A MEANS OF UNEARTHING THE GENESIS OF PSYCHOPATHIC AFFECTIONS

BY MEYER SOLOMON, MD., CHICAGO

THOSE; of us who have devoted a certain amount of our time and energy to the study of dreams have early come to realize the value of a dream as a starting-point in the analysis of certain mental states, particularly those of an abnormal character.

Frequently, in the hopeless tangle of symptoms, complaints and disconnected facts in the history as originally obtained, especially in old-standing cases, one does not really know just where to begin, what to start with in the first efforts to struggle with the problem of the ultimate genesis and evolution of the condition which is presented to him at the particular moment. Of course, by a careful review of the patient's past life history, gone over by persistent questioning and cross-examination, one can begin with the family history and step by step trace the history of the patient from earliest childhood or infancy through the various stages and phases of activity and development up to the very moment of examination. This may at times appear quite dull, quite uninteresting and entirely unnecessary to certain patients. For this reason and also for many other reasons, which I shall not enumerate at this point it is at times well to resort to dream analysis. And in analyzing dreams it is well to remember a fact, with which I believe all psychoanalysts will agree, namely, that by a most thorough and far-reaching analysis of a SINGLE DREAM, we can, by following out to the ultimate ends the various clues which are given us and the various by-paths which offer themselves to us in the course of the analysis—we can, I repeat, should we be so inclined, root up the entire life history of the dreamer. This may not be necessary in all cases. But, at any rate, if we desired so to do for scientific purposes, we could arrive at such results. In such an analysis we would, of course, first take up, individually, every portion and every element of every portion of the dream, and by means of each such lesser or greater element of the dream, we could arrive at a mass of material, a wealth of information concerning the past experiential, emotional, mental and moral life of the individual whose dream we were at the moment analyzing. In fact, one could ferret out the full life history in great detail, thus obtaining a complete autobiography leading far down into the depths of the dreamer's mental life and into the inner world of his own. With the material so obtained one could truly reconstruct the complete life history, piecemeal, until the wonderful and inspiring structure of the mental world of the dreamer would be reared, reaching far back to early childhood and perhaps even to infancy, extending so far forward as to give us

a prophecy, based on the dreamer's dynamic trends and emotional trends and leanings, of the probable future, stretching forth its tentacles in all directions, and, uncovering the psychic underworld in its every part, holding up before our eyes the naked mind, in its length, its breadth and its thickness.

I am not referring here particularly to the employment of the method of hypnosis, especially as practiced by Prince, or to Freud's so-called free association (which is frequently really forced association) or Jung's word association methods. I am speaking only of analysis of the dream by ordinary conversation and introspection, in the normal waking state. Of course, were the latter method supplemented by these other methods, the results would be so much the more complete and far-reaching. I may mention, specifically, that the employment of Freud's free association method would be helpful here in gathering information because, when employing this method, one practically forces the one being analyzed to think by analogy and by comparison, insisting that he tell you what a certain word or name or scene or experience or what not reminds him of, what it resembles, what he can compare it to, no matter how remote its connection, no matter how unrelated, how far-fetched or how silly the association may appear in his own eyes—in other words, we demand that he co-operate by suspending critical selection and judgment. Although, as I say, Freud's, Jung's, Prince's and other methods may be advantageously employed, still, it seems to me, although I cannot yet state this in final or positive terms, that, at least in most cases, such an unravelment and resurrection of the past life history can be obtained by an analysis of the dream conducted in the ordinary, waking state, and the usual conversational mode of history-taking and daily oral intercourse.

It needs no repetition or elaboration to convince psychoanalysts (I use the term "psychoanalyst" in the broad, unrestricted sense of the word, including the supporters of all possible schools or standpoints or methods in psychoanalysis or mental analysis, and not limiting it to Freud's psychoanalysis) of the essential and fundamental truth of this statement. I shall, therefore, not unnecessarily lengthen this paper by endeavoring to bring forth complete evidence of the truth of this assertion.

As a matter of fact, this conclusion or generalization applies not alone to dreams but to any single element in the objective or subjective world which may be seized upon as the initial stimulus and from which, as a starting-point, association of ideas, in ordinary conversation or aided by any of the more or less experimental or artificial but valuable methods heretofore mentioned, may be begun and continued ad libitum or even ad infinitum, under the tactful guidance and judgment of the investigator. For example, if I may be permitted to tread upon the dangerous path of near-sensationalism or extremism, I may mention that were I to take even so common, so widely used, and so relatively insignificant a word as the definite article "the" as the initial stimulus, and have one of my fellowmen or fellow-women (whose full co-operation, it is assumed, I have previously obtained) give me one or more free or random word associations, and thereafter, with these newly acquired elements, continued to forge my way into the thickly wooded and unexplored recesses of the unknown and mysterious forest of the mind, I doubt not but that I should achieve the same results as if I had started upon my journey with a dream. If this be true, and I firmly believe that it is, in the case of that universally used and apparently inconsequential word "the," to which the normal person can be expected to have such a large number of associations, of varying degrees of intimacy or remoteness, how much truer is it when we have such a definite mental fact or mental state as a dream as the starting-point of our hunting expedition?

The dream gives us something tangible to start with, something near at home to the dreamer or patient, something interesting and amusing to him, something baffling and so frequently unintelligible to him, and, as a consequence, a more conscientious, earnest and wholehearted co-operation can be obtained from the person whose mental life is being investigated. Here is something vivid to him, something of personal interest to him. And so we can look to him to lend us his aid in better spirit and in fuller measure than might otherwise be obtainable.

I have been referring in my previous remarks, for the most part, to unravelment of the normal individual's life history. But my remarks are equally applicable to a mentally disturbed individual's life history and to the genesis of abnormal psychic states, particularly those to be met with in the neuroses and psychoneuroses.

So true is the generalization, indeed the truism or dictum here laid down, that, in only the psychoanalyst knows how many instances, by the analysis of a single, even the very first dream, one can arrive at the rock-bottom depth of the trouble at hand—yes, at the very genesis of the condition. It is not my intention in this paper to report such cases in full detail, since the presentation of even a single such case would be too lengthy for publication in an ordinary medical or other journal, and in many instances might well go to make a good-sized book, a real autobiography of more or less interest, if not to the average reader, at least to the psychoanalyst and to the person who has undergone the psychoanalysis. Without attempting to present an elaborate history or complete analysis, but rather merely to call attention to the truth of the general problem which is being discussed in this paper, I

shall, however, mention a few definite illustrations of this sort.

A man of sixty was brought to my dispensary clinic by his wife (I say "brought" and not "accompanied" by his wife, advisedly). She accompanied him into my examining room. He had an almost complete aphonia, spoke hoarsely and in a whisper and presented all the signs of abductor laryngeal paralysis; added to which there was a partial hemiplegia of the right side involving the upper and lower extremities, but not the face or any of the cranial nerves other than that supplying the right laryngeal abductor. I shall not give any other points in the history except that this paralysis was of four months' duration, there was some resistance to movements at the elbow and knee, but Babinski and other indications of a central organic lesion were absent. The results of the rest of the physical examination need not be mentioned except that the patient presented evidences of arteriosclerosis. The patient was of dull mentality, meek humble and subservient; he was much below par mentally (I did not put him through any special intelligence tests), had little information to offer, constantly resorted to "I don't know" as a reply, and could co-operate but little. I did, however, obtain the important bit of information that seventeen years ago he had had an almost complete aphonia of several weeks' duration and that one day, while on board ship, he became seasick, vomited, became frightened, went to his room, and suddenly his voice returned to him. So sudden was the transformation that many of his fellow-passengers insisted that he had been deceiving them and had purposely simulated the condition he had previously presented. The case was one of hysteria, the patient presenting at the time of my examination signs of abductor laryngeal paralysis (laryngological examination disclosed a right-sided abductor palsy) and right-sided partial hemiplegia.

For the next two visits the wife accompanied, or rather, brought the patient to the clinic and I could get but little information and consequently progressed but little. I asked him, in her presence, to come alone the next time—which he did. The description of the onset of the attack, which was furnished me on his previous visits, proved the hysterical nature of the condition: he had suddenly been attacked by nausea and vomiting, fell to the floor, lay there, more or less unconscious (as he described it) for five or ten or more minutes, was assisted to his feet, went to his bed with practically no assistance, a few hours later found that he could speak little more than above a whisper, and in another few hours or more his right side became weak and failed him. He had insisted that the onset came on suddenly. He had denied any quarrels or trouble at home. Nothing could be obtained from him as to his thoughts just prior to the attack or as to any special emotional shocks.

On his fourth visit I asked him to tell me any dream he had had recently and which had made an impression upon him. He could give me no aid. Nothing came to mind. I asked him if he had dreamed the night before, and he told me he had had a dream the afternoon of the preceding day, during an afternoon nap. Here is the dream: He found himself struggling with a tremendous snake, the upper part of which was in human form, the features being very hazy and not at all recalled. The snake was vigorously endeavoring to enwrap itself about him and to strangle him, and he was desperately and fiercely struggling to defend himself against it and to free himself from it—and yet he could not fight it off. In desperation and in fear he cried aloud for help. This was the end of the dream, for, at this point, members of his family came rushing toward him to inquire what was wrong with him, and due partly to shock and his own activity in the dream, and partly perhaps to the noise of the footsteps and of the conversation of those who came running toward him to inquire into the cause of his distressful cries, he awoke.

The thoughts and reveries just preceding the dream and the thoughts and experiences during the morning preceding the dream, although the true inciters of the dream, and although concerned with the central figure (his wife) in this little drama, need not be detailed since the dream has a wider and more deeply arising significance.

I could not learn definitely from him whether the series of associated thoughts turned first from his wife to his troubles with her, to her attitude toward him, and then to her resemblance in this respect (her nagging, pestering persistence and actual persecution of him) to a snake which is endeavoring to enwrap itself about him, to strangle him, to withdraw from him his very life's blood, etc. This may or may not have been the line of associations just preceding the dream.

He had no idea as to what the dream meant. Using free association, in ordinary face-to-face conversation, I asked him what "snake" reminded him of. The association came in a moment. He smiled, became embarrassed, said it was foolish of him to tell me this, but it reminded him of his wife. He had always looked upon his wife as a snake in human form. He had frequently called her "snake" because of her conduct toward him. She had wound herself about his life in snake-like fashion.

And then came the story of their troubles. This was his second wife. She was fifteen years his junior. He was meek, feeble, of weak will-power, without initiative. She was domineering. Although his wife never told him so openly and in so many words, he felt convinced that the trouble had begun more or

less because his wife's sexual libido was not satisfied in her sexual relations with him. He admits that she is a passionate woman, her sexual libido was of such strength that he, much older than she, and not too strong physically, could but little gratify her. The first complaints and the sole trouble which appeared on the surface were financial—he barely made a living and she complained thereat continually, bitterly and tyrannically. It seems that her complaint in this direction was justified. It is difficult to determine just what role her lack of sexual gratification played— whether it only acted as stirring up the embers of dissatisfaction (with his weekly earnings) which already existed, or whether it was the basic factor, led to her dissatisfaction with her matrimonial choice, and caused her to seek some more or less valid cause for complaint, in that way permitting her, more or less consciously, to transfer her dissatisfaction and discontent from the lack of sexual gratification to the hard pressed financial condition (which perhaps she might, for that matter, have been willing to endure, did she but obtain the full gratification of her sexual craving). At any rate, both of these factors played their role in causing domestic disagreement, one factor being openly acknowledged as the cause by his wife, the other factor never mentioned by her, but believed by him to be an important accessory, if not the main, fundamental and primary source of the trouble. His wife, using his poor earning capacity as a weapon, and with the demand for "more money" as her battle-cry, carried on a campaign of complaint, grumbling, nagging, fault-finding, insult and abuse, but little short of persecution, making conditions wretched and miserable at home. Things at length became quite unbearable to him—so much so that, feeble in willpower and lacking in initiative as he was and is, he was compelled to leave home and live with his aunt, since his wife had practically deserted him. Although she had sold out the furniture and the rest of the furnishings of the home, and had pocketed the money thus received, she repeatedly called at his aunt's home for no other purpose than to force him to pay her sums of money for her weekly maintenance. On each such visit she would act the tyrant, would storm and rage furiously, would subject him to stinging rebukes and deliver biting tongue-lashings, causing him in consequence to be much upset and nervous the rest of the day. The very morning on which he had had the attack, which was followed by his present trouble (partial aphonia and partial hemiplegia) his wife had paid him one of these unusually stormy and noisy, and, to say the least, unwelcome visits. She had carried the attack to such a point that our patient became so emotionally upset (he is a harmless, emotional, kindly, unassuming and indifferent sort of old fellow) that he suddenly was attacked with nausea and vomiting, and, frightened, fell to the floor, with the consequences above detailed. I need not go further into the history and analysis of this case, but the story thus far elicited is more than sufficient to show that here we have a specific instance in which, by the analysis of a single dream, we have arrived at the genesis of an hysterical paralytic syndrome of four months' duration. The analysis took but a few minutes. It may be mentioned, in parentheses, that a full knowledge of the cause of the condition did not lead to a disappearance of the palsy. In other words, as we all know, knowledge per se does not lead to action or to the assertion or development of the will-power. I may say, also, that the events here related were not suppressed or repressed, for, as soon as the question of his wife was taken up, the patient admitted that it was she who was the real cause of his present conditions, and he thereupon detailed the story above related. He assured me that he had always been fully aware that it was she who had brought about his present condition, although, of course, he did not know whether he had had an hysterical, apoplectic or other sort of attack. In fact he believed his condition was permanent and incurable— especially since he had been treated at various neurological clinics for many weeks past without the slightest improvement or progress.

Were we to follow up this history we could unearth the full life history of this patient, including the genesis of his early attack of aphonia. But I deem this unnecessary and inadvisable in this paper, as mentioned previously.

Here, then, we have a definite case in which by the analysis of a single and incidentally the first dream we have arrived at the genesis of the psychoneurotic disorder.

From this same standpoint I have studied another case, a married woman of twenty-nine, with marked neurasthenic and hysterical symptoms (including astasia-abasia, anesthetics, palpitation of the heart, throbbing sensations in the stomach and a great many other symptoms). This case I studied for upwards of four months, with almost daily visits to the hospital where she was being cared for. I made quite an intensive study of her dream life and of her past life history, and I find that had I taken the very first dream which I obtained from her and conducted a thorough analysis with this dream as my first mile-post, I would have arrived at a full genesis of the condition, which was of ten years' duration. In this case, also, I must repeat, there was no indication of repression, the patient having always understood very well the origin and cause of her condition. Here, too, we find that the knowledge alone did not lead to her recovery. This case I shall report in detail at a later date.

In this connection, I cannot keep from reciting the dream of a young girl of twelve which I had the good fortune to study. She came to me complaining about her throat. There was something dry, "a sticking" in her throat. She did not know what it was. Would I look at her throat? I found nothing

abnormal, and was about to dismiss her when I observed that her hands were bluish. I felt them. They were cold. I thought at once of probable heart disease. I was soon informed that she had heart disease. She had been told so by other doctors. This proved to be the case, as I learned on examining her.

Being keenly interested in this subject of dreams, I wondered whether, if she were subject to periods of cardiac decompensation of varying degree, she did not have dreams of a terrifying nature (about burglars, robbery and the like), because of embarrassment of breathing during sleep, resulting from her cardiac insufficiency and consequent circulatory and respiratory disturbance. I asked her whether she had been dreaming much of late. She told me she had had a dream the preceding night. What was it? I inquired.

She had dreamed that she had died. Her mother had put her in a coffin, carried her to the cemetery and then proceeded to bury her. Her mother had first forced something into her mouth (it seemed to be a whitish powder), and then lowered her into the grave and filled the grave with dirt. That is all that she could remember.

I shall not enter into a complete analysis or interpretation of this dream. There is no doubt, however, to every psychoanalyst who has devoted his attention to dreams, that the analysis of such a dream should prove most interesting. It is also apparent that by taking up the various elements of the dream and following them untiringly along the various trails and ramifications which lead on in various directions, one could unmask the entire life history of this twelve-year-old girl.

I wish, however, to direct the reader's attention to only one aspect of this dream—the death of the dreamer. She denied that she feared death or that she thought of death because of her heart disease or from any other cause. I next inquired: "Do you wish or have you ever wished you were dead?" The reaction of the girl was immediate and intense. She stood frightened, embarrassed; her eyelids twitched convulsively in rapid succession, her face gradually assumed a suppressed crying expression, tears came to her eyes, they soon flowed freely and rolled down her cheeks; she sobbed, and, through her tears, she uttered, almost inarticulately, the one word, "Yes." A convulsive, inspiratory grunt, a bashful, receding, turning away of the head and body, a raising of the hands to cover her face and hide her tears, and hasty, running steps to get away, while murmuring audibly "Let me go away," followed rapidly one upon the other. I gently seized her hand, calmed and reassured her. And, through sobs and tears, in almost inaudible tones, in starts and spurts, and reluctantly replying to questions which were forced upon her, producing replies which were literally drawn from her against her will, she told me this little story: A little boy cousin of hers, three years her junior, had begun school two years or so later than she, and yet, in spite of this handicap, this little relative had outstripped her in school, he being now in a higher grade than she herself was. She would not be so much concerned or worried about this not-to-be-proud-of performance, had not the boy's mother that week visited her home and there, in the presence of other people, talked considerably about her boy's progress in school, his rapid advance as compared with that of our little dreamer, her relative stupidity and backwardness. And so this boy's mother had continued for some time in the same strain. This caused our little girl to feel much embarrassed—in fact, ashamed and mortified. She had felt that way for several days past, it had made her cry, had made her feel miserable and unhappy; so much so that she had wished she were dead. I shall not continue this analysis further. But it is plainly seen that here too, by a single dream, we have come upon life-experiences, viewpoints and mental material which affords us efficient and sufficient weapons to boldly attack the fortress of her full life history, her mental qualities, her trends, her psychic depth, her mental makeup in its entirety, in its every dimension.

It is interesting to note that on the morning following the experience which I had with this child, she came to see me a second time, and, on my examining her throat, it presented the typical picture of bilateral tonsillitis, the final result of the initial sticking sensation in her throat, which she had experienced the day before. After taking a culture from her throat as a matter of routine to exclude a possible diphtheria, the patient, greatly disturbed because of her newly-discovered trouble, burst forth into bitter tears, and, still sobbing, rushed abruptly from the room.

A week later, when I saw her again, she had regained her emotional equilibrium and we reviewed her dream and its analysis without any special signs of emotional disturbance.

Very interesting, also, was my experience about a week following this when, casually reciting this little girl's dream, its significance and her conduct, to an old lady whom I know very well, I found that she too was presenting all the signs of emotional upset, for, as I proceeded with my recital, tears gradually came to her eyes, her face assumed a suppressed crying expression, she tried to smile through her tears, and finally, unable to control her emotions, she broke out into a free and unrestrained weeping spell, following which I learned from her that the recital of this girl's condition, her dream and its meaning, recalled to her mind her darling daughter, a noble girl of sixteen years of age, who had died some fifteen years ago, after a long period of incapacitation and a miserable

existence brought on by tonsillitis, chorea, rheumatism and, finally, heart disease, with all the extreme signs and symptoms of broken cardiac and renal compensation. Here, then, I had touched another complex, which, if followed up, would lead me into the innermost depths and recesses of this old lady's soul-life, into the holiest of holies of her mental life.

The writer will be pardoned for not here giving fuller histories, or for not carrying out the analyses to their ultimate goals, or for not giving the interpretations of the two dreams presented. That was not the primary object of this communication.

I wish, in conclusion, to repeat that through the conscientious and most far-reaching analysis of a single dream, or, in fact, of a single element of a dream or a single element or stimulus in the objective or subjective world, one may, at least not infrequently, unearth the full life history of normal or abnormal individuals, and the genesis and evolution of psychopathic affections.

The reader may justly inquire why the analyst should resort to dream analysis instead of taking the history of the case in the usual way. In all cases the patient should be permitted to tell her story in her own way. This method of procedure, with cross questioning, may and should indeed be sufficient to unravel the case for us in most cases. But if we find that we have not gained the confidence of the patient and have not that condition of being en rapport with the patient which is essential for progress and success in the analysis, one may resort to dream analysis, not so much for the purpose of following the royal road to what the Freudian school calls "the unconscious," but rather with the object of obtaining the confidence of the patient and of having something definite to start with.

AN ACT OF EVERYDAY LIFE TREATED AS A PRETENDED DREAM AND INTERPRETED BY PSYCHOANALYSIS

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A RECENT article by Brill, entitled "Artificial Dreams and Lying,"[1] recalled to me a little work I did two years ago while engaged in making an introductory study of dreams as a thesis at Clark University. The part which is hereby submitted is a fragment of a larger work and, being only a sort of side issue, was never included in the thesis proper. I have made only such changes as were made necessary by the fact that this is a fragment and needed one or two minor changes to make it complete.

[1] Journal Abnormal Psychology, Vol. 9, No. 5.

Let me say at the beginning that I have the greatest and most profound respect for Freudian theories as interpreted by G. Stanley Hall and other men of like scholarly ability, but I have never been able to accept the more extreme form of Freudianism as interpreted by some of the most prolific writers in this field. I have found that the charges made by Habermann[2] are substantially true. I find it very helpful indeed, to try to interpret my own dreams and to assist some of my students to do so according to the Freudian formula, and to a certain point I believe these interpretations are undoubtedly true. The question is to find the point beyond which the interpretation becomes artificial. Personally, I believe that this will always have to be decided finally by the individual himself rather than by some outsider who insists on reading in a certain interpretation. I have come to believe that it is possible for one to become trained to the point at which he is able to decide just how far the interpretation goes, or, at least, to approximate it.

[2] Journal Abnormal Psychology, Vol. 9, No. 4.

With these few introductory remarks I shall submit the paper, which was written in 1912. I have not appended the rather long and cumbersome bibliography from which I drew these references, but I can supply any reference that is wanted.

If we examine the Freudian system, we find that it is impossible to disprove this theory of dreams. If we demonstrate that a dream has no sexual connection whatever, they have only to say that it is the censor that blinds, and, by resorting to symbolism and other such very present helps in time of trouble, they show plainly that we were mistaken. The situation is the same as it would be if I declared that what I saw as blue appeared yellow to the rest of the world. The disproof of this and of Freudianism are equally impossible. But, on the other hand, have the Freudians presented any proof or argument on the affirmative side of this question? They are over fond of saying, "Freud has proven thus and so," but in what did the proof consist? The great answer to all objections has been to analyze dreams and, so far as I know, the attempt has never failed to show that the dream in question conformed to the prescribed

requirements. And in truth, it is not a difficult matter to analyze a dream a la Freud. After a little practice, especially if one has a vivid imagination and is somewhat suggestible, it is possible to find the repressed sexual wish in every dream. But if we use such flexible and wonderful factors as the four mechanisms, and, above all, symbolism, we can find the same things in any other experience. By this I mean that if we take a bit out of our daily life, a dream of some one else, a fictitious story, an historical incident, or any other pictured situation and PRETEND THAT IT IS ONE OF OUR OWN DREAMS and apply the Freudian analysis, we find that it serves for this purpose as well as a real dream. When this is the case, it is absurd to put any faith in the analysis of real dreams, when carried to extremes.

As an illustration of the above statement, the following is a fairly typical example. The supposed "dream" is a commonplace bit out of my daily life. This is chosen at random (although Jones would say such a thing is impossible) and subjected to a dream analysis.

ANALYSIS OF FALSE DREAM

Dream. I was walking along a street on a cold winter night. I looked down at the cement walk and in this was set a piece of granite on which the letters "W. H." were cut. Coming to the corner, I looked up and saw on a short board which was nailed to a post, the name of the street, "Queen Street," The street running at right angles to this was King Street, and I turned and went down this. After walking a short distance, I came to a house from a window of which a light was shining. The house number was "23." I took a key from my pocket, unlocked the door and entered.

Analysis. In attempting to analyze this (so-called) dream, I was amazed to find with how many past longings and emotionally-colored experiences it was associated. I first took up the letters on the sidewalk, and as I repeated them, letting my mind be as blank as possible in order that the associations might be free, I gained an immediate response. "W. H."—"Which House"—came out as in answer to a question. With these words there was a definite visual image of a young country farm youth standing talking to two persons in a buggy. I remembered the incident in all its details. I was the young man and these people were asking the way to a certain place, or at WHICH HOUSE they should stop. As it so happened, I was at that time keeping company with a young lady who lived at the very house concerning which they asked. I will not go into detail any further at this point, for this is a real case and I should be trespassing on personal ground. But any one who yet remembers his boyhood courtship, with all its agonies and fears, its hopes and joys, its disappointments and its pleasures, can see at a glance how important this occasion is in throwing light on the meaning of the dream. Of course "W. H." stood for "Which House."

I seemed to get no further in my associations with these letters at this time, and my thoughts spontaneously turned to the name of the street. "Queen Street." Even more readily and completely than in the other case, there came a whole complex of associations. First there was the name and image of Miss Agnes Queen, whom I had known for years. But, strange to say, the image was of this young lady standing and talking to a certain Mr. Harding. I saw them together but once, and it seemed passing strange that this incident should be the one remembered in connection with the name. But the associations were rapidly progressing, and I mentally reviewed parts of three or four years during which I was working and closely associating with this Mr. Harding. Here I began to see some light. This Mr. Harding was in all respects, at least as far as I knew him a man of good morals, but he was much less particular in his social habits than I was. He was engaged to a young lady all the time I was with him, and wrote letters to her constantly; but this fact did not prevent him from paying attentions to other young women, and I was aware that he was more familiar with them than conventionality would warrant. In fact he made no attempt to be secret in the matter, and often poked fun at me for my over sensitivity on the subject. Here was the key to a whole lot of meaning. The first year I was with him, I had no sweetheart or any lady friend on whom to center my affection or to whom I could write. There were a number of young men in our "squad," as it was called, and nearly all of them had correspondents and it was a joke among us that I was "out in the cold world with no one to love." In reality, this was not so much a joke for me at the time, as I tried to give the impression that it was, and I longed for the very thing of which we joked. The fact that I was out on the street on a cold winter night in this dream symbolized being "out in the cold world," as we had used the term then.

I now took up the letters "W. H." again, and the words "White Horse" came in response to the stimulus. With little hesitation I placed this as connected with the Knights of the White Horse of whom Tennyson writes in his poems of "King Arthur's Knights of the Round Table." I got very little out of this, but still the White Horse was a band of men who were unrestrained in their desires and bore about the same relation to King Arthur's Knights that Harding did to me. However, the associations did not stop here but went on, giving what at first seemed to be a meaningless list of words. "W. H." first called up the words, "Wish Harding"; next, "Will Harding"; next, "With Harding"; and last, "Walk Harding." In a minute it flashed on me what this all meant. "I WISH to do as Harding is doing, to WALK the way he is WITH him and I WILL." To walk up Queen Street meant, then, to follow his example, as he at one time

paid some attention to this Miss Agnes Queen. Perhaps the reason why her name was selected instead of some others was because his relations to her had been very slight and formal, and thus the idea was easier for the censor to let into sleeping consciousness than it would have been if some other names had been taken. "W. H.," then, symbolized the four expressions that arose in the analysis.

The meaning of "King Street" came last of anything in the dream, but I will give it now. I did not seem to be able to get anywhere on this for some time, and the idea kept presenting itself that it symbolized that I was king of the situation which seemed innocent enough; but at last there came an association with Nero as portrayed in "Quo Vadis." I then remembered how I read this book while in the adolescent stage, and how a cousin made remarks, very sensuous in their nature, about parts of it. I then got a vision of the book, "Mad Majesties," which I saw on the library table not long since. Next came a memory of the French kings as portrayed in the works of Dumas. At this point, I realized that the idea suggested by the word king is very often, though not always, an idea or image of a very loose person as far as his social life is concerned. Thus to walk Queen Street or follow the example of Harding finds a parallel in walking King Street or following the example of a king.

With the light in the window, I came into an entirely new field of associations. I cannot go far into detail here as it would involve others as well as myself, but suffice to say that the light in the window called up a paper on the subject of light which was written by a Mr. X. and read in my hearing. Now Mr. X. and I had both kept company with the same young lady at different times, and here was another group of emotionally colored experiences. However, the important function performed by the light was that it symbolized (together with the house in which it was) the comforts, warmth and pleasures of the very opposite condition from that of being "out in the cold world with no one to love."

The house number "23" is associated with at least two occasions. One Sunday evening; a few of the boys of our "squad," myself among them, went out with the daughter of our landlady, and one or two other young ladies and took a boat ride in the park. It was a beautiful summer night and the park was full of young people who were treating each other to very endearing caresses. There were so many who wanted boats that only one boat was unoccupied, and it was No. 23. It had been left because it was a hoodoo number, and the other boaters were all superstitious. As we were not, we took this boat and used it. My longing lonesomeness was about at its maximum height on this night. The other occasion associated with this number is that I became engaged when I was twenty-three years old and at that time desired greatly to be married; but, as I was in school, it had to be postponed.

Now the climax of the dream! I took a key from my pocket, unlocked the door and entered. This is so plain that it hardly needs comment. Being in the cold world, as symbolized by the cold street, I enter the warmth and comfort of the lighted house. The key and lock are, of course, phallic symbols and have special significance for me as I once took a young lady to a banquet at which the favors were paper keys and hearts. Thus symbolically are fulfilled all the longings I felt while with Harding, all my desires to be married when twenty-three, all my adolescent courtship yearnings, and all my remaining repressed sexual longings.

As a point which may have a little bearing on this, I have recently received a letter from Harding and in it was information that he is for a time away from home, and I wondered if he is still careless in his behavior.

This analysis will seem foolish in the extreme to many, and I am one of the number, but my excuse is that I have copied as closely after the Freudians as possible. I have only to invite a comparison. This is not a "made up" dream, but a little bit out of my daily life; just an experience occurring on the way home from the seminary. The analysis is real in the sense that the associations arose as I have recorded them.

Perhaps some ardent Freudian might find it in his heart to say that this analysis only strengthened their position, as it showed how a whole sexual background underlies our entire life, and therefore our dreams must have a sexual origin. But the reason why I found a sexual solution of this was that I started the analysis with a definite Bewnssteinlage, as Titchener would call it, which consisted of a knowledge that I had started for a certain kind of solution, and the whole course of the associations was governed by this. If Freud had at first come into the possession of a theory that every dream fulfills a fear, or pictures a state of anger or any other emotion, he would have had just as good success in demonstrating the truth of his statements. The following analysis will illustrate this. This is a real dream, but before beginning the analysis, I took the attitude that the analysis would reveal the fulfillment of a fear or show that the dream was the dramatic representation of a feared condition as actually existing. It took some time to get into this attitude, it is true, but when the result was finally accomplished, the analysis was begun and the attempt was made to follow the Freudian method as closely as possible under the changed conditions.

The Dream. On the night of February first, I dreamed that I was going down a little hill in company

with my brother and Mr. N. We seemed to be in Colorado, and at the foot of the hill was a little stream which was very pretty. There was a little waterfall, and a green pool below it, and a mist hung over the pool. I am not sure I saw the color of this pool. There was also a huge rock around which the water dashed. Some people were fishing in the stream. Some one asked if we could see the rainbows, and Mr. N. replied that he could see only one. I then looked carefully and saw a purple haze in the mist over the pool and supposed this was what was meant. But, as I continued to look, I saw a great number of rainbows, or at least patches in the mist over the water which showed the spectral colors. These were about two feet in diameter and extraordinarily beautiful. I was very anxious to get some of the trout which I felt sure were in the stream. As we came nearer, it seemed that the stream had overflowed and there were several shallow pools not over a foot deep and eight or ten feet long. In these pools could be seen fish by the dozen from a foot to eight feet long. I was slightly troubled because it would muddy my shoes, but I began to try to get some of them out. I got one very big one by the gill slit, but could not manage him and had to let him go. I handled several in the dream, but do not know whether or not I got any out.

ANALYSIS OF DREAM SHOWING FULFILLMENT OF A FEAR

I had some trouble in getting any light on this dream, but suddenly much of the meaning became clear and a whole group of associations came up. Undoubtedly the trouble I experienced at first was caused by the resistance of the censor. I will give the associated memories first and explain them later.

I delight in fishing and have spent many happy hours fishing for trout in the clear waters of the Colorado streams; but, strange as it may seem, it was not a memory of any of these which come into consciousness. Instead, there came up memories of three different instances, each accompanied with definite visual imagery, and in such rapid succession that I could hardly tell which came first.

Six years ago last summer, I crossed the Ohio River to spend a day in Carrolton, Kentucky, and on the way back, I bought some fish of a fisherman at the river's edge. This man was barefooted and wore a little greasy wool hat and very ragged clothes. I remember thinking at the time that his work must be very degrading, and that the river fisherman must be about the lowest type in that part of the country. I especially noticed his feet and legs, which were bare to the knees, and which were so sunburned that they hardly looked like parts of a white man's body. In the analysis of this dream, the image of the man as he stood there and the memory of the incident came back with great vividness.

A year or two later, my brother and I were riding along the road at about the same place, and we met a very miserable-looking specimen of humanity, driving a poor limping horse to a rickety wagon in which were some pieces of driftwood. My brother was in a "spell of the blues" at this time, and he remarked that he was coming to just that condition as fast as he could. The image and memory of this incident also came into consciousness as if it had been waiting repressed just under the surface.

The other memory was one in which I did not figure personally. A year or so ago, my brother was telling me how he and his boy had gone to the river several times and gone fishing with an old fisherman who lived there. My nephew, like most boys, had a desire to become a fisherman or hunter, and my brother had suspected that a little close acquaintance with the way a fisherman lived would cure him of this desire; in this he was entirely right, and after a few trips to visit the old fellow, he had expressed himself as cured of any desire to live the beautiful, pleasant life of a river fisherman.

Without going any further, it can easily be seen that a fisherman symbolizes for me everything that is synonymous with failure. Thus, when I stepped out into the muddy water and began fishing I symbolically became a failure, a no-account, a man who had failed in the struggle and had not achieved success. The very fact that we came DOWN HILL to the place of fishing shows, on the face of it, that a downhill career is symbolized. My brother was with me, and that is easily explained as a dramatization of the fact that I was accompanying him on that downhill road to the state of the man in the rickety wagon which he had prophesied as his future. The water in the shallow pools was muddy, and I stepped into it just after experiencing a fear that I would get my shoes wet. Remembering the fisherman's bare brown feet, this can be interpreted as nothing but a very strong symbolization of a drop from a cultured and successful circle to a low and unsuccessful one. I grasp a fish bigger than myself and struggle with it, but am compelled to give it up. Another symbol: my work is plainly too big for me; this question is too much for me to handle, and this thesis will ultimately have to be given up as the big fish is. In fact, I cannot say that I succeeded in getting ANY fish out of the water and, therefore, I shall never succeed at anything I undertake, but will land figuratively, if not actually, in the fisherman's hut.

The Mr. N. who was with us, was cross-eyed which, in itself, seemed to have no special meaning; but it immediately called up an image of a cross-eyed man standing at the river's edge at Vevay, Indiana. This fellow was the picture of ignorance and want. He was telling another man about catching a big

fish a few days before and how he liked that kind of fish boiled so well, but he could not wait for it to boil, but had fried part of it and eaten it that way. As I heard him relate this and watched his face, the whole event seemed to me to be most disgusting. As I was watching him, some one at my side told me that, because of a drunken spree, he had been disfranchised. He was also a fisherman and another typical specimen of the class. Mr. N., having the same facial defect, though in a much less noticeable way, became identified with him, and I am again found walking down the hill to oblivion in company with this brother in distress. This is bad for Mr. N., but it cannot be helped.

The rainbows seem bright enough, but they bring in another disquieting group of associations. The rainbow is almost, if not quite, a universal symbol of failure. We all know the old story of going to the end of the rainbow for a pot of gold, and if we want to belittle any effort we say that the individual is chasing the rainbow. So here I am again on the downhill road between two failures, following the rainbow to a hopeless condition of muddy uselessness. And if it were not bad enough to be following one rainbow, I am following a great number which must mean that I shall always end in failure whatever I undertake.

But, besides this, the rainbow has special associations for me. The first of these associations which came into consciousness was a little booklet made by a Latin student and handed her professor. I had several years of Greek and Latin under this teacher and at a certain place in the course, he asked each student to make a little booklet of some kind, using as much originality as possible, copy some favorite quotations from De Senectute and hand in the finished product. Every year he gets these out and exhibits them as a kind of inspiration. One of them had a rainbow and a pot of gold on the cover. I spent a great deal of time and work on mine and made a more elaborate booklet than any other that had been made, but I purposely left it unfinished and inscribed a statement that this was to typify the kind of work I did in that department. Of course it was a joke, but I have often thought that there was method in this madness, and that it really approximated the true state of affairs. This seeming chance association, then, is closely connected with my fear of making a failure which is so clearly dramatized in this dream.

The fact that the dream is placed in Colorado is also important. Two years ago, I spent the summer in Colorado and had a very delightful time, as was natural, being on a wedding trip. But during this stay, I did make a total failure at fishing. I had been a fairly successful trout fisher a few years before, but I had forgotten the art and did not do enough fishing to relearn. In other words, my dream gives me to understand that I cannot be successful even in fishing. One evening my bride and I witnessed a most beautiful sunset, a rainbow figuring largely in the scene. At this time we were debating whether or not to go on farther West as I had originally planned; but circumstances prevented this and instead of going on farther, we came back East or toward the rainbow. This is just one more place where the dream so clearly symbolizes a failure to do what I undertake. I will not carry the analysis any further, though I could find associations by the hundred which would strengthen the meaning given.

Of course I am not at all conscious of having any such fear as this. In fact I am rather inclined to be over-confident; but this is, of course, due to the repressing influence of the censor and only strengthens the analysis.

Examples could be given until the last trump is sounded and the world rolled up like a scroll, but I do not want to keep any one so long. Whatever we wish to make out of a dream—the dramatization of a fear, a joy, a joke (really this is what the Freudians often do), a tragedy, anything that can be suggested, the result can easily be accomplished if only we be allowed the use of Freud's mechanisms and a moderate amount of symbolism.

I have tried to show: First, that any situation or experience can be analyzed with as good success as a dream, and second, that a dream may be made to mean anything. In other words, with Freud's method, one can demonstrate anything to suit his taste or belief. Long ago, the saying was formulated that all roads lead to Rome. This being true, it must also be true that all roads lead everywhere else. Freud employs a wonderful figure of a mystical sphere, with its layers and cross veins and other mineralogical characteristics, to represent the part of consciousness with the repressed factor at the center well guarded. It would be far more to the point if he should represent the whole of past experience as the surface of a country, with its various roads connecting the different centers. The stations would then represent the experiences, and the roads the association tracks between them. If one should travel at random over these roads, he would in time pass through all kinds of towns and cities, but if he started in quest of a certain type, say mountain villages, he would arrive at his goal much more quickly than he would otherwise. The Freudians themselves acknowledge that they have difficulty in knowing when to stop the analysis. Their plan seems to be to travel until the landscape suits them and then get off and camp.

Thus, while I have made no attempt to give positive proof or argument that Freud's theory, in its

extreme form is at fault, I have tried to substantiate my argument that there has been no real argument on the other side. And when a theory so spectacular and altogether out of the ordinary is presented, the burden of the proof should very decidedly be thrown on the positive side. We have no obligation or even excuse for accepting such a theory on the mere presumption of the originator.

And that Freud's theory is weird and fantastic is a self-evident fact. Perhaps the Clark University student who very carefully worked it up a few years ago went a little too far when he said it was a chaotic inferno, but at any rate, it is far removed from celestial harmony. Sidis takes about the sanest attitude possible when he refers to certain Freudian writings as being full of unconscious sexual humor. He observes further as does Prince and others that the Freudian school is in reality a religious or philosophical sect. He says that Freud's writings constitute the psychoanalytic Bible and are quoted with reverence and awe. Kronfeld, in a most valuable criticism, says that in comparison with Freud's conception of the vorconscious and its work, Henroth's Demonomania appears a modest scientific theory.

The attitude of the Freudians is, itself, worth noticing. They are very prone to consider any criticism as very personal, and fly to the rescue with all the fervor of a religious fanatic. A work on dreams, because it does not bear out Freud in all details, calls forth thunderbolts from two continents. This over-anxious attitude indicates that the belief in the theory is based on an emotional condition rather than logical reasoning. Bernard Hart, who is one of those happy individuals who get the best out of Freudianism, shows the difference between the two kinds of belief by comparing our belief that the earth goes around the sun and that the man who abuses a woman is a cad. The cold, indifferent attitude toward the former is in marked contrast to our warm lively interest in the latter, and the reason is that the belief in the one is founded on scientific demonstration and in the other on our feeling in the matter. If we allow this as a gauge by which to measure, it is not difficult to place the Freudians.

We must not overlook the immense opportunity for suggestion in the work of psychoanalysis, both on the subject and the one who is in the work. The Freudians vehemently deny that any of the results of dream analysis are suggested into the mind of the dreamer, but the evidences are all on the other side. Freud, in referring to psychoanalysis of hysterical patients, says, "It is not possible to press upon the patient things which he apparently does not know, or to influence the results of the analysis by exciting his expectations." Such an attitude is fatal when it comes to a question of accurate work. And no less important is the self-suggestion practiced by the Freudians. When we read of Freud's long struggle in an attempt to find something which he felt surely was to be found, we see that he had abundant opportunity to acquire almost an obsession. The long years since, which he has spent in analyzing dreams and making them all come out right some way, would serve to more firmly ground his conviction, and the same is true of his disciples. Put a man to drawing square moons for ten years, and at the end of the time he will swear that the moon is square.

A large portion of the scientific world seems to have gone mad over the term "psychoanalysis." But this kind of work has been done by all peoples and times under different names. There can be no objection to such an analysis of a dream if it is done by the right person. The dream may be used to aid the dreamer in finding out his own life, it is true, and when we understand psychoanalysis as this process, and only this, it is not objectionable. But if such is the case there is no need of all the mechanism and symbolism. The preacher who uses the Old Testament stories of the wars with the Philistines to illustrate a moral struggle is not to be criticised; but if he maintains that they were written for that purpose, we should hardly feel inclined to accept his position. A very inspiring message might be builded on the text, "The ants are a people not strong, but they prepare their meat in the summer"; but it is hardly possible that such thoughts were in the mind of the writer. Just so, a dream or a story or any other situation may be used to open the locked doors of a life, but to say that the dream has slipped stealthily out of the keyholes and over the transoms and wonderfully, mysteriously and magically clothed itself is quite another matter.

FREUD AND HIS SCHOOL

NEW PATHS OF PSYCHOLOGY

BY A. W. VAN RENTERGHEM M.D., AMSTERDAM

(Concluded)

WE are frequently confronted with the question: "Just why does an erotic conflict cause the neurosis? Why not just as well another conflict?" To this the only answer is, "No one asserts that this must be so, but evidently it always is so, in spite of anything that can be said against it. It is, notwithstanding all assurances to the contrary, still true that love (taken in its large sense of nature's course, which does

not mean sexuality alone), with its problems and its conflicts of the most inclusive significance, has in human life and in the regulation of the human lot a much greater importance than the individual can image.

The trauma-theory (meaning what was in the beginning conceived by Breuer and Freud) is therefore out of date. When Freud came to the opinion that a hidden erotic conflict forms the real root of the neurosis, the trauma lost its pathogenic significance.

An entirely different light was now thrown upon the theory. The trauma question was solved, and thrown aside. Next in order came the study of the question of the erotic conflict. If we consider this in the light of the chosen example, we see that this conflict contains plenty of abnormal moments, and at first sight does not suffer comparison with an ordinary erotic conflict. What is especially striking, seemingly almost unbelievable, is the fact that it is only the exterior action, the pose, of which the patient is conscious, while she remains unconscious of the passion which governs her. In the case in question the actual sexual factor unquestionably remains hidden, while the field of consciousness is entirely governed by the patient's pose. A proposition formulating this state of affairs would read as follows.

In the neurosis there are two erotic inclinations which stand in a fixed antithesis to each other, and one of these at least is unconscious.

It might be said of this formula, that although perhaps it is adapted to this case, possibly it is not adapted to all cases. Most people, however, are inclined to believe that the erotic is not so widespread. It is granted that it is so in a romance, but it is not believed that the most affecting dramas are more often enacted in the heart of the citizen who daily passes us by unnoticed, than upon the stage.

The neurosis is an unsuccessful attempt of the individual to solve in his own bosom the sexual question which perplexes the whole of human society. The neurosis is a disunity in one's inmost self. The cause of this inward strife is because in most men the consciousness would gladly hold to its moral ideal, but the subconsciousness strives toward its (in the present-day meaning) immoral ideal. This the consciousness always wants to deny. These are the sort of people who would like to be more respectable than they are at bottom. But the conflict may be reversed; there are people who apparently are very disreputable, and who do not take the slightest pains to limit their sexual pleasures. But looked at from all sides this is only a sinful attitude, adopted, God knows for what grounds, because in them, back of this, there is a soul, which is kept just as much in the subconsciousness as the immoral nature is kept in the subconscious of moral men. (It is best for men to avoid extremes as far as possible, because extremes make us suspect the contrary.)

This general explanation was necessary in order to explain to some extent the conception of the erotic conflict in analytical psychology. It is the turning-point of the entire conception of the neurosis.

After Breuer's discovery, putting into practice the "chimney sweeping" so justly christened by his patient this method of treatment has evolved into shorter psychoanalytical methods, which we will now discuss in succession in their main points.

In his use of the primitive method, Freud depended upon the time saving of hypnotism and upon the circumstance that many could not be brought into the desired deep degree of provoked sleep. The aim of this operation was to call up in the patient another state of consciousness, in which it would be possible for him to remember facts which had given cause for the origin of the phenomena, facts which thus far had remained hidden from the ordinary daily consciousness. By questioning the patient when in this state, or by spontaneous production of phantasies communicated by the patient while in hypnosis, memories come to light and affects connected with them are relaxed (these are abreagirt [rearranged], as the expression is) and the desired cure is attained. This just-mentioned method (cathartic, cleansing) and more especially the modified one, which aims especially at the promotion of a spontaneous production of phantasies communicated by the patient while under hypnotism, is still used in practice by some investigators. In what follows we go still further back—Freud next sought for a method to render hypnotism unnecessary. He discovered it by applying an artifice which he had seen Bernheim use during a visit (1887) to the latter's clinic at Nancy. Bernheim demonstrated upon a hypnotized patient how the amnesia of the somnambulist is only an appearance.

With this aim in view, Freud from then on ceased to hypnotize his patients and substituted for that method, "spontaneous ideas." This means that when the analysis of a patient who is awake is obstructed, and has come to a dead stop, he is told to communicate anything which comes into his mind, no matter what idea, what thought, even if the thing were very queer to him or seemed meaningless. In the material thus obtained the thread should be found leading to the semi-forgotten, the thing hidden in the consciousness. In single cases—where the resistance toward bringing into consciousness the forgotten or repressed thing, the complex, was slight—this method of treatment very

quickly attains its end, but in others where the resistance was greater, the spontaneous ideas merely brought about indirect representations, mere allusions as it were to the forgotten element. Here favorable results either were not so readily obtained, or else were entirely lacking. In conjunction with this, Freud planned a simple method of interpretation by means of which, from the material thus obtained, the repressed complexes could be brought to consciousness.

Independently of Freud, the Zurich school (Bleuler, Jung) had planned the association method in order to penetrate into the patient's subconsciousness. The value of this method is chiefly a theoretical experimental one; it leads to an orientation of large circumference, but necessarily superficial in regard to the subconscious conflict (complex).

Freud compares its importance for the psychoanalyticus; with the importance of the qualitative analysis for the chemist.

Not being completely satisfied with his method of spontaneous ideas Freud sought shorter paths to the subconscious, and therefore undertook the study of the dream-life (dealing with forgetfulness, speaking to one's self, making mistakes, giving offense to one's self, and with superstition and absent-mindedness, and the study of word quibbles taken in their widest sense), to all of which we are indebted for the possession of his three important books: "Die Traumdeutung?" (First edition 1900, third edition 1912); "Zur Psychopathologie des Alltagslebens" (1901-1907); "Der Witz und seine Bedeutung zum Unbewussten" (1905).

Because of the discovery of the repressed and the forbidden in the soul life, the instructions contained in the three last-named works are of great importance and of help to us in the study of the spontaneous ideas of the patient brought to light by free association. But what is of more importance for analysis is the study of what may well be termed Freud's masterpiece, "Die Traumdeutung."

Jung expresses himself as follows in regard to Freud's ingenious discovery.

"It can be said of the dream that the stone which was despised by the architect has become the corner-stone. The acorn of the dream, of the ephemeral and inconsiderable product of our soul, dates from the earliest times. Before that, men saw in the dream a prophecy for the future, a warning spirit, a comforter, a messenger of the gods. Now we join forces with it in order to explore the subconscious, to unravel the mysteries which it jealously guards and conceals. The dream does this with a completeness which amazes us. Freud's exact analysis has taught that the dream as it presents itself to us, exhibits merely a facade, which betrays nothing of the inmost part of the house. But where, by attention to certain rules we are able to bring the dreamer to express the sudden ideas awakened in him in talking over the sub-division of his dream, then it very quickly appears that the sudden ideas follow a determined direction, and are centralized about certain subjects, possessing a personal significance and betraying a meaning, which in the beginning would not have been suspected back of the dream, but which stand in a very close symbolical relation, even to details, to the dream facade. This peculiar thought-complex, in which all the threads of the dream are united, is the looked-for conflict in a certain variation which is determined by the circumstances. What is painful and contradictory in the conflict is so confused here that one can speak of a wish-fulfillment; let us, however, immediately add that the fulfilled wishes apparently are not wishes, but are such as frequently are contradictory to them. As an example let us use the case of a daughter who inwardly loves her mother and dreams that the latter is dead, much to her sorrow. Dreams like this are frequent. The contents make us think as little as possible of a wish-fulfillment, and so one might perhaps get the idea that Freud's assertion—that the dream presents in dramatic form a subconscious wish of the dreamer—is unjust.

That happens because the non-initiated does not know how to differentiate between manifest and latent (evident and hidden) dream contents. Where the conflict worked over in the dream is unconscious, the solution, the wish arising from it, is also unconscious. In the chosen example, the dreamer wished to have the mother out of the way; in the language of the subconscious it says: I wish that mother would die. We are aware that a certain part of the subconscious possesses everything which we can no longer remember consciously, and especially an entirely thoughtless, childish wish. One can confidently say that most of what arises from the subconscious has an infantile character, as does this so simple sounding wish: "Tell me, father, if mother died would you marry me?" The infantile expression of a wish is the predecessor of a recent wish for marriage, which in this case we discover is painful to the dreamer. This thought, the seriousness of the included meaning is, as we say, "repressed into the subconscious" and can there necessarily express itself only awkwardly and childishly, because the subconscious limits the material at its disposal, preferably, to memories of childhood and, as recent researches of the Zurich school have shown, to "Memories of the race," stretching far beyond the limits of the individual.

It is not the place here to explain by examples the territory of dream-analysis so extraordinary composed; we must be satisfied with the results of the study; dreams are a symbolical compensation for

a personally important wish of the daytime, one which had had too little attention (or which had been repressed).

As a result of the dominant morals, wishes which are not sufficiently noticed by our waking consciousness and which attempt to realize themselves symbolically in the dream are as a rule of an erotic nature. Therefore it is advisable not to tell individual dreams in the presence of the initiated, because dream symbolism is transparent to one acquainted with its fundamental rules. Therefore we have always to conquer in ourselves a certain resistance before we seriously can be fitted for the task of unraveling the symbolical composition by patient work. When we finally comprehend the true meaning of a dream then we at once find ourselves transposed into the very midst of the secrets of the dreamer and to our amazement we see that even an apparently meaningless dream is full of sense and really bears witness of extremely important and serious things concerning the soul-life. This knowledge obliges us to have more respect for the old superstition concerning the meaning of dreams, a respect which is far to seek in our present-day rationalistic era.

Freud correctly terms dream-analysis the royal road which leads to the subconscious; it leads us into the most deeply hidden personal mysteries and, therefore, in the hand of the physician and the educator is an instrument not to be too highly valued.

The opposition to this method makes use of arguments which chiefly (as we will observe, from personal motives) originate in the still strongly scholastic bent, which the learned thought of the present-day exhibits. And dream-analysis is precisely what inexorably lays bare the lying morals and the hypocritical pose of men, and now for once makes them see the reverse side of their character. Is it to be wondered at that many therefore feel as if some one were stepping on their toes?

Dream-analysis always makes me think of the striking statue of worldly pleasure which stands before the cathedral at Basel. The front presents an archaic sweet smile, but the back is covered with toads and snakes. Dream-analysis reverses things and allows the back side to be seen. That this correct picture of reality possesses an ethical value is what no one can contradict. It is a painful but very useful operation, which demands a great deal from the physician as well as from the patient. Psychoanalysis seen from the standpoint of therapeutic technic consists chiefly of numerous analyses of dreams; these in the course of treatment, little by little, bring what is evil out of the subconsciousness to the light and submit it to the disinfecting light of day, and thereby find again many valuable and pretendedly lost portions of the past. It represents a cathartic of especial worth, which has a similarity to the Socratic "maieutike," the "obstetric." From this state of affairs one can only expect that psychoanalysis for many people who have taken a certain pose, in which they firmly believe, is a real torture, because according to the ancient mystic saying: "Give what you have, then shall you receive!" They must of their own free will offer as a price their beloved illusions if they wish to allow something deeper, more beautiful and more vast to enrich them. Only through the mystery of self-sacrifice does the self succeed in finding itself again renewed.

There are proverbs of very old origin which through the psychoanalytical treatment again come to light. It is surely very remarkable that at the height to which our present-day culture has attained this particular kind of psychic education seems necessary, an education which may be compared in more than one respect with the technic of Socrates, although psychoanalysis goes much deeper.

We always discover in the patient a conflict which at a certain point is connected with the great social problems, and when the analysis has penetrated to that point, the seemingly individual conflict of the patient is disclosed as the conflict, common to his environment and his time.

Thus the neurosis is really nothing but an individual (unsuccessful to be sure) attempt to solve a common problem. It must be so, because a common problem, a "Question" which plunges the sick man into misery is—I can't help it—"the sexual question," more properly termed the question of the present-day sexual moral.

His increased claim upon life and the joy of life, upon colored, brilliant reality, must endure the inevitable limitations, placed by reality, but not the arbitrary, wrong, indefensible limitations which put too many chains upon the creative spirit mounting from out the depths of animal darkness. The nervous sufferer possesses the soul of a child, that arbitrary limitation which represses and the reason for which is not understood. To be sure it attempts to identify itself with the morals, but by this it is brought into great conflict and disharmony with itself. On one side it wishes to submit, on the other to free itself—and this conflict we speak of as the neurosis.

If this conflict in all its parts were clearly a conscious one, then naturally no nervous phenomena would arise from it. These phenomena arise only when man cannot see the reverse side of his being and the urgency of his problem. Only under these circumstances does the phenomena occur which allows expression to the non-conscious side of the soul.

The symptom is thus an indirect expression of the nonconscious wishes, which, were they conscious to us, would come into a violent conflict with our conceptions of morals. This shadowy side of the soul withdraws itself, as has once been said, from the control of the consciousness; by so doing the patient can exert no influence upon it, cannot correct it and can neither come to an understanding with it nor get rid of it, because in reality the patient absolutely does not possess the subconscious passions. Rather they are repressed from out the hierarchy of the conscious soul, they have become autonomous complexes, which can be brought again into consciousness only with great resistance through analysis. Many patients think that the erotic conflict does not exist for them; in their opinion the sexual question is nonsense; they have no sexual feeling. These people forget that in place of that they are crippled by other things of unknown origin. They are subject to hysterical moods, bad temper, crossness, from which they, no less than their associates, suffer. They are tortured by indigestion, by pains of every sort, and are visited by the whole category of other nervous phenomena. They have this in place of what they lack in the sexual territory, because only a few are privileged to escape the great conflict of civilized man of the present day. The great majority inevitably takes part in this common discord.

As specimens of dream-analysis I will give resumes of two histories of illness told me by Dr. Jung.

ANALYSIS AND CURE OF A CASE OF NERVOUS PROSTRATION

A twenty-year-old banker's son, from a large city in Hungary, suddenly grew sick two years ago, shortly after his father had suffered an attack of apoplexy and paralysis of the right side. He is spiritless, restless, not able to work, cannot use his right arm to write, is powerless to put his attention on anything, sleeps badly, etc. No treatment has any helpful effect. He is advised to seek distraction in Paris, but this, too, is of no avail. Then, after months of torture, he came to Zurich to Dr. Jung, who subjected him to analysis. At the second visit the patient behaved extremely mysteriously; he was much disturbed and appeared to be under the influence of an anxious dream, which he had dreamt that night. It required some effort to induce him to tell this dream, and it was only after he had convinced himself that no one could listen in the hall, that this story, not without emotion, came out.

"I see in a vault a coffin in which my father lies, and I beside him; in vain I attempt to remove the lid, and in my horrible fear I awake."

Some days were employed with the analysis of this dream. The explanation of it is: he has a very strong father-complex. From childhood up he has always been with his father, he has assumed the role of his father's wife, has cared for him, lived for him. He often reproached his mother for not making enough of the father, for not always cooking his favorite dish, for sometimes contradicting him, etc. He was always around with his father, worked at his office, served him in all sorts of ways, and anticipated all his wishes. Now, when the father suddenly became an invalid, the conflict arose. He identifies himself with the father. His father's invalidism becomes his own, he cannot think any more, he cannot write any more, and he sees death approaching. In the dream he is apparently dead, but his youth, his strength refuses to die, and this is translated in his attempts to get out of the coffin, which explains the fear.

The explanation brings relaxation. After some days, during which the patient communicates his secret thoughts in detail, he feels very much better, his heavy burden has been rolled away, and he cannot find words enough to express his thanks to the doctor. The latter points out to him that however natural this feeling of thankfulness may be, it is partly a symptom of the cure at his hands. He shows the patient how the latter, who had seen through the analysis that his love for his father has been exaggerated and morbid, had been able to control this, and how he now transfers to him, the assisting physician, the need for love, freed from suffering along the way of sublimated homo-sexuality. He impresses upon him that he must now learn to moderate the sympathy, which he expresses too feelingly, and that he must not desire to see another father in the doctor, but simply a friend, who is teaching him to stand on his own feet and to become an independent man. After a few more weeks the young man was entirely cured of his neurosis, freed from his exaggerations and returned home a well man.

ANALYSIS OF A CASE OF SLEEPLESSNESS

Once when traveling I made the acquaintance of a naturalist who not long before had completed a famous exploring expedition in distant countries. During this expedition he had been almost constantly in peril of his life. Almost every night he had had to stay awake and watch so as not to be set upon and killed. He had been back in England a short time and had completely recovered from the privations and sufferings he had experienced, but he suffered desperately from insomnia. On his return he had slept well, but a month before his sleep had suddenly begun to be disturbed.

Knowing me to be a neurologist, he asked my advice. I inquired about the patient's former life, but discovered that my traveling companion was little inclined to be communicative in this direction, in fact he was strikingly reticent. To my inquiry about the immediate origin of the insomnia, he told me it was immediately connected with a miserable dream which he had dreamt a month past, and from which he had awakened in terrible anxiety. I asked him to tell me this dream and gave him hope that perhaps the analysis of this might succeed in laying bare the cause of the insomnia. The substance of the dream was as follows:

"I was in a narrow gorge, formed by almost perpendicular walls of rock. This made me think of a similar narrow gorge which, during my journey, I had passed through at peril of my life. Upon a jutting rock a hundred yards high above the abyss, I saw a man and woman standing, shoulder to shoulder, both covering their eyes with their hands. They step forward and I see them plunge downwards together, and hear their bodies falling to destruction. Screaming wildly I awoke. Since that time I dare not let myself sleep for fear of the repetition of this dream.

The patient, accustomed to deadly peril on his long expedition, could not explain to himself the anxiety caused by this dream. I called Mr. X's attention to the fact that in my opinion an erotic conflict was concealed in the dream, and asked him point blank whether he had taken part in a love story. At this the patient grew deadly pale, struck the table with his fist and said "That you should have guessed it!" Now the confession followed, how he had had a love affair in which he had not cut a good figure and which ruined a woman's life, and that afterwards he had been violently remorseful and had lived with the idea of suicide. Then he had seized upon the opportunity offered him to lead a dangerous expedition. He wanted to die and here he would not find death ingloriously.

It is clear that the two people upon the rocks above symbolized the two, who went to meet destruction.

Soon afterwards the travelers parted. A year later the newspapers contained the report of the marriage of the famous explorer. The surmise is allowable that the analysis of this dream was the cause of this fortunate solution.

As I have already pointed out, the original cathartic method of Breuer and Freud, explained to some extent, is still followed by some investigators, by Muthman, Bezzola, Frank and many others. I had the opportunity in June and July, 1912, of observing for some time the treatment of patients by Dr. Frank in Zurich at his private clinic, and of gaining for myself a satisfactory idea of his technique. Frank by no means rejects the Freudian psychoanalysis with all its helps, but uses it only when he does not succeed in hypnotizing his patient. Preferably, and in a great number of cases, he uses, in a state of hypnotism, a cathartic method he originated.

Where Breuer and Freud profited from the spontaneous or the provoked somnabulistic state of the patient, and by questioning dug up the hidden depths, Frank decided to be satisfied with a light hypnose, a state of hypotaxie, which might be termed analogous to the half-conscious state of the person who after taking a mid-day nap frequently denies having been asleep. In this condition we can give an account on waking of what happened around us. One sleeps and one does not sleep; the upper-consciousness then can control what the sub-consciousness brings up.

Frank says that, except in the peculiarity that he is satisfied with a lighter degree of hypnose, his method differs from that of Breuer and Freud in that generally he does not question the patient when under hypnotism, neither suggests. Experience has taught him, he says, that the ideas loaded with affect, spontaneously discharge. They are the very ones which would do so in a dream, but are differentiated from the occurrences in the dream in the sense that these last enter phantastically dressed, while the first express themselves with the mental affects belonging to them, precisely as they were lived through.

Precisely as in the primitive-cathartic method, the affects pushing in here are disemburdened here, but at the same time, the connection between the existent sick-phenomena and the causes having a place here were automatically conscious to the patient. In some cases suggestion is called upon for help in order to free an affect or to direct the attention to the expected scene.

In most cases the process goes on itself, after the introduction of hypnosis. If the sleep is too deep, then the ideas are transferred into real dreams, which the patient immediately recognizes as such, or the production of scenes discontinues; the superconsciousness no longer works.

The scenes described are usually recalled by the patients, just as they were experienced by them, even when taken from the earliest youth. The reality of the events which happened in childhood, lived over again in hypnose, are substantiated as much as possible by the patient's parents or associates. He succeeds best in inducing this semi-sleep by exhorting the patient as he closes his eyes not to bother

about whether he sleeps or not, but to fasten his attention upon the scenes which are about to present themselves; that is, to think himself, so to speak, into the state of someone at a moving picture show.

As an example I give a fragment of a Frankian analysis of a case of

FEAR NEUROSIS (ANGST-NEUROSE)

Y. B., born 1883, a law clerk. Patient comes on the third of December, 1908, to Frank's consultation hour; he complains of periods of short breath; during these he feels as if his heart were ceasing to beat, especially when he is just going to bed. He feels then as if something heavy were striking him on the chest, great restlessness, and a feeling of faintness comes over him. After taking a glass of wine the condition is aggravated and becomes insupportable. These attacks come once or twice a day, mostly in the evenings. At times they keep off for eight or ten days. He lives continually in an excited state, he suffers from palpitations of the heart, from pain in the left thigh, pain in the left side, and at night cannot get to sleep.

Patient attributes this condition to an automobile accident which happened to him on June 2, 1908. Even before this accident he had been a trifle nervous on account of overwork. In the automobile accident he had been thrown out, and had been thrown a distance of ten or fifteen yards. The automobile, which was at high speed, had also plunged down the decline, but luckily the patient was not caught directly under the machine. He did not lose consciousness, and escaped with some scratches and a bad fright; it was a marvel that he and the chauffeur escaped with their lives. He plainly recalls thinking, during the fall, that his last hour had come, and even yet is amazed how extremely untroubled he had been by that thought. The days following the accident he felt as if his face were burning, and he was inwardly agitated whenever he thought of an automobile. On June 30, 1908, he was obliged to take a business journey. While seated in the station restaurant it suddenly grew dark before his eyes. He could breathe only with difficulty, his heartbeats were irregular and he had a strange sensation of fear. This condition lasted the whole day. On the return journey his train ran into an automobile truck. The patient was thrown to the floor of the coupe by the shock. This incident made a great impression upon him; nevertheless, for eight days he was free from the uneasiness already described. After that an attack of fear again set in, continuing at intervals, with periods of greater or lesser violence, until the present.

December 7, 1908. A first attempt to induce hypnosis was successful.

December 8, 1908. Patient goes to sleep immediately, becomes frightened and gives frequent signs of terror. When awakened, he mentioned that he had had a feeling as if he were falling into a hole, that had given him a very strange sensation. The patient speaks while he sleeps; his super-consciousness therefore remains awake and is able to take notice directly of the scene taking place. After some minutes he sees in the hypnosis a locomotive approaching. He cries out, "There it comes out of the tunnel." He is afraid of being run over, and is terrified. Two years previously he had been through this scene. He was standing on the track when a train approached, and he was afraid of being run over. In his sleep, the patient communicates the details and sees everything clearly. After a short interval of complete rest, he begins to breathe heavily, his pulse quickens, then he cries out in fright and excitement and dread, "Now it's coming, now the auto's coming, it's turning over, we're under it, there it's riding over us!" Gradually he quiets down again, and after a quarter of an hour, awakes. He says he now feels something lifted from his chest, that he has slept well, and feels better. He recalls everything. The train came out of the tunnel with gleaming lights; this scene took place in the evening. The automobile scene was reproduced precisely as he had taken part in it, no detail escaped him; his breathing is unobstructed now, and he has no more heart palpitations.

On the day appointed for the seance I was unexpectedly obliged to go away. When I wished to resume the treatment, January 9, the patient wrote me that his condition was strikingly improved, the heart palpitations and feelings of anxiety had not reappeared. His pleasure in life and work had returned once more, his night's rest left nothing to be desired, his appetite was excellent, therefore he thought that further treatment was not necessary for the present. To a later inquiry, February 12, 1910, a year afterwards, I obtained this answer: "Without exaggeration I am able to write you that in my whole life I have never felt so well as now. There has been no question of any nervous attacks or feelings of dread. My weight, which had gone down to fifty-eight kilos during my nervous sickness, has gone up to seventy kilos."

When Frank shuts himself up with his patients in a room, from which all outer noises are excluded as much as possible, by means of double windows and doors, although he—by means of electric light signals visible to him alone—keeps in touch with the servant outside, he has the patient recline as comfortably as possible upon a low sofa. He kneels on a cushion at the head, bends down over the patient and has the latter look upwards directly into his eyes. Meanwhile he lets his left hand rest upon

the patient's forehead and gently presses the latter's eyelids with his thumb and forefinger. As soon as the patient shows signs of weariness, he carefully gets up, takes a seat next to the patient and continues carefully observant of the latter's behavior and expression of countenance. He makes note of everything that shows itself and rouses the patient after about a quarter of an hour, unless the latter awakes spontaneously. Now he talks over with him the material which has been procured and then has the patient go into a renewed hypnosis, until the end of an hour. Sometimes the seances are protracted when important scenes come up, and in the interest of the treatment it might be lengthened to two or even three hours.

Bezzola makes use of a small, light, black silk mask, which he puts on the eyes of the patient. He induces hypnosis, and for the rest follows Frank's technique already described.

While analysts who avail themselves of hypnosis as a means of help have all their patients take a reclining position, those who have given up hypnotism in their treatment, have also given up this reclining position. Freud continues to prefer having the patient assume a reclining position, and takes his position with his back to the patient, behind the head of the sofa. He considers that this manner of treatment induces the greatest calmness in the patient and makes it easier for him to express himself and to confess. He keeps as quiet as possible, listens with undivided attention, does not take any notes during the seance, not wishing to give rise to the suspicion that all the confession will be written down and perhaps seen by other eyes.

Jung receives the patient in his study just as he would receive any ordinary visitor. He thinks that in this way the patient is put most at his ease and that it makes him feel he is not considered as a patient, but rather as some one who, being in difficulties, comes to ask advice and needs to tell his troubles to a trusted friend. Even less than Freud does he take notes in the presence of the patient.

Stekel does as Jung, the only difference being that he remains seated at his writing-table and makes notes of the most important points.

The most satisfactory way for the uninitiated to make himself familiar with the technique of psychoanalysis is to submit himself to psychoanalysis. For that purpose one turns to an experienced analyst, and takes to him one's ideas and dreams. Consequently I submitted myself for two months to analysis from Dr. Jung, who in that way initiated me into the practice of psychological investigation. The interpretation of one's own dreams, reading and studying of the principal literature about analytical psychology or deep psychology, as Bleuler calls it; and the application of what is thus learned, at the start to simple, later to more difficult cases, must do the rest in making an independent investigator in this branch of psycho-therapy.

As has already been said, psychoanalysis aims at bringing into consciousness all the forgotten things. When all the gaps in the memory are filled in, when all the puzzling operations of the psychological life are explained, then the continuance and the return of the suffering has become impossible. The attainment of this ideal state is truly the attainment of Utopia. Most certainly a treatment does not need to be carried so far. One may be satisfied with the practical cure of the patient, with the restoration of his power for work, and with the abolition of the most difficult functional disturbances.

It is applicable in cases of chronic psychoneurosis which exhibit no difficult or dangerous phenomena. Among these are counted all sorts of compulsive neuroses, compulsive thoughts, compulsive behavior and cases of hysteria, where phobias and obsessions play a chief role, also somatic phenomena of hysteria which do not need to be acted upon quickly, such as, for example, anorexia. In acute cases of hysteria it is better to wait for a calmer period before applying psychoanalysis. In cases of nervous prostration this manner of treatment, which demands the serious co-operation and attention of the patient, which lasts a long time and at first takes no notice of the continuance of the phenomena, is difficult. This form of psychotherapy places great demands on the physician's patience and understanding. Psychoanalyses which last more than a year, are no rarity. It cannot be applied to the seriously degenerated; to people who have passed far beyond middle life, because among the last named the accumulated material compasses too much; to those who are entangled in a state of great fear and who live in deep depression. Analysis can be applied to the neuroses of children. It is desirable in those cases for the physician to be supported by a trusted person, as for example a woman assistant, but preferably by parents enlightened sufficiently to observe the spontaneous remarks of the child, to make notes of them, and communicate them to the physician. According to the experiments undertaken by the Zurich school, the expectation is justified within certain limits, that psychoanalysis will be therapeutically useful in certain forms of paranoia and dementia praecox.

I think that it will soon be said of psychoanalysis, as of so many other systems which like it were decried and yet later were highly valued, that the enemies of to-day are the friends of to-morrow.

Whoever wishes to judge Freud must take the trouble to initiate himself seriously into his doctrines,

and use his methods for a long time in practice, according to his instructions.

Most of the condemnations are brought forward by investigators who judge a priori, without acquaintance with the facts, upon uncertain theoretical grounds and with prepossession against his sexual theory.

Whoever initiates himself seriously into the practice of psychoanalysis, will arrive at the conclusion that this new form of psychological curing deserves, to a great degree, the attention of the physician and that it may be considered as an enrichment of the armory of the psychotherapy, not yet sufficiently valued.

Does it render other forms of psychotherapy superfluous? There can be no thought of that.

Taking the pros and cons given here, we see that each of the forms of psychological therapy deserves in its turn preference, and that all support and complement each other.

Jung, as well as Freud, both of whom have made their life's aim the perfection of psychoanalysis, and who for that reason now concern themselves exclusively with it, appreciate all forms of verbal treatment, as well with hypnotism as without it. Hypnotic suggestion and suggestion given when awake was used at an earlier period by both of them with good results, and they still are not averse to using this method where quick comprehension and the immediate subdual of a troublesome symptom is desired.

The psychoanalyst follows the longer road, and assails rather the root of the sickness; it works more radically; hypnotic treatment takes hold quicker and is directed at the symptoms.

Freud explains it in this manner: when one treats the patient by hypnotic suggestion, one introduces a new idea from outside in exchange for the morbid idea; if psychoanalysis is applied, then one simply eliminates the morbid idea. Within certain limits the *modus agendi* of the two methods is in absolute opposition.

The suggestion method, substituting one idea for another, puts in something; the analytical, expelling an idea, takes out something. Both aim at and obtain the same end, a more or less lasting cure. Suggestion neutralizes, stops the poison; analysis expels the harmful matter. The latter manner of treatment is positive and the most decisive.

"Don't we all analyze?" Bernheim inquires, and once more I agree that all forms of psychotherapeutics do, but there is a difference in analysis.

Superficial analysis can bring us a long way toward the goal. In many cases it may suffice. But the profound, the Freudian analysis, is what we need if we wish to attain the radical cure of psychoneurosis, as far as we can ever speak of a radical cure. Many cases of illness do not lend themselves to deep analysis.

When, because of the nature of the illness, or the lifetime, or the feeble intelligence of the patient, or because of temporary circumstances of a moral or material nature, its adaptation is excluded or impossible, it is advisable, especially in chronic cases— to take refuge in the more palliative forms of the psychic methods of cure.

Thus the psychotherapeutic as moral leader fills the role of guide (*directeur-d'ames*), one who helps along the doubter, encourages the toilers, calms the frightened, arouses courage, keeps up hope and comforts where comfort is needed.

Pierre Janet, in his instructive book ("*Obsessions et Idées Fixes*"), observes that one of his chronic patients gave him the pet name of "*le remonteur de pendules*," an expression which luminously describes the role of the physician of souls, who, tirelessly, day in, day out, lifts the burdens, and for a time breathes new life into the depressed.

Hypnotic suggestion, which induces sleep, stills pain, silences fear, abolishes functional disturbances, works chiefly palliatively. The place for its application is where quick comprehension is desired. In its simplest form it resembles the treatment of a mother, who soothes her child with pacifying words and loving touch, and rocks him to sleep, and also it resembles the behavior of the father, who asserts his authority by force and breaks down the childish opposition. We find hypnotic suggestion, perfected and clothed in its scientific garment, in Liebeault's assertion: "It is a cure of authority, of faith, of confidence, a cure which frequently performs semi-miracles. Respect on one side, sympathy on the other, is what gives the hypnotiser results."

However highly we may value this last mentioned form of therapy, however numerous the cures due

to it may be, however indispensable it may be in the practice of medicine, yet its splendor pales before the light which shines forth from the cures which aim at reeducation and which are directed toward the understanding. Those are the cures which make use of analysis.

One method, which we will call the superficial analytical method, is directed exclusively toward the upper consciousness and cures principally through exhorting, convincing, exercising and hardening. Its sponsors are Bernheim, Rosenbach, P. E. Levy, Dubois. At least it is true to its birth, it has suggestion blood in its veins.

The other method is the deeper: the Freudian analysis. This does not allow itself to be satisfied with seeing only one side of the medal, it does not limit its field of activity to the superliminal consciousness, in searching for the causes of psychogenic illnesses, but it penetrates into the strata which lie hidden under the threshold of the consciousness.

Where the moral and the suggestive methods of cure are limited exclusively to symptomatic treatment, the first form of educative therapy, limited merely to a superficial analysis, is only partly symptomatic, but the second form of educative therapy penetrates with its deep-going analysis to the root of the trouble, and has as its aim a fundamental cure.

Only too frequently the physician must be satisfied with the cure of the symptoms, with lightening the load. He always strives to remove the cause. Freud's great service is that he has opened before the physician a path which leads to the cause.

These lines of Vondel's seem as if composed for him:

"The physician must not only know How high the pulse has mounted, And where the sickness lies, which makes him groan with pain, But he must see the cause, from where The great weakness of this sickness came."

REVIEWS

AN ELEMENTARY STUDY OF THE BRAIN, BASED ON THE DISSECTION OF THE BRAIN OF THE SHEEP. By Eben W. Fiske, A.M., M.D. Illustrated with photographs and diagrams by the author. The Macmillan Company, New York, 1913.

The study of the brain is confessedly a difficult subject, and particularly so for the elementary student. There is certainly no royal road to its conquest, but this is an added reason why an introduction to its study should be made as simple as the subject permits, and also as interesting. Dr. Fiske has attempted this task in this book, which he entitles "An elementary study of the brain." The brain of the sheep is chosen as the basis of study because of its availability, its relative simplicity of structure, and its essential similarity to that of man. It appears to the author, and we think with justice, that the subject should be approached from a biological standpoint; hence, throughout the book, there is constant reference to the evolution of nervous structure and to fundamental conceptions of a biological character. Further than this, the relations of cerebral anatomy and function, together with allied psychological considerations, demand continual reference as a supplement to purely anatomical considerations. The secret of exciting interest in any anatomical study surely lies in a consideration of the function of the organ or structure in relation to its anatomical form. Bare descriptions cannot and should not inspire interest, whereas the driest anatomical facts, if seen in their broader relationships, at once assume a significance in the student's mind which may be attained in no other way.

The first chapter is a brief statement of phylogeny, followed, as are succeeding chapters, by directions to the student regarding means of study. The second chapter concerns itself with ontogeny, and the student is wisely advised to make drawings of various stages in the development of the brain of one of the higher mammals. An actual brain is always to be preferred to a model. The third chapter gives directions of a simple and practical sort as to methods of removing the sheep's brain. Thereafter, chapters follow, descriptive of the various surfaces of the brain, of sagittal, horizontal and transverse sections, and of certain of the internal structures and the brain stem.

A summary concludes the volume, and a very brief but well selected bibliography. The illustrations are thoroughly adequate, the excellent method being used of photographic reproductions, with accompanying descriptive plates done in outline. In general, the book, modest though it is, should prove a most admirable laboratory guide, not only for students of zoology, but also for those who propose, as physicians, to make a final study of the human brain. It is, no doubt, more difficult to write an acceptable elementary text-book than a more complete treatise, but the author, we have no hesitation in saying, has succeeded in this object, and has added a book of positive value to the long list

which has gone before. The BNA nomenclature has been adopted in part, but by no means to the exclusion of the old terminology, which is certainly a far more efficient means of introducing an ultimate uniform nomenclature than an immediate complete change to the BNA system. The text is well printed and readable, and the proof reading in general good. We note, however, on page 86, that the name Von Gudden is spelled with one d instead of two. E. W. TAYLOR.

THE BACKWARD CHILD, A STUDY OF THE PSYCHOLOGY OF BACKWARDNESS: A PRACTICAL MANUAL FOR TEACHERS AND STUDENTS. By Barbara Spoffard Morgan. G. P. Putnam's Sons, New York, 1914. Pp. xvii plus 263.

This book by Mrs. Morgan, which is somewhat unique and certainly very different from other books on the same subject, promises to be one of the most widely read educational works which has recently appeared. It is based on two years' experience in an experimental clinic for backward children in New York City and the author states that, "It is an effort to persuade teachers and parents, in spite of a hide-bound educational system, to study the children that interest them as individuals and to recognize their faculties and tendencies." It "Looks to a future when teachers will so understand every child's mental structure that his whole education will be directed to the fortifying of his weak points and the development of his tendencies."

The author terms her process "mental analysis" and says it differs from the Binet and Simon tests in that they are merely to classify children, and her method discovers peculiarities and also gives the training necessary to bring the child up to normal. She gives a psychological basis for her work which will be surprising to many readers because of its great divergence from the usual psychological treatment. The child's mind is considered as having four primary processes, namely: (1) Sense Impressions, (2) Recollections of Sense Impressions, (3) Association Channels (4) Abstraction Processes. As the child grows older these are elaborated into Imagination, Reasoning, and Expression. Attention is of three kinds: (1) Homogeneous Attention or concentrating, which consists in attending to one thing for a period of time; (2) Simultaneous Attention or observing, which consists in giving attention to a number of things at once; and (3) Disparate Attention, or giving attention to two or more things over a period of time. Memory may be (1) Automatic, (2) Voluntary, or (3) Retentive. The function of the tests is to determine just which one of these processes are weak or strong and discover a method of education which is suited to the individual. Other mental processes, such as sensation, perception, abstraction, and judgment are discussed, and an interesting treatment distinguishing between the analytic and synthetic type of mind is given.

One of the most important parts of the book is the discussion of the way in which the tests are given. She insists that the relation of the child and the examiner be very personal and informal and that the process be varied as much as possible in order to prevent crystallization. Many of the tests are the same, or much the same, as those of Simon and Binet, but the greatest of liberty is taken in adapting them to the particular case. Much use is made of conversation, puzzle-pictures and other little friendly means by which the personal characteristics of the child may be learned. After this is done, the proper training of the child is to be selected and the effort made to bring him back to normality, for which purpose, some quaint and interesting devices are used. One case given is that of a little girl whose senses of sound and form were defective and who therefore could not learn her letters. These letters were pasted on the keys of a piano and she was taught to play a piece with one finger, meanwhile chanting over the names of the letters as they were struck. In this way her sense of sound was trained, she learned her letters and gained ability to learn more and faster. Abstraction may be strengthened by having the child measure distances with a rule, first calculating the distance with his eye. The power of association may be made stronger by having the individual sort words or pictures which are pasted on slips of cardboard; he is to arrange them according to meaning or according to the activities with which they have to do. Simultaneous attention may be trained by such games as "Hide-the-thimble" or Jack-straws, and homogeneous attention may be trained by some such action as hammering nails in the upper left hand corners of all the squares on a board. Imagination is developed by retelling stories, and invention by solving puzzles; voluntary memory is strengthened by writing original rhymes and automatic memory may be strengthened by having the child write out a list of all the things in his kitchen or any other room with which he may happen to be familiar.

Different types of backward children are described and a few pages are devoted to a discussion of hysteria.

It is a book which will, in all probability, arouse considerable discussion and which will find some warm friends and some determined enemies. As one more publication calling attention to this important problem, it is of great value and it will probably be read more widely than any other book in this field which has appeared. Perhaps its greatest practical value lies in its suggestiveness as to the ways in which one may use his personality and initiative in dealing with backward children, rather than

sticking so closely to prescribed tests and methods. RAYMOND BELLAMY. Emory & Henry College, Emory, Va.

CONTINUITY: THE PRESIDENTIAL ADDRESS TO THE BRITISH ASSOCIATION FOR 1913. By Sir Oliver Lodge. G. P. Putnam's Sons, New York and London, 1914. Pp. v, 131.

The most obvious particular wisdom of the present scientific period is undoubtedly just that concept denoted by the title of this volume, continuity. And this wisdom is advanced wisdom and, withal, wisdom which is very expedient and even indispensable at this day, as a reaction required to set right the over-specialization of recent minds thoughtful only of some little branch of knowledge. Just in proportion as one esteems "authority" will one give heed to the pronouncement of the presidential address before the British Association, yet for its own intrinsic sake it is a piece of work which cannot be ignored.

Interesting and revolutionary as are the recent additions to philosophical physics brought about by the discovery of radium and its like, it is the other phase of this great physicist's mental trend which particularly interests the student of human behavior— that wisdom which gives him (as it gave William James, and for a like reason), the bravery to look a bit beyond the more or less materialistic confines of mere science into the broader realm. And strange, is it not, that a man NEED be brave in this twentieth century Domini to discuss spiritism and survival and telepathy? Only those do it who cannot "lose their jobs." Can one indeed honestly doubt that many an intelligent psychologist to-day is kept from investigating this pressing phase of knowledge largely, or even solely, by the materialistic incubus whose continuance still stands for an academic salary usually sufficient to buy wife and children bread, if not a little meat?

"Material bodies are all that we have any control over, are all that we are experimentally aware of; anything that we can do with these is open to us; any conclusions we can draw about them may be legitimate and true. But to step outside their province and to deny the existence of any other region because we have no sense-organs for its appreciation, or because (like the ether) it is too uniformly omnipresent for our ken, is to wrest our advantages and privileges from their proper use and apply them to our own misdirection." . . . "I am one of those who think that the methods of science are not so limited in their scope as has been thought: that they can be applied much more widely, and that the psychic region can be studied and brought under law too. Allow us anyhow to make the attempt. Give us a fair field. Let those who prefer the materialistic hypothesis by all means develop their thesis as far as they can; but let us try what we can do in the psychical region, and see which wins. Our methods are really the same as theirs—the subject-matter differs. Neither should abuse the other for making the attempt."

Here is this matter in a nutshell, and the evolution of cosmology in the last few years makes this argument and this plea greatly more persuasive still, for it forges one more link in the actual knowledge of continuity.

Twenty-four pages of useful, explanatory notes follow in this volume, the text of the Address. The book lacks an index. To those sapient ones who have not already saved the important little work out of Science, the dollar which this volume costs is a dollar well-spent, unless, indeed, philosophy be to him but a reproach. GEORGE V. N. DEARBORN. Tufts Medical and Dental Schools.

ADVENTURINGS IN THE PSYCHICAL. By H. Addington Bruce. Little, Brown & Co., 1914.

Professor Flournoy, in the Preface to his *Spiritism and Psychology*, made the remark: "It will be a great day when the subliminal psychology of Myers and his followers, and the abnormal psychology of Freud and his school, succeed in meeting, and will supplement and complete one another. That will be a great forward step in science and in the understanding of our nature." (Page VI.)

Any one who attacks the problem from this standpoint, in the right manner, is to be commended; and this is, very largely, the method of attack taken by a certain group of "psychical researches"; it is also the method of approach of Mr. Bruce, in the book under review. Although it will probably contain but little new to the student of abnormal psychology, it is, nevertheless, a welcome and extremely sane presentation of the problems discussed; while, for the general public, the effect of the book cannot be other than beneficial,— giving a sound and scientific view-point of many of these obscure and outlying problems.

Much of this book will be familiar to readers of the JOURNAL. The chapters on the "Subconscious" (extended and amplified in his final chapter on "The Larger Self"), "Dissociation and Disease," and "The

Singular Case of B. C. A.," contain a summary of material long familiar to general psychological students—though this data has not been sufficiently popularized as yet,—while the case of B. C. A. is a relief after the oft-quoted earlier cases!

The first chapter, "Ghosts and their Meaning," deals with apparitions of the living, of the dying, and of the dead—according to the tentative arrangement of these cases made by the English S. P. R. Most of these are quoted from the Society's Proceedings, and the usual theories are offered to account for them; in the case of apparitions of the dead, e. g., "ghosts," the theory of deferred telepathic suggestion being held. This brings us naturally to the second chapter, "Why I believe in Telepathy," which again contains a summary of much of the S. P. R. work in this field; accompanied, however, by some other cases and a few interesting incidents which fell under the author's personal observation. The next two chapters deal with "Clairvoyance and Crystal Gazing" and "Automatic Speaking and Writing" respectively. Here, again, the bulk of the material is familiar to psychical and psychological students; though it must be admitted that this material is all excellently and carefully summarized. The author's attitude, throughout, is strictly critical and scientific; and while he believes in telepathy and other supernormal powers, he rejects spiritism as an explanation, and his views throughout are temperate and modest.

The remaining chapter, dealing as it does with "Poltergeists and Mediums," takes us into the more dubious field of "physical phenomena"—spontaneous and experimental—and cases are discussed which lie outside the province of the psychologist,—since they entrench more upon the domain of physics and biology. As such they have been treated and discussed by the majority of Continental savants.

One word more regarding the famous medium, Eusapia Palladino, whom Mr. Bruce refers to in several passages in this Chapter, referring to her in a footnote on page 196, as "The discredited Eusapia Palladino, once the marvel of two continents." May I take this occasion to repeat here what I have often repeated in public and private, elsewhere? and that is, that I retain my unshaken belief, amounting to a conviction, in the genuineness of Eusapia's power, and that, despite the trickery which was undoubtedly discovered here—and which had also been discovered, I may add, more than twenty years before she ever came to this country—she yet possesses genuine, remarkable powers of a supernormal character, and this belief, I may say, is shared equally by all the continental investigators, who remain unaffected by the so-called American expose. A statement of their attitude is perhaps well summarized by Flournoy, in his *Spiritism and Psychology* (Chap. VII); while I have published the records of the American seances—for those who may be interested—in my "Personal Experiences in Spiritualism," where copious extracts from the shorthand notes of the American sittings are given.

To return, however: If there is a criticism to make of Mr. Bruce's book, it is that it displays a lack of personal investigation and experimentation, and bears throughout the ear-marks of a literary compilation. But this is, after all, not a serious detractor from a work of this character,—which is, as I have said before, excellently done. HERWARD CARRINGTON.

DES TROUBLES PSYCHIQUES ET NEVROSIQUES POST-TRAUMATIQUES, Par R. Benon.
Ancien interne de la Clinique des Maladies Mentales et de l'Encephale a la
Faculte de Paris, Medecin de l'Hospice General de Nantes (Quartiers
d'Hospice). G. Steinheil, editeur, Paris, 1913; pp. x-449.

The author in this volume has written a clinical and medico-legal treatise on traumatic nervous affections from a broad and philosophical standpoint. The subject is treated under the following headings: "Generalities," in which is discussed the historical development of our knowledge of the effects of traumatism, the etiology, the evolution of the various disturbances, and the legal side of the questions at issue.

Following this introduction, under Chapter I, the general topic of what the writer terms the traumatic dysthenias or the traumatic sthenopathies is discussed under the following subheadings: (a) Simple post-traumatic asthenia; (b) Post-traumatic astheno-mania; (c) Prolonged asthenia and chronic traumatic asthenia, under which he includes traumatic neurasthenia, traumatic hysteroneurasthenia, traumatic neurosis, and traumatic psychoneurosis; (d) Chronic post-traumatic mania; (e) Periodic post-traumatic dysthenias; (f) Asthenic mania and pathological anatomy. Chapter II, under the general heading, "Traumatic Dysthymias: (a) Anxiety post-traumatic hyperthymia; (b) Traumatic hypochondriasis and traumatic hysteria; (c) Special hyperthymia of accidents; (d) Hysterical and traumatic crises; (e) Prolonged or permanent post-traumatic disturbances of character in children and adults. Chapter III, under the general heading, "Traumatic Dysthymias": (a) Traumatic amnesia; (b) Post-traumatic Korsakoff syndrome; (c) Traumatic mental confusion; (d) Post-traumatic agnosia; (e) Post-traumatic dementias; (f) Systematized chronic post-traumatic deliriums. Chapter IV, under the general heading, "Psychic states and Diverse Post-Traumatic Neuroses": (a) Post-traumatic epilepsy; (b)

Traumatic aphasia; (c) Alcoholism, traumatism and hallucinatory conditions; (d) Post-traumatic sensual perversions; (e) Pains, vertigos, deafness, etc., following trauma; (f) Distant post-traumatic psychic disorders with cerebral lesions; (g) Unclassifiable observations. To this comprehensive material is added an appendix on the topic of psychic and neurotic disturbances as indications for trephining.

This outline of the contents of the book, which contains in addition many subheadings, gives a sufficiently clear idea of its scope and of the pains which the author has taken to subdivide his subject matter to the last possible degree. Whether such a detailed classification has merit sufficient to justify its complexity must be left to the individual reader to determine. It may, however, with justice be said that the author has spared no pains to illustrate by case reports the various phases of traumatic disorder which he enumerates. He has a keen sense of the significance of psychiatric knowledge in a proper understanding of the various results of trauma, and lays special stress upon the breadth of the psychiatric field, under which he properly enough includes the various so-called psychoneuroses as well as epilepsy, tics and aphasia. He believes that one may only arrive at a diagnostic criterion of such affections through the sensations and emotions expressed by the patients. The somatic phenomena he regards as always subordinate and accessory. Under this point of view, he attacks his problem, and with considerable success. An admirable brief historical review of traumatism in relation to the nervous system constitutes a valuable section of the book, in which he brings out the conflicting views which have prevailed since the earlier work of Erichsen down through the fundamental investigations of Westphal, Charcot, Knapp, Oppenheim and others.

The author finds fault with the common use of the word traumatism in the sense of trauma, and correctly draws attention to the fact that traumatism should express a general condition, whereas, trauma should be used as indicative of a local lesion. This distinction has been too often overlooked, with resulting confusion.

In general, the book represents a vast amount of painstaking thought and an earnest but somewhat confusing attempt to bring light into the somewhat dark places of a much-discussed subject, which has frequently been the source of more or less acrimonious discussion. Not the least significant part of the volume is the constant reference to the legal implications of the traumatic affections. It should therefore be useful, not only to the physician, but also to the legal profession. It will doubtless be used rather as a book of reference than as a readable treatise. E. W. TAYLOR.

VERBRECHERTYPEN. 1 Heft. Geliebtenmorder von Albrecht Wetzels und Karl Willmanns. Verlag Julius Springer, Berlin: 1913.

With a better understanding of psychopathic phenomena, the underlying psychology of criminology becomes more clearly defined. Maladjustment may express itself in an insane outbreak, criminal act, or in an anti-social deed, indeed, in all of them the underlying phenomenon is a psychopathic condition which comes under the realm of abnormal psychology. The large group of criminals SHOULD not be looked upon as a homogenous class, but the individuality of criminal and the type of the delinquent act in reaction to his heredity, mental make-up and environmental influences should be fully considered. Herein lies the great value of Wetzels' and Willmanns' Monograph—these authors report three cases in which criminal acts were attributed to abnormal mental life.

The first case was that of a young man of twenty-three, who showed a psychopathic personality with tainted heredity on the paternal side. He was subject to convulsive attacks, which were regarded as hysterical and not epileptic. In his intelligence he was above the average. He was engaged to a young woman, and because she refused to marry him, he at first contemplated to take his life, but later shot at her three times without injuring her, and then made an unsuccessful attempt at suicide. His delinquent act was determined not only by his environment, but also by his peculiar type of personality, which was taken into consideration by the court, and on this ground he was acquitted.

In the second case, a young man of twenty shot his fiancée through the temporal region, injuring her severely. Soon after committing this act he surrendered himself to the police. He also showed striking evidences of a psychopathic personality with a strong suggestion of epilepsy, but with intact intelligence. He was given to periods of depression and was unstable mentally. He was easily suggestible and his general conduct was not only controlled by environmental influences, but also by his mood. Suicidal ideas and jealousy played a very important role in his mental life; especially they were marked when he began to keep company with the young woman. Although his abnormal constitution was taken into account, nevertheless he was punished by one year's imprisonment. During confinement he attempted suicide, but was unsuccessful. Some time after his release he committed suicide, the cause of which he assigned to an abortion that was induced by his sweetheart.

The third case is very interesting and rather intricate, by reason of the fact that murder or double

suicide was suspected. The following are the details of this case: A young man of eighteen kept company with a young woman about the same age, from another town. The girls of the town were jealous of her and began to gossip about her to the extent of casting aspersions upon her character, etc. The young man's father, without investigating this case, forbade his son to marry her. However, the two lovers would have frequent secret rendezvous, and his fiancée became depressed over this scandalous and groundless rumor and also because of the peculiar attitude her young man's father assumed. One evening the young man returned home late, and upon confessing to his father of his secret meetings with his fiancée, he was severely beaten and prohibited to see her again.

A few days later the young man wrote a letter to his sweetheart, telling her of his father's emphatic determinations, but soon they met again and she suggested that they should die together on account of this gossip that was circulated about her. A day following this meeting both of them were missed, and after some search the young woman was found lying on the ground with two shots in her head and one in the breast, and the young man was hanging from a tree, in a near-by wood; the latter was resuscitated, but the former was dead. It is interesting to note that the autopsy showed that death in her case was due to strangulation and not to the bullets. This young man was endowed with a psychopathic personality, and there was a history of short attacks of depression. He received several head traumata and suffered from enuresis in his early life.

Following the resuscitation, he grew confused and excited, and within twenty-four hours he recovered from the acute episode but showed incomplete amnesia for his act. He stated that he remembered firing the shots, but had no remembrance of strangulating her. Soon after this he passed into a peculiar state of confusion; in addition, fabrications and retention defect were also demonstrated. The cerebrospinal fluid revealed some abnormal changes which were suggestive of an organic brain disease. The Wassermann test was negative. Finally, he made a complete recovery except for the incomplete amnesia.

Since the death of the young woman was caused by strangulation, the question had to be decided whether he was the cause of her death or she died as the result of her own hand. The court favored suicide, and held that the bodily injury was inflicted with the pistol by the young man. He received a lenient sentence—only nine months imprisonment. In this case, the type of his personality, and all the circumstances that led to the development of the act were taken into consideration.

Although the authors presented this subject purely objectively, yet their studies are extremely interesting and important, and show conclusively the importance of psychopathological methods in criminology. One who is interested in this subject will find this monograph of great value and help. It may also be added that the authors give a complete list of the casuistic literature of the murder among lovers. MORRIS J. KARPAS.

DEVELOPMENT AND PURPOSE. AN ESSAY TOWARDS A PHILOSOPHY OF EVOLUTION. By L. T. Hobhouse, Martin White Professor of Sociology in the University of London. Macmillan & Co., London: 1913; pp. xxix, 383.

"Development and Purpose" is essentially the complement of Professor Hobhouse's well-known and valuable "Mind in Evolution," published in 1901; if it were rather a continuation than the complement, many would be pleased, for the exposition already made practically guarantees a rich application, were it undertaken, to matters still further "away" in the realm of thought. The present volume lacks the multitude of scientific data and references which make "Mind in Evolution" so important for the study of psychology (as behavior or not as behavior, as the reader pleases), but it contains in their space many timely discussions, in some cases seemingly prophetic, of teleology in its relation to evolution.

The seventeen chapters of the book (there is also an extremely thoughtful Introduction and a full Index), are divided into two parts, one entitled "Lines of Development" and the other "The Conditions of Development." The reviewer's lazy cortex, and possibly those of other and more leisurely readers, is made glad by a complete chapter-synopsis or syllabus, occupying seven pages). So much of the whole treatise is suggested in the synopsis of the first three chapters that it is well to give them in full, as follows:

"I. The Nature and the Significance of Mental Evolution. (1) The biological view regards Mind as an organ evolved to adapt behavior to the environment, (2) and tends to reduce its action to a mechanical process. (3) Parallelism in the end reduces Mind to an epi-phenomenon {an important undoubted fact which has been often ignored by what are left of the Parallelists!} (4) The object of Comparative Psychology is to determine empirically the actual function of Mind in successive stages of development. (5) It involves a social as well as an individual psychology. (6) The statement of the higher phases also opens up philosophical questions, (7) and on the solution of these depends the final interpretation of

the recorded movement.

"II. The Structure of Mind. (1) Mental operations are known in the first instance as objects of consciousness. (2) Mind is the permanent unity including consciousness and the sum of processes continuous with consciousness and determining it. (3) These processes involve, but are not identical with physical processes, constituting with them a psychophysical unity.

"III. The General Function of Mind and Brain. (1) The generic function of Mind, as of the nervous system, is correlation (2) The special organ for effecting fresh correlation is consciousness. (3) The deliverances of consciousness arise from stimuli acting upon structures built up by experience, (4) on foundations laid by heredity, (5) which supplies not only specific adaptations, but a background to the entire life of consciousness."

It would be hard to find a more concise, complete, and timely formularization of the seeming trend of present resultants in this particular direction than these sentences set forth for whomsoever will ponder each carefully-built statement and really understand what it means as part of a system. "Mind is the permanent unity including consciousness and the sum of processes continuous with consciousness and determining it. These processes involve, but are not identical with, physical processes, constituting with them a psychophysical unity,"—this quotation might almost serve as the motto of early Twentieth Century scientific philosophy. It seems to the present reviewer to have almost as much philosophy in it as Harold Höffding's well-known sentence has of psychology: ("the unity of mental life has its expression not only in memory and synthesis, but also in a dominant fundamental feeling, characterized by the contrast between pleasure and pain, and in an impulse, springing from this fundamental feeling, to movement and activity"). It might be the creed of the Neoidealism.

Hobhouse's discussion of mechanism in relation to teleology and to the universal harmony and reality is fairly representative of the drift of thought as set forth by recent English and French writers such as J. S. Haldane, Oliver Lodge and some of the prominent biologists, and by Henri Bergson: "An organic whole is therefore like a machine in being purposive, though unlike it in that its purpose is within." "A purposive process is one determined by its tendency to produce a certain result, purpose itself being an act [sic] determined in its character by that which it tends to bring about. As such it differs fundamentally from a mechanical cause." "The empirical and philosophical arguments point to the same general conclusion, that reality is the process of the development of Mind." As a guide to one's thinking, and as integrators of one's subconscious intuitions and resultants, such concise formulae certainly have much value, especially when, as here, clearly and ably expounded in the text proper. Tufts College. GEORGE V. N. DEARBORN.

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[*] Read at a meeting of the American Psychopathological Association, New York City, May 5, 1915.

BY G. STANLEY HALL

THE exact sciences consist of a body of truth which all accept, and to which all experts strive to contribute. Philosophy, however, like religion, has always been broken into sects, schools or parties, and the body of truth which all accept in these fields is relatively far less, and the antagonistic views far greater. Normal psychology, which a few decades ago, started out to be scientific with the good old ideal of a body of truth *semper ubique et ad omnibus*, is already splitting into introspectionists, behaviorists, genetic, philosophical and other groups, while in the new Freudian movement, Adler and Jung are becoming sectaries, the former drawing upon himself the most impolitic and almost vituperative condemnation of the father of psychoanalysis. With this latter schism we are not here concerned, but we are deeply concerned with the more general relations between the psychologists of the normal and those of the abnormal; with a very few negligible exceptions psychoanalysis has hardly ever had a place on the program of our American Psychological Association, and the normal has had little representation in your meetings and publications. This I deem unfortunate for both, for unsatisfactory as this sadly needed rapprochement is on the continent, it is far more so here. That the normalists in this country so persistently ignore the unique opportunity to extend their purview into the psychopathological domain at the unique psychological moment that the development of Freudianism has offered, is to me a matter of sad disappointment and almost depression. In reading a plea for Freud in our association of normalists, I am a *vox clamantis in deserto* and can evoke no response, and even the incursions of psychoanalysis into the domain of biography, myth, religion and dreams, have not evoked a single attempt at appreciation or criticism worthy of mention by any American psychologist of the normal. I have sought in various ways the causes of this reticence, not to say ignorance. While I received various answers, the chief one was to the effect that the alleged hypertrophy of sex in its gross pathological forms, and the conviction of the kind and degree of sex consciousness found in the many hundreds of analyzed cases, are so unique and constitute the very essence of the neurotic and psychotic cases, and conscious and unconscious sex factors are slight or absent in most normal cases, that these patients and their doctors alike are sex-intoxicated, and that the Freudian psychology applies only to perverts and erotomania or other abnormal cases. To ascribe all this aversion to social or ethical repression is both shallow and banousic, for the real causes are both manifold and deeper. They are part of a complicated protest of normality, found in all and even in the resistance of subjects of analysis, which is really a factor which is basal for self-control of the varying good sides of which Freudians tell us nothing. The fact is that there are other things in the human psyche than sex, and its ramifications. Hunger, despite Jung, fear despite Sadger, and anger despite Freud, are just as primary, aboriginal and independent as sex, and we fly in the face of fact and psychic experience to derive them all from sex, although it is freely granted that in morbid cases each may take on predominant sex features. In what follows I can only very briefly hint at the way in which some of the Freudian mechanisms are applied to one of the emotions, viz., anger.

Anger in most of its forms is the most dynamogenic of all the emotions. In paroxysms of rage with abandon we stop at nothing short of death and even mutilation. The Malay running amuck, Orlando Furioso, the epic of the wrath of Achilles, hell-fire, which is an expression of divine wrath, are some illustrations of its power. Savages work themselves into frenzied rage in order to fight their enemies. In many descriptions of its brutal aspects, which I have collected, children and older human brutes spit, hiss, yell, snarl, bite noses and ears, scratch, gouge out eyes, pull hair, mutilate sex organs, with a violence that sometimes takes on epileptic features and which in a number of recorded cases causes sudden death at its acme, from the strain it imposes upon the system. Its cause is always some form of thwarting wish or will or of reduction of self-feeling, as anger is the acme of self-assertion. The German criminalist, Friedrich, says that probably every man might be caused to commit murder if provocation were sufficient, and that those of us who have never committed this crime owe it to circumstances and not to superior power of inhibition. Of course it may be associated with sex but probably no human experience is *per se* more diametrically opposite to sex. Some temperaments seem to crave, if not need, outbreaks of it at certain intervals, like a well-poised lady, so sweet-tempered that everybody imposed on her, till one day at the age of twenty-three she had her first ebullition of temper and went about to her college mates telling them plainly what she thought of them, and went home rested and happy, full of the peace that passeth understanding. Otto Heinze, and by implication Pfister, think nations that have too long or too assiduously cultivated peace must inevitably sooner or later relapse to the barbarisms of war to vent their instincts for combat, and Crile thinks anger most sthenic, while Cannon says it is the emotion into which most others tend to pass. It has of course been a mighty agent in evolution, for those who can summate all their energies in attack have survived. But few if any impulsions of man, certainly not sex, have suffered more intense, prolonged or manifold repressions.

Courts and law have taken vengeance into their hands or tried to, and not only a large proportion of assaults, but other crimes, are still due to explosions of temper, and it may be a factor in nearly every court case. Society frowns on it, and Lord Chesterfield says the one sure and unfailing mark of a gentleman is that he never shows temper. Its manifestations are severely tabooed in home and school. Religion teaches us not to let the sun go down upon our wrath and even to turn the other cheek, so that we go through life chronically afraid that we shall break out, let ourselves go, or get thoroughly mad, so that the moment we begin to feel a rising tide of indignation or resentment (in the nomenclature of which our language is so very rich, Chamberlain having collected scores of English expressions of it), the censorship begins to check it. In many cases in our returns repression is so potent from long practice, that the sweetest smile, the kindest remarks or even deeds are used either to veil it to others, or to evict it from our own consciousness, or else as a self-inflicted penance for feeling it, while in some tender consciences its checked but persistent vestiges may become centers of morbid complexes and in yet other cases it burrows and proliferates more or less unconsciously, and finds secret and circuitous ways of indulgence which only psychoanalysis or a moral or religious confessional could trace.

I. Anger has many modes of *Verschiebung*, both instinctive and cultivated. One case in our returns carries a bit of wood in his vest-pocket and bites it when he begins to feel the aura of temper. Girls often play the piano loudly, and some think best of all. One plays a particular piece to divert anger, viz., the "Devil's Sonata." A man goes down cellar and saws wood, which he keeps for such occasions. A boy pounds a resonant eavespout. One throws a heavy stone against a white rock. Many go off by themselves and indulge in the luxury of expressions they want none to hear. Others take out their tantrum on the dog or cat or perhaps a younger child, or implicate some absent enemy, while others curse. A few wound themselves, and so on, till it almost seems, in view of this long list of vicariates, as if almost any attack, psychic or physical, might thus be intensified, and almost anything or person be made the object of passion. Be it remembered, too, that not a few look, do, think, feel their best under this impulsion.

II. Besides these modes of *Abreagierung* there are countless forms of sublimation. In anger a boy says: I will avenge myself on the bully who whipped me and whom I cannot or will not whip, by besting him in his studies, class-work, composition, or learn skilful stunts that he cannot do, dress, or behave better, use better language, keep better company, and thus find my triumph and revenge. A man rejected or scorned by a woman sometimes makes a great man of himself, with the motivation more or less developed to make her sorry or humiliated. Anger may prompt a man to go in to win his enemy's girl. A taunt or an insult sometimes spurs the victim of it to towering ambition to show the world and especially the abuser better, and to be able to despise him in return; and there are those who have been thus stung to attempt greatness and find the sweetest joy of success in the feeling that by attaining it they compensate for indignities they suffered in youth. In fact, when we analyze ambition and the horror of *Minderwertigkeit* that goes with it, we shall doubtless find this factor is never entirely absent, while if we were to apply the same pertinacity and subtlety that Jung in his "Wandlungen" has brought to bear in working over the treacherous material of mythology, we might prove with no less verisimilitude than he has shown the primacy of the libido that in the beginning was anger, and that not Anaxagoras' love or the strife of Heraclitus was the *fons et origo* of all things, that the *Ichtrieb* is basal, and that the fondest and most comprehensive of all motives is that to excel others, not merely to survive, but to win a larger place in the sun, and that there is some connection between the Darwinian psychogenesis and Max Stirner and Nietzsche, which Adler has best evaluated.

III. Anger has also its dreams and reveries. When wronged the imagination riots in fancied humiliation and even tortures of an enemy. An object of hate may be put through almost every conceivable series of degradation, ridicule, exposure and disgrace. He is seen by others for what our hate deems him to be. All disguises are stripped off. Children sometimes fancy a hated object of anger flogged until he is raw, abandoned by all his friends, an outcast, homeless, alone, in the dark, starving, exposed to wild animals, and far more often more prosaic fancies conceive him as whipped by a parent or stronger friend, or by the victim himself later. Very clever strategies are thought out in detail by which the weaker gets even with or vanquishes the stronger, and one who suffers a rankling sense of injustice can hardly help day-dreaming of some form of comeuppance for his foe, although it takes years to do it. In these reveries the injurer in the end almost always gives up and sues for mercy at the feet of his quondam victim. So weird and dramatic are these scenes often that to some minds we must call anger and hate the chief springs of the imagination. A pubescent girl who was deeply offended went off by herself and held an imaginary funeral of her enemy, hearing in fancy the disparaging remarks of the bystanders, and when it was all over and the reaction came, she made up with the object of her passion by being unusually sweet to her and even became solicitous about her health as fearing that her revery might come true. We all too remember Tolstoi's reminiscences when, having been flogged by his tutor, he slunk off to the attic, weeping and broken-hearted, and finally after a long brooding resolved to run away and become a soldier, and this he did in fancy, becoming corporal, lieutenant, captain, colonel. Finally came a great battle where he led a desperate charge that was

crowned with victory, and when all was over and he stood tottering, leaning on his sword, bloody and with many a wound, and the great Czar of all the Russias approached, saluted him as saviour of his fatherland and told him to ask whatever he wanted and it was his, replied magnanimously that he had only done his duty and wanted no reward. All he asked was that his tutor might be brought up and his head cut off. Then the scene changed to other situations, each very different, florid with details, but motivated by ending in the discomfiture of the tutor. In the ebb or ambivalent reaction of this passion he and the tutor got on better.

IV. Richardson has collected 882 cases of mild anger, introspected by graduate students of psychology, and finds not only over-determination, anger fetishes and occasionally anger in dreams with patent and latent aspects and about all the Freudian mechanisms, but what is more important, finds very much of the impulsion that makes us work and strive, attack and solve problems has an element of anger at its root. Life is a battle and for every real conquest man has had to summate and focus all his energies, so that anger is the acme of the manifestation of Schopenhauer's will to live, achieve and excel. Hiram Stanley rather absurdly described it as an epoch when primitive man first became angry and fought, overcoming the great quaternary carnivora and made himself the lord of creation. Plato said anger was the basis of the state, Ribot made it the establisher of justice in the world, and Bergson thinks society rests on anger at vice and crime, while Stekel thinks that temper qualities should henceforth be treated in every biography and explored in every case that is psychoanalyzed. Hill's experiments with pugilism, and Cannon's plea for athletics as a legitimate surrogate for war in place of James' moral substitute, Frank Howard's opinion that an impulse that Darwin finds as early as the sixth week and hardly any student of childhood later than the sixth month, and which should not be repressed but developed to its uttermost, although carefully directed to worthy objects, are all in point. Howard pleads for judicious scolding and flogging, to be, done in heat and not in cold blood, and says that there is enough anger in the world, were it only rightly directed, to sweep away all the evils in it. In all these phenomena there is no trace of sex or any of its symbols, and sadism can never explain but must be explained by it. My thesis is, then, that every Freudian mechanism applies to anger as truly as it does to sex. This by no means assumes the fundamental identity of every feeling-emotion in the sense of Weissfeld's very speculative theory.

In this very slight paper I am only trying to make the single point which I think fear and sympathy or the gregarious or social instinct would still better illustrate, although it would require more time, that the movement inaugurated by Freud opens up a far larger field than that of sex. The unconscious that introspectionists deny, (asserting that all phenomena ascribed to it are only plain neural mechanisms, and therefore outside the realm of psychology,) the feelings which introspection can confessedly never tell much about and concerning which our text-books in psychology still say so little: studies in these fields are marking a new epoch, and here the chief merit of Freudism is found.

THE NECESSITY OF METAPHYSICS

BY JAMES J. PUTNAM, M. D.

SOME years ago, at the Weimar Congress of the International Psychoanalytic Association, I read a paper on the importance of a knowledge of philosophy and metaphysics for psychoanalysts regarded as students of human life. Perhaps if I had had the experience and ability to contribute the results of some original analytic investigation on specific lines, I should not then have ventured into the philosophic field. Perhaps, indeed, if those conditions now obtained I should not be bringing forward similar arguments again, and if any one feels tempted to maintain that philosophic speculation is a camp of refuge for those who, in consequence of temperamental limitations and infantile fixations which ought to be overcome, draw back from the more robust study of emotional repressions on scientific lines, I should admit that the allegation contains an element of truth. But in spite of this, and in spite of the fact that there is some truth also in the statement that the effects—good and bad—of emotional repression make themselves felt, as a partial influence, in all the highest reaches of human endeavor, including art, literature, and religion;—in spite of these partial truths, philosophy and metaphysics are the only means through which the essential nature of many tendencies can be studied of which psychoanalysis describes only the transformations. And this being so it is perhaps reasonable that one paper should be read at an annual meeting such as this, where men assemble whose duty it is to study the human mind in all its aspects.

I presume that just as, and just because men have minds AND bodies, an evolutionary history in the ordinary sense and a mental history in a sense not commonly considered, so there will always be two, or perhaps three, parties among psychologists and men of science, and each one, in so far as it is limited in its vision, may be considered as abnormal, if one will. I decline, however, to admit that the temperamental peculiarities of one group are more in need either of justification or of rectification

through psychoanalysis than those of the others. It is probably true that emotional tension often plays a larger part among persons who love a priori reasoning—the "tender-minded" of Dr. James—than it does in those who work through observation; but on the other hand exclusively empirical attitude has its limitations and its dangers. Philosophy and metaphysics deal more distinctively with essential function—that is with real existence,—while natural science and the genetic psychology (of which psychoanalysis, strictly speaking, is a branch) deal rather with appearances and with structure. Both are in need of investigation. The FORM which art, religion, and literature assume is determined by men's personal experiences and special cravings. The essential motive of art and religion is, however, the dim recognition by men of their relation to the creative spirit of the universe.

No one can doubt that function logically precedes structure; or if any one does doubt this, he need only observe his own experience and see how in every new acquisition of knowledge or of power there come, first, the thought, the idea, then the effort, next the habit, and finally the modification of cerebral mechanism, in which the effort and the habit become represented in relatively permanent and static form. In fact, the crux of the whole discussion between science and metaphysics turns on, or harks back to the discussion between function and structure; and it is the latter, in the sense in which I mean the word, that has had of late a too large share of our attention.

The enterprise on which we are all of us embarked,—whether we define it as an investigation, pure and simple, into human nature and human motives, or as a therapeutic attempt to relieve invalids of their symptoms,—is a larger one than it is commonly conceived of as being. Each physician and each investigator has, indeed, the right to say that for practical reasons he prefers to confine his attention to some single portion of one or the other of these tasks, be it never so small. But each one should regard himself as virtually under an obligation to recognize the respects in which this chosen task is incomplete. Every physicist is aware that there is some form of energy underlying, or rather expressing itself in, light and heat and gravitation. Physicists do not study this form of energy, not because they do not wish to but simply because they cannot do so by the only methods that they are allowed to use. But, as a reaction of defense, they sometimes assert that no one else can do so either, that this underlying energy cannot be explained. To say this is, however, in my judgment, to misappreciate what an explanation is.

To explain any matter is to discover the points of similarity, or virtual identity, between the matter studied and ourselves. But in order to do this thoroughly, or rather in order to do it with relation to the essential nature of some form of energy (the "Libido," for example, considered as an unpicturable force) one must first consider what we, the investigators, are, not at our less good, but at our best. It is with us, as given, with our best qualities regarded as defining in part the Q. E. D. of the experiment, that the investigation must begin. The nature of any and every form of real underlying energy or essence must be defined in terms of our sense of our own will and freedom. And this means that we must conceive and describe ourselves, and expect to conceive and to describe the powers that animate us, no longer as a system of forces subject to the so-called laws of nature (which are, in reality, not immutable) but as relatively free, creative agents; no longer as the product of the interplay of instincts, but as individuals possessed of real reason, real power of love and real self-consistent will. To claim to study the effects of the "Libido," to which we ascribe the vast powers with which we are familiar, yet fail to seek in it what would correspond to our own best attributes, would be to lay aside our duties as students of human nature. It would be to confine our attention to the "structure" of the mind, the form under which it manifests itself, without having studied the laws of its action under conditions which are more favorable to its development.

It must, now, have struck students of psychoanalytic literature that a marked tendency has been shown toward supplementing the study of structure,—that is, the detailed history of men's experiences and evolution, regarded as sequences of phenomena,—by the study of the function or creative energy for which the experiences stand. Silberer, whose work is endorsed by Freud, has gone to a considerable length in this direction; and the whole tendency of Freud's insistence on the relevancy, in the mental sphere, of the law of the conservation of energy has been a movement, though, I think, a narrow one, in this direction. More recently, Jung has emphasized the importance of this tendency, and has dwelt more strongly, as I think, than the facts warrant, on the supposed unwillingness of Freud to recognize its importance.

Behind the experiences of childhood, for example, lie the temperamental trends of childhood, and it is these with which we really need to get acquainted; for these trends, if not the whole causes and equivalents of the experiences which are recounted to us by our patients, constitute the conditions without which the latter would not have been what they became.

But Jung himself, strangely enough, in both of his carefully prepared arguments, specifically rejects all intention of dealing "metaphysically" with this theme, in spite of the fact that every movement toward a fuller recognition of creative energy is nothing less than metaphysics, even though not in

name.

The skilled observer, scrutinizing the motives and peering into the history of the person whose traits and trends he is called on to investigate, must see, in imagination, not only a vast host of acts, but also a vast network of intersecting lines of energy of which the casual observer, and even the intimate friend, may be wholly unaware. We call these lines of energy by many special names,—“Libido” or “Urlibido,” first of all, then love and hate and jealousy, and so on.

What are these lines of energy, and how can we study them to the best purpose? Obviously they are incomplete editions of the love and reason and will the laws of which we can study to best advantage in ourselves and in men where they are displayed in their best, that is, in their most constructive form. To make such studies is to recognize metaphysics, but instead of doing of doing this tacitly and implicitly we should do it openly and explicitly.

The study of human nature should, in short, begin at the top, rather than at the bottom; just as, if one had to choose what phase of a symphony one would choose in order to get an idea of its perfection, one would take some culminating moment rather than the first few notes simply because they were the first. To be accurate, one could not do justice to the symphony except by studying it as a whole, and similarly one should study the man as a whole, including his relations to the universe as a whole. It is as wholes that great poets conceived of their poems and great artists of their pictures, and it is as a whole that each and every human life, standing as it does as the representative of the body of the universe, and the spirit of the universe, on the other, should implicitly be viewed.

The psychologist should sympathize deeply with the anatomist and the physiologist and the student of cerebral pathology, but equally deeply with the philosopher and the metaphysician who study the implications, present although hidden, that point to the bonds between the individual and the universe. To fail to recognize that these bonds exist,—as is done when the attempt is made to study human beings as if they were really and exclusively the product of their historic past conceived of in an organic sense,—would be to try to build one-half of an arch and expect it to endure. The truth is, we do not, in my opinion, genuinely believe that a human is nothing but the product of his organic past, or the product of his experience.

We believe, by implication, in our metaphysical selves and our corresponding obligations, more strongly than we have taught ourselves to recognize. But to this fact we make ourselves blind through a species of repression, just as many a child, confident of its parents' affection, assumes, for his own temporary purposes, the right to accuse them of hostile intentions which they do not entertain.

We forget, or repress, the fact that the mind of man cannot be made subject to the laws of physics, and yet we proceed to deal with the phenomena dependent on the working of the mind of man as if these laws actually did prevail.

The misleading effects of this tendency are clearly seen where it is a question of the conclusions to be drawn from the researches, admirable in themselves, made under the influence of the genetic method.

The notion seems to prevail that we should prepare ourselves for the formation of just ideas with regard to the mode in which the higher faculties of men come into existence by wiping the slate clean to the extent of assuming that we have before us no data except some few acts or thoughts that are definable in the simplest possible terms, and then watching what happens as the situation becomes more complicated. But one is apt to forget, in doing this, that there is one thing which we cannot wipe off the slate,—namely, ourselves, not taken in the Bergsonian sense alone, but as fully fledged persons, possessed of the very qualities for which we undertake to search, yet without the possession of which the search could not begin. This does not, of course, militate against the value of these genetic researches in one sense. The study of evolutionary sequences is still, and forever will be, of enormous value. But it does not teach us nearly as much of the nature of real creativeness as we can learn through the introspection of ourselves in the fullest sense; and I maintain that psychoanalysts are persons who could do this to advantage.

Is not the notion that through the careful watching of the sequences of the evolutionary process, as if from without, we can get an adequate idea of the forces that really are at work, exactly the delusion by which the skillful juggler tries to deceive his audience when he directs their attention to the shifting objects that he manipulates, and away from his own swiftly moving hands?

My contention is that there are other means of studying the force which we call “Libido” besides that of noting its effects. The justification for this statement is that the force itself is identical, in the last analysis, with that which we feel within ourselves and know as reason, as imagination, and as will, conscious of themselves, and capable of giving to us, directly or indirectly, the only evidence we could ever hope to get, for the existence of real creativeness, spontaneity and freedom.

Every work of art, worthy of the name, gives evidence of the action not alone of a part of a man, but of the whole man; not only of his repressed emotions, but of his intelligence and insight, and of relationships existing between his life and all the other forms of life with which his own is interwoven.

Unity must prevail throughout all nature. Either we are,—altogether, and through and through, our best as well as our less good,—nothing but the expression of repressed cravings, in the sense that they or the conflicts based on them constitute the final causa vera of all progress; or else the best that is in us and also our repressed cravings are alike due to the action of a form of energy which is virtually greater than either one of them, inasmuch as it has the capacity of developing into something greater than either.

This is the agency which we should preeminently study and it is best studied under conditions when, instead of being obviously subject to repression, it is most free from repression. That is, it is best studied as it appears in the thoughts and conduct of the best men, at their best, their most constructive moments.

We cannot use our power of reason to deny our reason; for in so doing we affirm the very thing which we deny. Nor are we under the necessity of using our reason to affirm our reason, since that is the datum without which we cannot undertake our task.

If this view is sound, what practical conclusions can we draw from it? I wish to insist on this question because it was distinctly and positively with the practical end in mind that I ventured to write this paper, and I suggest the following as a few of these conclusions.

(I) We should not speak of the "Libido," in whatever sense this word is taken, as if it were a fixed quantity, like so much heat, or so much fluid, that is, as representing so much measurable force. One current notion which has played a very useful part in psychoanalytic work, yet is misleading in its tendency, is that the "Libido" may be likened to a river which if it cannot find an outlet through its normal channel is bound to overflow its banks and perhaps furrow out a new path. This conception is based on this same law of the conservation of energy to which reference has been made. If, however, I am right in my contention that the "Libido" is only one manifestation of an energy,— greater than simply "vital,"—which can be studied to the best purpose only among men whose powers have been cultivated to the best advantage, then it will be seen that this conception of "Libido" as a force of definite amount is not justifiable by the facts.

One does not find that love or reason is subject to this quantitative law. On the contrary, the persons whom most of us recognize as of the highest type do not love any given individual less because their love takes in another. The bond of love holds not only three, but an indefinite number.

The same statement may be made with regard to reason and to will. The power and quantity of them are not exhausted but are increased by use.

I maintain, then, that although the "Libido," in so far as it is regarded as an instinct, does not stand on the same footing with the reason and disinterested love of a person of high cultivation and large views, neither does it stand on the same footing with the physical energy that manifests itself in light and heat and gravitation.

When we come to deal with man and any of his attributes, or as we find them at any age, we ought to look upon him, in my estimation, as animated in some measure by his self-foreshadowing best. And whether it is dreams with which we have to do, or neurotic conflicts, or wilfulness, or regression, we shall learn to see, more and more, as we become accustomed to look for evidences thereof, the signs of this sort of promise, just as we might hope to learn to find, more and more, through the inspection of a lot of seeds of different plants, the evidences which would enable us to see the different outcomes which each one is destined to achieve, even though, at first, they all looked just alike.

(2) The next point has reference to "sublimation." This outcome of individual evolution, as defined by Freud, has a strictly social, not an ethical, meaning. Jung also, in the interesting paper referred to, in his description of the rational aims of psychoanalysis, makes sublimation (though he does not there use the word) the equivalent of a subjective sense of well being, combined with the maximum of biologic effectiveness.

"Die Psychoanalyse soll eine biologische Methode sein, welche das hoechste subjektive Wohlbefinden mit der wertvollsten biologischen Leistung zu vereinigen sucht."

But in my opinion, while it may be true that the psychoanalyst may often have reason to be thankful if he can claim a therapeutic outcome of this sort, the logical goal of a psychoanalytic treatment is not covered by the securing of a relative freedom from subjective distress, even when combined with the satisfactory fulfillment of one's biologic mission. A man has higher destinies than this, and the sense of

incompleteness felt by the neurotic patient, which was emphasized by Janet and is recognized by us all, must be more or less painfully felt by every man whose conscience does not assure him that he is really working for an end greater than that here specified. The logical end of a psychoanalytic treatment is the recovery of a full sense of one's highest destiny and origin and of the bearings and meanings of one's life.

On similar grounds I think that the conflicts to which all men find themselves subjected, must be considered, in the last analysis, as conflicts of an ethical description. For it is only in ethical terms that one can define one's relation to the universe regarded as a whole, just as it is only in ethical terms that a man could describe his sense of obligation to support the dignity of fine family traditions or the ideals represented by a team or a social group of which he felt reason to be proud. I realize that a man's sense of pride of his family, his team, or his country may be a symptom of narcissistic self-adulation; but like all such signs and symbols—the symbol of the church tower, for example—this is a case where two opposing meanings meet.

Every act and motive of our lives, from infancy to age, is controlled by two sets of influences, the general nature of which has here been made sufficiently clear. They correspond on the one hand, to the numerous partial motives which psychoanalysis studies to great advantage, and on the other hand, to the ethical motives which are only thoroughly studied by philosophy.

(3) Another conclusion, which seems to me practically of great importance, follows from this same view. Every one who has studied carefully the life histories of patients, especially of children, and has endeavored in so doing to follow step by step the experiences through which they reach the various mile-stones on their journey, must have been astonished to observe the evidences of PREPAREDNESS on their part for each new step in this long journey. Human beings seem predestined, as it were, not only in a physical but in a mental sense, for what is coming, and the indications of this in the mental field are greater than the conditions of organic evolution could readily account for. The transcendence of the mind over the brain shows itself here as elsewhere.

We are told that our visions of the unpicturable, the ideal world, which our imagination paints and which our logical reasoning calls for as the necessary cap or final corollary to any finite world which our intelligence can actually define,— that such visions are nothing but the pictures of infantile desires projected on to a great screen and made to mock us with the appearance of reality.

I have nothing whatever to say against the value of the evidence that a portion of our visions are of this origin. In fact, I believe this as heartily as does any one. But I desire strenuously to oppose the view tacitly implied in the statement of the projection theory just cited, the acceptance of which as an exclusive doctrine would involve the virtual rejection of our right, as scientific men, to rely on the principle that the evidence afforded by logical presuppositions and logical inference is as cogent as that furnished through observation.

It is, in my opinion, just because we all belong to a world which is in outline not "in the making" but completed,—because, in short, we are in one sense like heirs returning to our estates,—that this remarkable preparedness of each child is found that impresses us so strongly. The universe is, in a sense, ours by prescriptive right and by virtue of the constitution of our minds. But the unity of such a universe must, of course, be of a sort that includes and indeed implies diversity and conflict as essential elements of its nature.

Psychoanalysts should not make light of inferential forms of reasoning, for it is on this form of reasoning that the value of their own conclusions largely rests. We infer contrary meanings for words that are used ostensibly in one sense, and we infer special conflicts in infancy of which we have but little evidence at hand, and cravings and passions of which it may be impossible to find more than a few traces by way of direct testimony.

Our immediate environment and the world that surrounds us in that sense, appear to our observation, indeed, as "in the making." But besides the power of observation which enables, and indeed forces us to see the imperfection in this environmental world, we possess, or are possessed by, a mental constitution which compels us, with still greater force, to the belief in a goal of positive perfection of which our nearer goals are nothing but the shadow.

It is because I believe in the necessity of such reasoning as this that I am not prepared to accept the "Lust-Unlust" principle (that is, to use philosophical terms, the "hedonistic" principle) as representing the forces by which even the child is finally animated. Men do not reach their best accomplishments, if indeed they reach any accomplishment, through the exclusive recognition, either unconscious or instinctive, of a utilitarian result, or a result which can be couched in terms of pleasure or personal satisfaction as the goal of effort. They may state the goal to themselves in these terms; but this is, then, the statement of what is really a fictitious principle, a principle in positing which the patient does but

justify himself and does not define his real motive. Utilitarianism and hedonism and the pleasure-pain principle, useful though they are, are alike imperfect in that they refer to partial motives, partial forms of self-expression; whereas that which finally moves men to their best accomplishments and makes them dissatisfied with anything less than this, is the necessity rather than the desire to take complete self-expression as their final aim. The partial motives are more or less traceable as if by observation. The larger motives must be felt and reached through inferential reasoning, based on observation of ourselves through careful introspection.

Finally, the practical, therapeutic question arises, as to what measures the psychoanalyst is justified in taking to bring about the best sort of outcome in a given case?

It is widely felt that the psychoanalyst would weaken his own hold on the strong typically analytic principles through which painful conflicts are to be removed if he should form the habit of dealing with ethical issues, and talking of "duties", instead of stimulating his patients to the discovery of resistances and repressions, even of repression the origin of which is not to be found within the conscious life. Yet,—parallel, as one might say, with this clear-cut standard of professional psychoanalytic obligation, the force of which I recognize,—it has to be admitted that there are certain fairly definite limitations to the usefulness of psychoanalysis. As one of these limitations, well-pronounced symptoms of egoism, taking the form of narcissism, are to be reckoned. These symptoms are not easily analyzed away. But if one asks oneself, or asks one's patients, what conditions might, if they had been present from the outset, have prevented this narcissistic outcome (Jehovah type, etc.), the influence that suggests itself—looming up in large shape—is just this broad sense of ethical obligation to which repeated reference has here been made. If these patients could have had it brought home to them in childhood that they belonged, not to themselves conceived of narrowly (that is, as separate individuals) but only to themselves conceived of broadly as representatives of a series of communities taken in the largest sense, the outcome that happened might perhaps have been averted.

And what might have happened may still happen. What is to be done? Each physician must decide this for himself. He should be able both to do his best as a psychoanalyst and at the same time help the patient to free himself from that sort of repression in consequence of which he is unable to see his own best possibilities. But he cannot do this unless he has trained himself to see and feel in himself the outlines of this vision any more than he could help the patient to rid himself of an infantile complex if he did not appreciate what this complex means. We must trust ourselves, as physicians, with deadly weapons, and with deadly responsibilities, and we ought to be well harried by our consciences if we should do injustice, in using them, either to our scientific or our philosophic training.

ASPECTS OF DREAM LIFE[*]

[*] It should be stated as possibly bearing on the interpretation of the dreams recorded by the author, who is well known to me, that she is the subject of an intense and unusual obsession of hatred of an obtrusively pathological character against a relative. The psycho-pathology of the obsession, of which I have an intimate knowledge, has not been determined. A reasonable interpretation is that the main etiological factor is jealousy. She has undergone prolonged psychoanalytic treatment by a skilled psycho-analyst without improvement of the obsession and without revealing a satisfactory explanation of its pathology. To what extent the contents of the dreams have been determined or coloured by culture acquired by this treatment and by the study of Freudian doctrines is also a question deserving of consideration.—Editor.

The Contribution of a Woman

IT is an easy matter to accept upon authority a given scientific theory and bring to its support certain selected evidence, but quite another to carefully observe and report phenomena, inspired, influenced and guided indeed by the scientific-theory but drawing conclusions no wider or deeper than individual insight warrants. Scientific knowledge advances not by ready acceptance of theories but by original observation and experiment and the following study of dreams is offered as fulfilling in some degree the latter requirement. While there is a certain familiarity on the part of the writer with the general theory advanced by Freud and with his principles of interpretation, there is no acquaintance at first hand with his *Die Traumdeutung*, the reading of which has been postponed lest there be excess of influence.

No apology is offered for this invasion of the domain of psychology by a layman. The laboratory of the mind is open to all and he who has missed conventional training may yet chance upon valuable facts and their interpretation. Neither is apology offered for the intimate nature of the data reported. Belonging as dreams do to the most personal and private life of the individual it is nevertheless true that continued and careful study of this form of mentation insensibly alters one's attitude so that at

length the dream appears as a fact of nature, impersonal and objective.

It is a common remark that if one tells his dreams their number will increase but this increase is probably only apparent. With attention the products of the dream-self become more accessible until one who is practiced in introspection can raise the number of his remembered dreams from one in two or three nights to five, ten, or even fourteen in a single night. Even at this maximum of remembrance one feels that but a fraction of the mind's nocturnal activity is recalled. Images emerge in consciousness and fall back into obscurity before the waking thought can grasp them. Or it may be more accurate to say that upon awakening consciousness rises from level to level. It sometimes happens that when first awake I recall several dreams which vanish utterly as a sudden shifting of consciousness occurs. Then, upon this new level, a new set of dreams appears. There is reason to believe that in thinking again of a dream which has once been recalled it is not the original dream experience which comes to mind but the copy made in the waking consciousness when it first emerged. On the other hand visions recognized as dreams belonging to a long past time occasionally float into the mind giving rise to the suspicion that they have not before reached the waking consciousness. It is possible that all dreams are recorded in the depths of the mind, themselves influencing and merging with later dreams.

The number of my dreams recalled and written out during three years closely approaches five thousand and without doubt the total number far exceeds this. I am inclined to the belief that constantly, by day as well as by night, we are dreaming; that unnoticed and independent trains of thought are carried on. At times when resting if I fall into an abstracted state—not of set purpose—I find myself in the midst of a stream of thought appearing, for the moment, perfectly natural, familiar and intelligible, as if I knew the beginning and end of the matter. But only for a moment will consciousness remain at this lower level. There is a sudden return to the normal plane, the passage fades from memory and I wonder what on earth it was all about. These phases of subconscious activity differ from dreams proper in the absence of visual images. The ideas are embodied in words, heard with the mind one might say. The source may be the same as that of the night visions but it is evident that during the day the incessant stimulation of the eye from without leaves no opportunity for the emergence of the secondary visual images pertaining to subconscious ideas, which, we are told by Dr. Morton Prince, furnish the perceptual elements of the dream. The other senses are sometimes represented. Often we are performing, or trying to perform, some action. But dreams are predominantly visual. Goethe has said, "I believe men only dream that they may not cease to see."

An account of the probable genesis of the memory images not only furnishes a clue to the mechanism of dreaming but to the underlying conditions as well. The lowest forms of life possess no image-forming power. They have no sense organs; sensation is diffused over the entire form and undifferentiated. Gradually, as the scale of life is ascended, certain parts of the organisms become specially sensitive to certain stimuli and eventually individual organs give separate and distinct reports of phenomena. A substance hitherto merely felt, is seen, heard, smelled, tasted. The passage from sensation to perception occurs when but one or two of the sense organs are stimulated by an object, yet, because of nervous connections established during former more close and complete experience of the object the remaining sense organs are faintly roused, sending into consciousness copies of former sensations. Thus the whole is present to mind while but a part to sense. In the developing brain the store of memory images of various kinds would rapidly increase and these images would come at length to have a more or less independent existence. It is probable that the next step in the making of mind was the synthesis of one set of sense impressions to form an idea of the object, the first abstraction, and thenceforth a sensation gave rise to an idea. There is at this stage no impulse to explain sensations, but involuntarily, from the store of memory images, and from the reservoir of ideas above, emerges a representation of the exciting object. If this is one to which the organism is accustomed the resulting complex in the highest nerve centers fits the subject, but as evolution proceeds and environment and capacity for sensation grow more complex, new stimulations occur. In the absence of the capacity for knowledge and understanding of the object the developing mind, true to its law, brings forward mental images most nearly related—those which fit in one or two respects,—and thus we have the birth of analogy, "the inference of a further degree of resemblance from an observed degree of resemblance."

To look at one's self is a late endowment. The kitten pursues its own tail but would chase that of its mother with equal ardor. I once saw a monkey searching industriously with eyes and hands upon its own body. The sight was startling. I had never before seen an animal look intelligently at itself. It was long before man distinguished his self from the world without, and longer still before he began to understand himself. Physical and mental phenomena, pain and pleasure, could not be tracked to their sources and so came to be expressed in terms of the world of nature, and for a reason precisely similar that portion of the self functioning in sleep makes use of symbolism. Occasionally the higher thought centers are involved but the typical dream is the product of a restricted, primitive self, lacking the resources of the complete personality and limited in power of expression. In dreams we are deficient in

self-consciousness because it is only a partial self that dreams. Our wishes are rarely given clear and definite expression for the reason that the section of the mind then active is incapable of clear, definite and adequate concepts. Symbolism and reasoning by analogy are the resources of the mind until the power of knowledge dawns.

Predicating then a dream-self by its nature largely restricted to the use of symbolism and having at its disposal a vast store of images endlessly susceptible to influences which combine and alter their form, we reach the crucial question, what initiates the dream? This is by no means a mere purposeless thronging of visual images as occasionally happens in the period preceding sleep when faces, forms and scenes flit aimlessly before the mind's eye, some bare replicas of stimulations of the eye from without, others the attendant visual images of past thoughts and experiences and their distorted combination. Somewhat closer to actual dreaming is the rise of images accompanying present bodily and mental states. I sometimes see a body in the posture my own body has that moment assumed and one night, when recalling a passage from Wilhelm Meister, I saw a young man seated bareheaded on a doorstep, plainly a picture of Wilhelm at Marianna's threshold. In the last example we come definitely upon a vision induced from within, an idea working downward upon the visual centers. Still nearer dreams, indeed if occurring in sleep they would be classed with them, are the purely imaginative pictures whose cause is as mysterious as that of the actual dream. Fire in the wall near the pantry door, a garden with a woman rising from a clump of bushes, high, rocky mountain tops, a perpendicular wall of rock and against it a man on a ladder reaching for a flower, a long vista ending with a pillared temple on a hill,—these are a few of my visions before sleep. But to return,—why the dream? Are all or most dreams sexual? Can we say with Freud that they express the fulfillment of repressed desires?

It is not my purpose to attempt a complete answer to this question as I am far from understanding even the majority of my own dreams. Broadly speaking I should say that considering the amount and complexity of the material on hand which the mind may use and the probable inconceivable number of dreams it is unlikely that all are concerned with this matter. This question may well be allowed to rest for the present. But certain convictions have arisen in my mind as the result of the study of hundreds of personal dreams, convictions which do not rest upon the arbitrary interpretation of accepted symbolism, though I am far from questioning the validity of this procedure. I venture little beyond the region illuminated by individual insight though examples are cited far exceeding my power of interpretation.

The sexual theory of dreams has by some authorities been characterized as greatly over-emphasized, as failing to take account of other factors and interests of human personality. To those critics let me present the matter briefly and simply. The very fact of a person's being alive today presupposes an ancestry stretching backward through uncounted ages, an ancestry whose chief function, up to very recent times, was sexual and reproductive. Modern interests, business, social, intellectual, religious, artistic and philanthropic, which today loom so large, are a recent innovation, occupying in comparison with the period when they were not but a moment of time. In a vertical section of man—both racial and individual, they are seen to constitute but a superficial layer, from a contemporary standpoint predominant and paramount but in the light of the ages secondary and unstable. Biologically a woman is only an agent for the reproduction of her kind; more than this, with mind, all save the conscious, socially and ethically restricted sections, set toward the same end and toward the means for its accomplishment. There is no gainsaying this fact and in my dreams which yielded to analysis it stands paramount. I am inclined to disregard the theory of a "censor" for the reason that after I had admitted to my thought and frankly considered certain facts, by a thousand devious hints, by a thousand subterfuges, my subconsciousness continued to express these same facts by means of obscure symbolism. As the savage seizes upon one link in a chain of events expecting thereby to repossess the whole, as the native of Borneo makes a wax figure of his enemy in the belief that as the image melts, the enemy's body will waste away, as the women of Sumatra when sowing rice let the hair hang loose down their backs in order that the rice may grow luxuriantly and have long stalks, so this woman, this under-self, ignorant of the true law of cause and effect, and unable to form definite concepts, instinctively selects from the innumerable memories and visual images at her disposal those having relation to her unfulfilled function and forms a picture or weaves a tale, expecting through the performance of some remotely associated act the complete result.

To the events of an hour or so, supremely significant from a biological standpoint, are related a very large number of my dreams. Again and again events of that day and of the preceding days form the basis of dreams; trivial circumstances are revived one by one and fragments of the experience itself are seized, distorted and each woven into what I can no longer term "the baseless fabric of a vision." For instance the day preceding I broke my umbrella and found a shop where it was mended. In dream after dream appears that broken umbrella under various circumstances and when I ask the reason for its apparent importance I can not escape the conclusion that the article in question stands for a period of time, a series of events, in which the dream-self would again be placed. Apparently on that road

opportunity lay in waiting, therefore by any means at her disposal must that path be regained. Involuntarily the language of metaphor is assumed in attempting to describe a process so far removed from actual knowledge. Still are we driven to avail ourselves of the expedient of primitive man.

Of the dreams presently to be cited only a part fall within the category of analogical reasoning. In none of the examples is a complete analysis attempted. The mind of each reader may carry the solution of the problem as far as it will. I am content merely to furnish a clue. That each dream is of great significance must not be assumed. But that each one, even though it appear a mere fanciful reverie, means SOMETHING can hardly be doubted. At the outset it is acknowledged that the dreams recorded followed a period of intense emotion when, through the exigencies of life the strongest instinct of humanity required control and repression. Further the writer is a musician and a botanist, and especially interested in biological and social problems. Study of the latter subjects was continued throughout the period in question. It must be confessed also that though loth to accept the sexual theory of dreams, once convinced of its at least partial truth I was on the watch for confirmation. I expected sexual symbolism. On the other hand each dream was absolutely spontaneous, an utter surprise, having no slightest likeness to any creation of my waking mind and seeming to rise from a region so remote as to be not myself. It should be noted also that the greater number of the nearly five thousand remembered dreams, all but very few in fact, would have remained in the limbo of the unconscious but for the persistent and trained effort which rescued them from oblivion. Neither by, nor apparently for my waking self were they formed.

Each individual mind, besides sharing in the symbolism common to mankind, has doubtless its own particular and special forms. For instance during the period covered by my study no less than ninety different varieties of plant life figured in my dreams, not including indefinite ferns, moss, grass, weeds and trees, and several plants noted somewhat in detail yet unlike any form known to me. Of the recognizable plants a number were used somewhat cleverly for their analogical significance. Of these may be mentioned the snowball and hydrangea whose flowers as every botanist knows are sterile, the size of the individual blossom being gained at the expense of loss of stamens and pistils. These plants were plainly used to indicate barrenness and the predominance of traits other than sexual. The keen critic will here interpose an objection. How is the primitive, unreasoning dream-self able to make use of symbolism whose import is known only to higher and developed states of mind? The force of the objection is granted and without attempting fully to answer it I will say that the likeness of the primitive mind of the race to that surviving in the highly evolved individual is only partial. Like tendencies exist but the influence of a great body of knowledge above inevitably alters the action of the latter. Maidenhair fern stood indubitably in several instances for the pubic hair, once surrounding a cluster of trailing arbutus when talcum powder of that fragrance had been used on the body. I dreamed of *Linnaea borealis*, the little twin-flower, in connection with a woman who a few days before when told of the birth of twins to a friend, said, "That is the way to have them come." Lettuce, for its milky juice obviously, appeared in two bunches on the front of the waist of a woman into whose house I had broken by leaning against a screen door, and a lawn bordered by cowslips, our common name for *Caltha palustris*, certainly represented a certain lawn that a friend told me had been kept mown by the cows feeding upon it when driven from pasture.

In each of the above instances the floral symbolism was part of an elaborate dream having wider significance leaving no doubt as to the accuracy of my conclusions. A particularly interesting and devious use of flowers occurs in the following dream—I am in front of a certain house over which, in the dream, is growing a vine having white, star-like, fragrant blossoms. I want one flower and the woman living there says I may have it. The name of the vine seems to be "Dyak." There is no plant having that name but a few months before I was reading of the Dyak girls of Borneo who "are very careful of their clothing, and often very vain, but when they are married they frequently become exceedingly untidy." I quoted the passage in an article thus fixing it in my mind. The link with the dream consists in the fact that the woman living in the vine-decorated house is, in reality, notoriously untidy. Her two daughters as they approached womanhood greatly improved in the daintiness of their garb, and one had become pregnant—outside marriage. Another dream:—I see a friend, by name Anna, stoop and pull from the ground a tiny lily-of-the-valley plant. It has no roots. I say, "What a pity." This dream had no meaning until into my mind came the thought of another Anna, a young girl who was led astray and who, I had just been told, had taken medicine to terminate her pregnancy. When I learned of this I had thought of the loss of the incipient life. The same night I dreamed of going upstairs in a shed or barn. At the top of the stairs something—a door—is in the way. I go by it. A child is there. Again:—I am crossing a level field and come upon little star-like flowers which I try to analyse. I find many with pistils but no stamens,—the pollen bearing organs which effect fertilization. I wonder if they will keep fresh until I reach home. Once more:—I approach a city. I see woods and two gardens, either flower or vegetable, from which comes music. On a mound wild flowers are growing, some white, some small and dark. I gather them. Then very remote and vague,—my brother is there. I see a long snake which my brother puts on(?) and covers my flowers. Still another vision was of a branch of beautiful; fragrant apple

blossoms growing through the wall of a room. Some of the flowers were pistillate, some staminate,—a condition false to nature as regards the apple.

A dream, which in common with many others, seems not the fulfillment of a wish but the symbolical expression of a bodily and mental state, is the following:—After a day of very great physical restlessness I dream that I am walking in a path by a river. I can not see the water for the over-hanging trees beneath whose branches grow quantities of *Impatiens fulva*, the spotted touch-me-not,—named from the sudden bursting of the pod when touched. The plant in question I had not seen for some time and the fitness of the symbolism to the bodily state was too close to be accidental. After a walk in the spring when the ground was white with the cotton-tufted seeds of the poplar and I thought if all germinated how overwhelmed we should be with poplars, I dream that I am sweeping a floor upon which cotton is scattered, some of which flies and is caught in my hair. I dream of walking under pine trees whose pollen falls on me, and finally—though examples of the significant use of plants are by no means exhausted—I have upon awakening the vision of a pine tree growing from my nose. This strange anomaly becomes intelligible when I recall that a friend told me that the pores of her nose were enlarged, and I said mine were also; we had been talking of a quotation from Emerson relating to nature's fecundity; my friend was soon to be married; and a line from Emerson often in my thought is that in regard to pines "throwing out pollen for the benefit of the next century."

For a musician to dream of playing, or of trying to play, upon an organ or piano is apparently the most natural thing in the world and an attempt at interpretation is, to uninstructed common sense, a journey far afield. Yet the strange and striking variations introduced and the hindrances to my accomplishment of the act invest the dream with marked significance. For instance:—It is after church service and I want to play upon the pipe organ. I find my music. The stool is a kettle of water with a board over it. A stream of water comes from the organ. There is a horse near which kicks or bites me. Again:—I play on the piano to a friend who is a German scholar the opening theme of the *Tristan and Isolde Prelude*. My friend tells me the pronunciation of the title of the opera and it sounds to me like Froebel. That the name of the world-famous music drama, the apotheosis of passion, should be transformed to that of the notable child educator is nonsense or otherwise according to the observer's point of view. Another dream:—Some children want me to play and I go to the piano and try to play the *Spring Song*. But the piano stops sounding; only a few bass notes respond. I dream that a table of sheet music is on fire. Sometimes the music is too far away or too high for me to see: the notes are flowers, or books, or animals, or "hanging objects," or queer figures; in the book from which I play are pictures of the sea, a ship, a person, and birds—sea gulls, among them. The bed becomes an organ upon which I try to play. I begin to play the *Witches' Dance* and there are not enough keys to the piano. Again the keys are covered by a cloth or there are no keys. An organ behind me is played and I see no organist, or I move the pedals of an organ and music begins before the instrument is open. I try to play and the stops are wrong. Often I search frantically for the hymn given out by the minister and can not find it. Once I picked flowers in its place, drooping racemes of sweet alyssum, which I gave to a woman. Oddest of all on the keys of a piano I see a small boy who salutes me. Lastly, I play for children to sing. At the top of the page of music are whole notes—easy to play; below there are whole notes in groups of two, joined like confluent living cells.

There are several examples of punning to record—not brilliant, even somewhat vulgar yet interesting as exhibiting varieties of mental action. I dream that I am at a barn yard trying to hold the gate shut. In the yard are two men, each with an animal, a kid, one light, one dark. The light kid is unmanageable, pawing and shaking its head. Some days elapsed before the interpretation dawned upon me but once noted could not be doubted. Several weeks previously I had a business engagement and of two pairs of gloves—kids—I hesitated which to wear. I was to do some writing necessitating their removal and as one fastening of a light glove was difficult I fixed upon the dark pair, as to ask help would under the circumstances, have proved exceedingly embarrassing.

A friend had informed me of her approaching marriage. I dream of eating at a table with her. I take meat but she wants me to do she does. So I return the meat I had chosen and take spare-rib. This variety of meat I had neither eaten nor thought of for months and the conclusion that the reference is to the story of Adam and Eve is inevitable. I dream of eating at the table of a friend. I am a little sick and cannot eat all that is given me. My friend points smilingly to a package of stuffed dates on my plate. One date is apart from the package. This dream relates unmistakably to a day when I had a pressure of engagements and had not time to eat; when I did feel slightly ill, and when one very significant engagement was made unexpectedly—a date apart from the others. A kiss of her lover upon the lips of a young girl becomes in my dream a piece of court plaster on her upper lip, and a woman about whose prospective marriage some one asked, returns, in my night vision to a university to obtain the degree of B. Ed., which in sleep I took to indicate Bachelor of Education but which is open to a different interpretation.

Visions of natural scenery are most remote, strange, beautiful and delightful. They are doubtless

composites of actual localities but in their construction and use fine powers of imagination are at work and real life seems left far behind. In my dreams of this type the ocean stands as a symbol of Life itself, of the mighty and profound procreative force the entrance into whose domination is the crisis of existence. For this experience is demanded the mightiest symbol. It is evening. I am on the seashore with my father and mother. Great waves are rolling in. I look backward and see one wave break where we have passed. My mother is afraid but we cannot turn back. I am calm. Then—this immediately follows—I am in a kind of tunnel and fear that I shall suffocate. This and the following might be construed as symbolising my own birth. I am in a boat on the ocean with my mother. The waves are tremendous and as she goes out on deck to close a great door I fear she will be washed away. But she is safe. Next there is a violent jar and the boat is aground. Then I see down a city street. In a particularly impressive dream I approach the sea at early morning. I think I shall see the sun rise from the water. I go over a hill to reach the ocean which is frozen near the shore. I go into a little house and when I come out I can not close the door. The wind is high and the waves enormous. Then there is calm and I see a man on horseback in the water. Next a fog rises and out of the mist a little boat comes toward me, the oars flashing like silver. Then a little boy comes ashore. There are strange dreams of a frozen ocean, and of being out in a small boat with a friend, soon to be married, with ships passing and we afraid. I am near the ocean and longing to see it, and once trying to go with some one to see the foundation of the sea but am hindered.

Among visions of mountains is the following.—I see high and beautiful mountains as I stand on a bridge. I hear the squeal of a horse. Then stones fall from a mountain-top into the stream and spirals of bright water rise to meet them. After receiving from a man of vigorous, vital personality an atomizer for a slight hay fever, I dream of high mountains and at the foot of one is an irregular patch of red sunlight. Above are two houses, not side by side. In front of them is a fine, slanting veil of rain. A dream in which indications of the reputed "father complex" may be found is one of my father and myself in a team at the top of a high mountain, at the end of the road. My father wants to drive off among the peaks but I fear that we shall be lost. I dread the night there but think I can call for help. Somewhat similar is the following.—I am in a high, steep place with my father. I fear. He moves a stone and in the hollow of a rock I see moss or fungus. There are often brief, passing dreams in which no person figures. I see a bridge across a chasm; it is long and extends beyond where a bridge is necessary. I see two rivers join and wonder what the resulting stream is called. I see a river from the side of which emerges a spring of water and a new stream. A small, steep hill, snow-capped. A river with water above the banks.

To dream of moving to an old house—what signifies this? Apparently nothing. If one is to dream it must be of something—houses or people or scenery. But to dream often of going to live in an ancient house,—of trying to find in it my room; mosquito netting at the window, not quite tight; from my room into a smaller one a door which I try to fasten but can not because at the bottom it is a swaying curtain, the wall paper loose and a mouse hole near the floor; a long, sunshiny room where I see what appears to be a rat but which becomes a little kitten, weak from long confinement, that follows me from room to room and at last through a door leading to a porch;—why all these accessories? Once I go through many rooms—furnished but uninhabited—and come to an upper bed chamber where, upon a couch, lies a woman, quite dead I think; but presently she moves one hand. Again I go through room after room until I reach one where still another woman—or is it the same—lies dead on the bed. As I look she becomes a beautiful child who has lain there forty years. The child stirs and opens its eyes; I think something should be done to keep it alive but the eyes close, and sleep, or death, reigns again. After calling upon an expectant mother who showed me her layette, all white and blue, I dream that I go in an old house to a room with blue papered walls, a blue and white spread on the bed and a case of books, one of which is Dickens' Great Expectations. In one old house I find the bulbs of some plant sprouting on a shelf; in another I open the stove and find to my surprise that fire is still there. In still another house I see behind the stove a closed door which I long to open. I go about the house, up steep, worn stairs, down again and out into a garden where there is a single strawberry and I think staminate and pistillate plants should be set out to insure fertilization. Always I think of the closed door and presently I return to the house and enter the room behind the stove. On the floor is a green veil of firm texture. And at last there are cobwebs on the ceiling of my old house and I still search for my room.

After the presentation of this array of symbolism quite spontaneously the interpretation arose in my mind. The old house is the recurring abode of life. I would dwell there and take my place in the line of succession. Quite in line with this symbolism was the very beautiful dream of a young woman not many months before her bridal which I give in her words—"With a crowd of unknown people I was to visit and go over a haunted house. The living room was nicely furnished in antique furniture and the whole house was very still. We went upstairs, and it passed through my mind that people who were dead and gone had moved through the rooms. I was coming down the stairs when suddenly a pipe organ burst forth. That was the haunted part—music in the air, no organ at all. We were awestricken and I awoke with the same feeling." In dreams of this character we find it necessary to predicate a creative, myth-making tendency in the structure of the mind by means of which currents of life flowing beneath all

thought become articulate.

Coming now to examples of reasoning by analogy directly expressive of the desire for maternity, I wish to make still more plain my view of the reason for symbolism. Maternity is untold ages old; intelligent comprehension of the function very recent. That portion of the mind functioning in dreams—that is in the majority of dreams—is unable to picture the process and its necessary antecedents. (Frankly sexual dreams occurred to me very rarely.) Instinctive acts are the last to be made objects of thought; a relatively high degree of mental development is necessary before the requisite detachment from the process can be obtained and as we have seen this detachment is beyond the power of the self that dreams. Hence the recourse to analogy and symbolism.

I call upon a woman who is pregnant and whose face is slightly bloated. In that night's dream I look in a mirror and see that my face is plump. I think I am too old. I see on the street a young girl in short skirts wheeling a baby carriage. My friend tells me that the girl is a mother. That night I dream of being in a shop to buy an article which I in reality intended to purchase and in addition looking at a dress for a girl of twelve or fourteen. I hear of a pregnant woman who ran away and worked for a time in a mill and a night or two after I have a dream of a devious walk with many details which finally ends at a kind of factory. An expectant mother tells me of her trip to a neighboring town where a friend gave her a tiny crocheted jacket. Soon after I start in a dream for that town, afoot, in the dark, without lantern or money, and hampered and stumbling, make the weary journey.

A dream which upon analysis proves extremely interesting is the following:— I come out from a house and stand looking at other houses. I am waiting for some one, and look toward the street. In the yard I see a large elm tree nearly sawed off but at one side the wood is continuous,—to indicate that the tree is still alive. I look up. A bough sways and I am dizzy. I think the bough will fall. Beneath the tree is a sick woman on a couch. Until the clue was found this appeared a mere aimless mixture of imagery but one circumstance makes it very clear. Shortly before I was reading a book on biology and in the section devoted to the influence of environment on organisms a portion of the trunk of an elm tree was shown and the influence of various factors noted as indicated by the annual rings of growth. One considerable variation was due to the fact that children had swung from one limb of the tree. At the time of reading the fact made so slight an impression that after the dream some time elapsed before I recalled it and then so faintly that I had to refer to the book for verification. Thus we see upon what slight and obscure basis a dream may be constructed.

That all dreams do not originate in one section or at one level of the mind is quite evident. The range extends from those which almost merge with waking thought to creations strangely remote and primitive. When I dream that Goethe is a guest at my home and I am trying to ask him in regard to Faust, Wilhelm Meister and Mignon,—when after reading of x-rays, ether waves and electrons wake with the thought, "To solve the problem of matter would prove materialism,"—when I dream that I am conversing with a conservative friend who says that he does not like new religions and I reply that Moses and Jesus were new once, it is plain that a different stratum of mind is operative than when I dream that I am in an old fort and chased by three rats, or that a snake is on my bed and my father kills it with a pitchfork, or strangest of all, that I throw an egg at the plug of a sap bucket which it hits and then flies to the left; it is rotten. Again, a very vague dream, I, see two eggs and then am climbing inside a kind of tower. A dream which immediately preceded the menstrual period, is as follows:—I pass a narrow, dark canal which seems to be under cover. On the very brink is a child and I fear it will fall in. A man is there whose business it is to save the child but he does not. That this indicates the impending passage from the body of the ovum can hardly be doubted. Under like conditions—this before sleep—I see a doorway filled with flowers.

It was natural that after a time I should wonder what event of the day would be woven into a dream; as I performed certain acts I found myself wondering, will this appear tonight, and how? One Sunday I walked across lots to church and on the way picked a twig of balm of Gilead poplar keeping it with me through service for its fragrance. That night I dream that I am in a pasture looking for fertile fronds of the cinnamon fern which I fail to find. I see cows and am afraid.—This based on reality of a few days before.—At length by a stone I find a fern coiled as in spring. This becomes a squirrel, the male comes, and then they are lions. The male has a sprig of leaves which he lays at the feet of the female and which she eats. I want to know what the leaves are but fear to look closely because of the lion. I found it difficult to deliberately influence dreams by suggestion. The dream-self is not to be coerced and usually I over-did the matter. Most of my examples deal with flowers and perhaps the most apposite is the following:—I plucked a stem of blossoms of white everlasting and wore it inside my waist on my bosom all day, asking as I fastened it in,—How will this reappear in my dream? The following morning as consciousness returned, I had a vision of a baby's bottle filled with milk and beyond it, more faint, another similar bottle. It is fair to say that this outcome was entirely unexpected. Another night after watching Venus, low in the southwestern sky, I dream that I am molding a statue—strangely enough the arms as the reference is to the Venus de' Melos—and the figure is that of a young woman of

immoral life.

My store of dreams is so great and varied that the forms of symbolism are by no means exhausted. The reception of mail is a favorite subject and here again one may say that this is the most natural of dreams and quite its own excuse for being. But strange things come in the mail,—pieces of turf in which are growing tiny plants, boxes of rice, jelly, breakfast food, cooked fish still warm; and once a sack of mail is emptied upon my door-stone—not by the postman but by a man who the day before drove past with a little child. Other recurring motifs are strawberries, yeast, Bologna sausage, ice cream—once poured over slices of clear, transparent fruit which I eat, this very plainly referring to the fertilization of the eggs of fish about which I read the preceding evening:—"As soon as the female finishes spawning the male will approach the eggs and eject a milky fluid over them to effect fertilization. If this is successful the spawn will have a clear, glassy appearance." The dream-self can turn anything to its use,—I read of certain suffrage activities in England and forthwith dream that I attend a suffrage meeting. But the house at which it is held is in reality the home of a woman nearly my age, who is pregnant.

I pass over all the dreams obviously of an infantile character, and likewise those of travelling and of packing for a journey. More unusual is the dream of a flight of birds which twice occurred under conditions which left no doubt as to its sexual character. A house having a wet sink and a dry one is the verdict of my dream-self regarding a home in which the woman can bear no more children because of physical disability; and a railway station where I go down the steps, pick from the floor a flower—wondering if it is all right,—reach a restaurant in which seventy have that night been served and where I lose my flower, symbolizes a house of prostitution mentioned in Chicago's famous report where one woman served sixty men in one night and was said to have seven thousand dollars in the bank. Beneath convention strange unconvention lurks. A young woman of irregular life appears in my dream as one with soiled skirts, and, very vaguely, some one's else skirts are soiled also. After seeing a print of Tompkins' painting, Hester Prynne, heroine of *The Scarlet Letter*, I dream that I go to a shop, where I have great difficulty because of darkness, to buy some dark green silk for embroidering a letter somewhere on my dress. Not to pander to the base in human nature are these details given but to make known life's realities to those who are blinded by theories. The frank and honest truth is never foul and monstrous. Society can be renovated only when all the facts are brought to light.

In conclusion I give the dreams of a single night:—First, a drunken man and girl in the same team; I think they should not be there. Then I am on a porch looking off at a headland with ice at the foot. Farther up the hill are quantities of ice—a sheet of it over the ground and in one place it is as if water had been poured and allowed to freeze. In the midst of this last, which is not on the hill, is a fine and shapely tree with the ice about it very smooth and shining and slanting somewhat. I think it is a good place for skating. In the morning as I recalled this dream, quite abruptly into my mind came the remark of Philina in *Wilhelm Meister*, after seeing a woman "great with child," "It were prettier if we could shake children from the trees." Next I see far off high mountains with sunlight on the summits. Then I am in a porch enclosed by a wire screen; by me is a woman. From the window of a building outside, which seems to be a hospital without funds, a woman looks at me. I want to see far off and shade my eyes with my hands. I think I must cut the screen in order to see clearly. Then I see a rampart and beyond it is the ocean. I hear a bird, a robin, on the rampart. Near it is another bird, large, gray and strange. Then it is a rooster. The key to this dream lies in the fact that the day before I received an appeal for financial aid from a hospital and the printed request showed the picture of a row of nurses each with a tiny baby in her lap. Finally I go into a bed-room. On the bed is a baby. I uncover it and it moves and cries. It wants its mother and I go to find her.

That the mind which dreams is not uncognizant of the hopelessness of its aspirations is strangely indicated by the following for which at the time I found no direct exciting cause:— I see two long lines of seeds planted and at the end of the rows tiny lettuce plants. Near by are apple trees in blossom. But it is autumn.

Bergson at the close of his essay on dreams hints that the mind may transcend its conjectured limits and be influenced in profound slumber by telepathy. This is but an hypothesis which must long await verification. My own dreams which apparently forecast the future are out-numbered by erroneous forecasts and one vivid dream of the death of a friend though coinciding as to the day, is not of great value as evidence as I had been expecting the news for weeks, and further, beyond the surface portent the dream is remotely allied in certain details with more personal and vital memories.

Though the dream process may to a certain extent be made verbally intelligible he who studies it most best realizes the attendant mystery. Dream-self, subconscious ideas, visual images,—these are but terms which bridge the abyss of our ignorance. Further exploration of the mystery is of value not only from the standpoint of pure science, to whose domain there is no limit, but also in the interest of education, health, sanity and morality. It is neither necessary nor wise for all persons to study their

dreams, but for those who shape the growing thought and conduct of the world a knowledge of even the remotest outposts of human mentality is supremely important.

REMARKS UPON DR. CORIAT'S PAPER "STAMMERING AS A PSYCHONEUROSIS"[1]

[1] Dr. Isador H. Coriat's paper with this title appeared in the *Journal of Abnormal Psychology*, Volume IX, No. 6, February-March, 1915.

A CRITICISM

BY MEYER SOLOMON, M. D., CHICAGO

I have frequently wondered whether those of us who oppose the dissemination of the Freudian theories, at least as they are being and have been applied to the psychoneuroses and to psychopathology in general, have solved the problem as we should have solved it or fought the fight as we should have fought it. It has not infrequently seemed to me that our plan of battle, our campaign, the battle we have in a way waged, was not as consistently planned and as well organized as it should have been and as the occasion really demanded. There were many lines of attack open for us. We could, if we so wished, have made generalized and wholesale attacks upon all that Freudism stood for regardless of whether, in certain principles, it was right or wrong. This some have actually done. Although this method is not in my opinion fair or scientific, yet, so reckless and so uncritical have been many of the Freudians, and the foremost Freudians at that, in their declarations and conclusions, that I can readily see how one may be prompted to resort to unmitigated ridicule and general condemnation of the entire system, the standpoints and the conclusions that have been made the bulwark of the Freudian movement. Others have adopted a different method of dealing with the situation. They have entirely ignored the Freudian school and all that it stands for, and have permitted the members of this school to go to ever greater and greater extremes and excesses, with the more extensive elaboration of their system, so that eventually the error of their ways would be apparent to all, since the final conclusions to which they would be led would be openly fallacious and give proof positive that the foundation, the psychology upon which as a basis the Freudian system of interpretation and analysis has been erected, was defective to such an extent that it would crumple into disintegrated portions under the heavy load of the unsupported superstructure. This method has by no manner of means been unsuccessful.

A third standpoint to be assumed is that in which replies to or criticisms of individual articles, rather than criticisms of a general nature and applicable to the Freudian psychology or method or conclusions in toto, is adopted as the proper method of dealing with the situation with which we found ourselves with the advent and spread of the Freudian movement. This last-mentioned method is probably the most desirable of the three methods which have been here mentioned.

And it is the method which I shall follow in this criticism of Dr. Coriat's paper, because, among other reasons, I believe it is the fairest to all concerned.

It is not my purpose to take up for discussion the various statements, made by Dr. Coriat, with which I disagree, but rather to consider only the question of the correctness or incorrectness of the general thesis which he has presented.

The reasons for my entering into a criticism of this particular article by Dr. Coriat may be stated as follows: In the first place I am interested in the general problems of psychopathology, and of the psychoneuroses in particular. In the second place I am somewhat unusually interested in the problem of stuttering.[2] This latter interest has two main sources of origin: (1) I am deeply interested in the question of stuttering because of my general interest in neurology and psychiatry, including the speech disorders, under which heading stuttering finds its place; (2) I have myself, from earliest childhood, suffered from this affection and so find myself naturally much interested in the subject.

[2] In this paper I shall use the terms "stammering" and "stuttering" interchangeably.

It is not out of place, it seems to me, to at once answer one of the stock arguments which certain Freudians have been in the habit of offering as a reply to those who criticized their theories and conclusions. I refer to the argument or rather the insistence that those who oppose the spread of the Freudian ideas are themselves unconscious illustrations of the truth and accuracy and general applicability of the Freudian dicta. In this argument they accuse their opponents of unconsciously indulging in or being victims of a defense mechanism, as a means of self-justification and self-rationalization, based on repression, sexuality, etc., in order that their hidden, unconscious, repressed, forgotten desires, tendencies and inclinations may not be brought to the surface and consciously

acknowledged. In other words, in my particular case (my present criticism of Dr. Coriat's paper), I could, perhaps, be accused, by those Freudians who are in the habit of resorting to this charge as their own method of self-justification and self-rationalization, as the path of least resistance and as a loophole through which they can escape from meeting the situation presented to them by a frank self-examination and acknowledgment of error or by a fair and satisfactory response—I could be accused, I repeat, of showing, by the very fact of my criticism, that all that Dr. Coriat stated concerning the origin and nature of stammering was true.

In replying to this oft-repeated and oft-resurrected assertion, I need not be detained for any great length of time from proceeding to the consideration of those facts which are the real purpose of this paper. I need only say, in parentheses, that it does seem to me that there surely are a few anti-Freudians (and I may here include myself) who are perhaps, who knows, capable of that degree of unprejudiced self-criticism and intensive self-analysis which is necessary for the purposes of making ourselves eligible for candidacy as critics of the Freudian theories and dogmata. I may go further and gently suggest that it even seems to me that there may be some others of us who are capable of as great a degree of such self-criticism and self-analysis as, and it may even be of a greater degree than, many of those who have been making this claim. I am content to leave this point to the sound judgment and good sense of the average reader of these pages.

The second point that I should bring out in this connection is as follows: That which is of fundamental importance and of basic significance in the life of the psychoneurotic or the stutterer, that which is the fundamental and essential motive force which controls the psychoneurotic and the stutterer is also true, but in greater or less degree, for all of those who are not within the confines of this group.[3] And as a further statement I must assert that whatever is deemed to be the essential and primary cause for stuttering must also be applicable, in the same way but in different degree, to all the other manifestations of speech disorder such as the slips of the tongue, and many other of the psychopathologic acts of everyday life. Consequently, if the Freudian theories of sexuality are directly applicable to the problem of stuttering, it follows that they must likewise be applicable to all the other disturbances of speech just referred to. For, if followed out to the very end, we shall find that the possible mental content and mental mechanisms are the same for all psychopathologic acts, whether of everyday life or distinctly abnormal and outside the pale of our average range. If sexuality lies at the bottom of stuttering, it must be at the root of all other psychopathologic acts, of whatever nature, of whatever degree and wherever and whenever found. I cannot devote the time in this place to enter into an elaborate discussion to prove the truth of this thesis. But I can gain my point more easily and more directly in another way. Although Freud and his followers have not stated, in just so many words, that the psychopathologic acts of everyday life have the same hidden mental content that the psychoneuroses have (although it is my contention that this conclusion is but a natural extension of their sexual theories concerning the psychoneuroses), yet we do find that Freud and the Freudian school in general apply their sexual theories to the whole group of the psychoneuroses. Now, since stuttering is a psychoneurotic disorder of a certain special type, it is understood that they must believe that stuttering, as a matter of course, comes within the rubric of their generalization. As a matter of fact, if their sexual theories were at first applied only to stuttering, as they were originally applied to hysteria, it would mean that, by a process of reasoning, the Freudian school would have to apply their dicta to all of the psychoneuroses. This was, in truth, just what did occur, beginning with hysteria. And it is seen that the same thing would have happened had they begun with stuttering. I contend, further, but I shall not endeavor in this place to prove the correctness of my contention, that what is absolutely and without exception, fundamentally and essentially true of the psychoneuroses is likewise true, in different degree, of the psychopathologic acts of every day life. This would be the conclusion to which I would be forced if I started with any one of the psychoneuroses, whether it be hysteria or stuttering. One can thus see that my statement that if Freud's theories are true for stuttering they must of necessity be true for all psychopathologic acts of whatever sort is quite true.[4] I could go much further and prove that if Freud's theories were the primary and basic explanation for stuttering they must be applicable to all manifestations of human mental energy, which to me would mean that they are no less true of all vital energy, human or otherwise. In other words, the solitary application of Freud's conception to the problem of stuttering would lead us, by logical steps, to the ultimate conclusion that the vital energy was sexual—a conclusion with which Jung will not agree. And let us not forget, too, that the term "sexual" would here be used in a psychological sense, so that, in fact, Freud's theories of sexuality as the explanation of stuttering would lead us, step by step, to a psychosexual conception of the universe. And is this not exactly what the Freudian school has assumed?

[3] Freud himself agrees that his sexual theories apply to all mankind and that the psychoneurotic differs from others in not being able to successfully and completely repress or sublimate the undesirable sexual trends.

[4] Freud himself agrees psycho-pathologic acts of everyday life are the formes frustes of the

psychoneuroses and that this shows that we are all slightly nervous.

I fear that I have not made myself as clear as I should and as I should like to, but at the risk of being misunderstood, or of not carrying the reader with me in my argument, I shall not enter into any further discussion of this aspect— the wider meanings of Dr. Coriat's paper.

As can be judged from the above remarks, it was no surprise to me to see such a paper on stuttering as Dr. Coriat's. To be sure it was tacitly understood, by those who could read between the lines, that this must be the belief of the Freudian school, since their conclusions were said to be true of all the psychoneuroses.

I had also known that a few Freudians abroad had arrived at conclusions similar to those presented by Dr. Coriat, but since, so far as I knew, no paper along this line had appeared in the English or American journals, I did not give the subject any serious or special consideration and had not the slightest idea of refuting the statements. When, however, Dr. Coriat's paper appeared, I concluded that it was not out of place for me at this time to enter into a criticism of these views.

I have felt on many occasions that too many of the statements made by members of the Freudian school have been left unchallenged, with the result that the views promulgated have received quite widespread dissemination; so much so that many believe that the sensational and unsupported views which have come to their ears are accepted as the untarnished truth by most or all psychopathologists, and were a definitely proven and generally accepted part of psychopathology. It is therefore not at all surprising to find so many workers in other fields of medicine who believe that the terms "psychopathology" and "Freudian psychoanalysis" are synonymous, one and the same thing.

This also is one of the motives which prompts me to write these lines.

I am furthermore impelled by the purely scientific desire for truth and accuracy, as applied in particular to the problem of stuttering.

And last, but by no means least, I see a serious danger to the community in the uncritical acceptance and the widespread dissemination of the views promulgated by the Freudian school.

Let me assure Dr. Coriat that I regret very much that I find myself compelled to take the field against him or rather his paper in this connection, and that no personalities enter into the question at issue, but that it is a purely scientific problem, which demands the freest discussion, from all sides. Each of us is entitled to his personal opinions in this matter. The question of sincerity and honesty of purpose is not at all breathed. It is purely a matter of "What is the truth?"

And it shall be my object in the following brief discussion not to give my personal views upon this subject, nor even to dissect each and every statement in Dr. Coriat's paper with which I find myself at issue, but merely to show wherein Dr. Coriat is in most serious error.

I shall confine myself to the question of the application to stammering of the sexual theories so rampant in Freudism. Besides, I shall avail myself of the privilege of giving, in Dr. Coriat's own words, the gist of his theory or concept.

"The attempt to repress from consciousness into the unconscious certain trends of thought or emotions, usually of a sexual nature, is the chief mechanism in stammering." This is the only place in the article where Dr. Coriat expresses any doubt as to the universal validity of his theory for all cases of stuttering. But I consider this merely as a slip of the tongue or pen, because in the other portions of the paper the conclusion concerning the sexual basis of stammering is unqualifiedly made general, and I find that even on the very next page, at the conclusion of the paragraph of which the sentence just quoted is the beginning, there occurs the statement that "the fear in stammering is a deflection of the repressed sexual impulse or wish." With this beginning Dr. Coriat proceeds to explain: "Thus the repressed thought, because of fear of betrayal, comes in conflict with the wish to speak and not to betray (the secret through words[5]). Hence, the hesitation in speech arises and as the repressed thoughts gradually are forced into the unconscious, there finally develops the defective speech automatism, either stammering or a spastic aphonia. This arises in childhood after the child has learned to speak."

[5] Words in parentheses mine but taken from Dr. Coriat's paper; for explanatory purposes.

Moreover, "the hesitation of stammerers on certain words or letters is due to disturbing complexes. The stammering does not cause the inhibition, it is the inhibition which is at the bottom of the stammering."

"Two types of stimuli lead to stammering, either internal conflicts, or external instigators which

throw these conflicts into activity. The internal conflicts are either conscious or unconscious fear of betrayal (and therefore a wish to retain a secret), and this mental attitude leads to the dread of speaking, a genuine conversion of morbid anxiety into defective speech. . . . The external stimuli act like dream instigators, for instance the fear of speaking to relatives or to intimate friends may be based upon the fear that the unconscious wishes may be discovered and this stimulates the unconscious anxiety, whereas with strangers, speech is free, because the dread of discovery is absent."

"Thus," says Dr. Coriat, "the beginning of stammering in early childhood . . . is caused by the action of unconscious repressed thoughts upon the speech mechanism, the repressed thought obtruding itself in speech."

In brief it is contended by Dr. Coriat that the stammering arises as a defense or compensation mechanism, the object of which is to keep from consciousness certain painful memories and undesirable thoughts, in order that they may not be betrayed in speech. In fact, as Dr. Coriat says, "all stammering, with its hesitation, its fear, its disturbing emotions, is a kind of an association test in everyday life and not a phonetic disturbance. It is a situation phobia, the same as phobias of open or closed places."

Consequently, according to this view, stammering is purposeful and intentional and not accidental. This purposiveness is psychological and individualistic. It is resorted to by the individual for very definite, intimate, personal reasons. It is due to unconscious, repressed hidden complexes which crowd or press between the words of syllables, as Stekel puts it, and which produce the inner resistance which inhibit the free flow of speech.

It is asserted that these hidden, repressed, unconscious thoughts are related to the sexual impulse or wish.

Dr. Coriat enumerates the types of repressed complexes in childhood which may bring about stammering as follows:

1. Repression of sexual acts or secrets and the fear of betrayal.
2. Typical Oedipus complexes, with a fear of betrayal of the hate for the father and a consequent embarrassment of speech in his presence.
3. Masochistic phantasies, wondering and imitating how it would sound to talk with the tongue cut out.
4. The fear of pronouncing or saying certain sexual and, therefore, tabooed words, and thus betraying what the child thinks, his hidden thoughts.

The stammering may then arise as a wish to say or think certain tabooed words and the wish encounters a prohibition from within. These words may relate to certain anal, urinary or sexual functions which are recognized by the child as unclean, and thus forbidden to pronounce. 5. As a manifestation of anal eroticism, that is, holding the feces so that he could talk while trying to conceal the act.

. . Talking at these times would be difficult, because talking would take away the muscular tension for withholding the feces."

At another place Dr. Coriat assures us that "the dreams of stammerers are interesting because these dreams reveal their wishes to talk freely, their resistances and transferences and, also, their reversions to childhood when the stammering arose as an embarrassment complex or as a gainer of time to conceal their sexual thoughts or libido."

I have presented Dr. Coriat's views so fully and quoted him so much at length in order that there may not be any question of the absolute accuracy of my statements.

What does this mean to the one who has followed the trail of the Freudian movement? The meaning is plain. It is like the handwriting on the wall. Dr. Coriat has permitted himself to be deluded by the Freudian sexual theories and their application to the psychoneuroses, and in this special instance to stammering.

What does this imply? It implies that Dr. Coriat accepts the Freudian theories en masse. Hence, to discuss this subject in a thorough way I should have to take up for discussion the various aspects of Freudian psychoanalysis. This would include a consideration of the method employed, the psychology, the attitude or standpoint assumed, the "art of interpretation" developed, and the real meanings, in their wider and more extended sense, of various unsupported, unfounded, dogmatic and untrue conclusions of a theoretical and practical nature. This cannot, it is obvious, be expected in this place. Attempts of a certain sort in this direction have been made by me in previous communications.[6] In the not very distant future I shall endeavor more successfully to cope with some of the problems mentioned.

[6] See, for example, the *Psychoanalytic Review*, January 1915 and the *Journal of Abnormal Psychology*, June-September, 1914.

With respect to the general problem of sexuality I may say that I have recently[7] taken up, for separate dissection, the conception of sexuality assumed by Freud and his followers. The present paper should, I feel, be read in connection with this particular paper, since it will, in a way, clear the field of many of the misunderstandings in interpretation. Everything depends upon what one means by "sexuality" or "sexual impulse" or "sexual tendency." Unless a mutual understanding is arrived at on this subject of sexuality, little advance toward the dissipation of conflicting views of Freudians and anti-Freudians can ever be had. And permit me to mention in this place that it is the Freudians themselves and not their opponents who are most to blame. Until the Freudian school decidedly and once for all gives up its false and distorted viewpoint of man's sexual impulse and of human mental life, little progress of a worth-while nature can be made by them.[8]

[7] "A Critical Review of the Conception of Sexuality Assumed by the Freudian School." *Medical Record*, March 27, 1915.

[8] Owing to the fixed, systematized theories of the Freudian school, I believe that little co-operation can be expected from it. We can only prevent the dissemination of their dangerous sexual theories.

Starting out, then, with certain concepts or theories which are basically wrong and can be summed up by stating that they assume an individualistic, psychosexual conception of life and interpretation of vital phenomena, and with a psychology and a sexology which is radically wrong in its sweeping and dogmatic conclusions, Dr. Coriat, who has obviously accepted these theories as actualities, else he could not have arrived at the ideas concerning stammering which he presents in his paper, builds up or accepts an imaginatively constructed theory which he applies in full force to the problem of stuttering, and into which he crowds the phenomena of a physical and mental order which are manifest in this intermittent, special psychoneurotic disorder. As a natural consequence all the faults of Freudism have been transported to the elucidation of the genesis, nature and evolution of stammering. And this means that the theories of universally acting psychical repression, of the unconscious, of the endopsychic censor, of the significance of resistance and amnesia, of the employment of highly complicated and phantastic symbolism, of the manifestations of sexuality and so forth have been made use of in a high-handed, uncalled for, unnecessary and unscientific manner to prove the truth of the thesis with which the author set out upon his journey.

It is no wonder that in such a fashion and with such concepts the conclusions above cited were arrived at. Indeed, work along this line was unnecessary, except in a purposively corroborative way, if the theories of Freud in the case of the whole group of psychoneuroses is once seized upon and accepted as the basic truth. The problem for Dr. Coriat is to prove the truth of Freud's conceptions as laid down in his psychology and sexology, upon which his psychopathology is built.

I must stoutly protest against an evasion of the real issues by the leaders of the Freudian movement. Let them retrace their steps and first prove the truth, soundness and validity of their psychological and sexual theories and cease pressing on to pastures new, as Dr. Coriat has done here in the case of stuttering. If they are not prepared to do this, or are unwilling so to do, I do not believe that they are entitled to continue to inflict upon others views which have little real foundation in fact, which are unproven, unfounded, purely speculative, imaginative, pure figments of the imagination, a delusion and a snare. I have elsewhere[9] given credit to Freud and his co-workers where I think they deserve it. But that should not deter me from protesting against their evasion of the issues, their befogging of the problems involved, their failure to prove their case or to offer satisfactory replies to criticism which is given in a fair and frank fashion.

[9] "A Plea for a Broader Standpoint in Psychoanalysis." *Psychoanalytic Review*, January, 1915.

The method of burying one's head in sand, after the manner of the ostrich, and the refusal to see that which is pointed out or which stares one clearly in the face, cannot go far to establish one's case or as a method of defense. And the same thing applies to that oft-repeated and tiresome retort: "You do not (or perhaps you cannot) understand our theories and viewpoints." Or that other evasive accusation, rather than reply: "Your lack of understanding is of itself proof positive that our theories are absolutely correct in every detail." Or "Your attack or criticism just completely and undoubtedly proves our case. You are prompted by those very mental mechanisms and by that self-same mental content—meaning all the time the sexual content and sexual mechanisms—which we have been trying to explain to you so that you might understand us."

In response to this I should like to ask the Freudian school what it means by "censor," "wish," "unconscious," "sexual," and other similar and constantly used terms which form the stronghold of their defenses. I have shown,[10] at least to my own satisfaction, that the conception of sexuality is not at all

clear to any of the Freudian school, including Freud himself. This should by no means be so. Surely the terms which are constantly used and are the sine qua non of their theories should have a definite meaning of some sort, at least to the Freudians themselves. Mystical and metaphysical implications should not continue to find a sheltering place in the province of psychopathology. They should be uprooted and driven forth from the dark and hidden recesses into the light and open highways.

[10] Loc. cit.

These statements have a direct application to the paper which I have undertaken to criticize. It is all very well and very commendable to come forward with new theories. They are entertaining, interesting and make one think, even if they are not at all true. But it should be definitely and plainly stated that we are dealing with theories and not with facts, that the theories will be considered theories until they are proven to be facts, and that if they are disproven, they should be thrown into the rubbish heap or discarded, or else they should be modified to meet with the facts and actual conditions—as they are and not as they ought in our opinion to be or as we should like them or as we imagine them to be. Here we are confronted with a problem (stammering) which has been the subject of much study and discussion by many men. Theories have been carefully and guardedly formulated by most workers in this field. Many of them were, it is true, in error in their conclusions or viewpoints. They were, as it were, on the wrong trail.

Here is a problem of the greatest interest and of the greatest importance—one which should demand the most careful research and the most positive deliberation and consideration, with prolonged and intensive study and observation of cases, combined with self-scrutiny and self-analysis and self-knowledge (which means a keen insight into human nature and the human mind in its manifold workings). Here is a serious, concrete problem of great practical importance. Its solution and elucidation means much. And he who comes forward with an explanation of this problem should be expected to give conclusive proof of his conception and for his conclusion. And we should, justly and as a matter of course, expect and demand it.

And what proof has Dr. Coriat given us for his conclusions? Here and there scattered through his paper one finds a few conclusions or explanations of a concrete nature, but they are his interpretations of the facts and not the facts. No real, in fact not a vestige of proof is offered. The few dreams which he presents do not, to the inquiring and demanding reader, show anything which permit of the conclusions which Dr. Coriat draws with reference to their meaning or significance. He seems to have interpreted (rather than analyzed) them in typical Freudian fashion. And, furthermore, even if his interpretations of the few dreams which he presents and which were taken from different cases were true, of what significance would that be? What right would we thus have of drawing conclusions which apply to all cases of stuttering (and, as mentioned earlier in this paper, to many other related states of a normal and abnormal nature)? Not the slightest.

Not a single case has been presented in proof of the conclusions drawn in the paper. Surely this is not what we have been accustomed to expect in other fields of medicine, especially when the conception newly put forth is entirely novel, sensational, revolutionary, contrary to all former beliefs, and based on theories and conclusions which have been for some time and still are a centre of storm, of wordy argumentation, and even of insult and abuse—at any rate sub judice,

Has the science and practice of psychopathology come to the stage when theories of any sort can be given to the reading public as fact, and no actual proof therefor presented?

I venture to say that in no other department of medicine or in fact in no other aspect of life would scientific men tolerate such presentation and promulgation, despite opposition and disproof and with no tangible or definite evidence or proof. Nor would men come forward to offer revolutionary, let alone dangerous theories, for general consumption, with so little proof, as is being laid on the platter for psychopathologists.

I find no evidence offered by Dr. Coriat to bolster up the conclusions of his paper.

In response to a question asked by one of those who discussed his paper in which he was requested to explain how he knew that stammering begins by concealing something, Dr. Coriat stated: "I have had an opportunity of examining a number of stammerers and subjecting them to a complete psychoanalysis, studying all the paradoxical mental reactions and in nearly every case this concealment of some sexual secret of childhood came up. It is easy to establish a certain relationship between the speech embarrassment and the concealed sexuality."

There is, as is seen, no other proof for this theory (that is all that one call it) of Dr. Coriat and the Freudian school in general, than his or their say-so. Those who are acquainted with the method of arriving at conclusions adopted by the Freudian school will demand more than this as proof of either

the "concealment" of some "sexual secret" of childhood (and where lives there a man or woman that has not sexual memories, not necessarily secrets, of some sort or other, related to the period of puberty or antedating it by a certain varying period?) or the establishment of a relationship other than co-existence or coincidence, between the speech embarrassment and the "concealed sexuality" (just as if even proof of the existence of this relationship was sufficient testimony of the causative operating influence of the latter).

I could discuss Dr. Coriat's paper from many angles, and in each case show that its conclusions were not only unsupported but impossible.[11] But in the above remarks I have presented sufficient evidence, I believe, to carry out the objects of this criticism.

[11] The ideas in the paper are, in fact, absurd. If definite, practical, clinical issues were not involved matters might be different. But the situation is serious yes, dangerously antisocial, since the practical application of these theories to human beings is the point of greatest interest.

The reader should not lose sight of the cold but important fact that the application of Freud's sexual theories to stammering in children is, in my humble opinion, fraught with the greatest danger. I cannot do otherwise than look upon this as positively anti-social. It would, it is my belief, be a glaring and rife source of danger to the community and to society in general for these ideas to be spread broadcast. Freud himself has shown that the child, before puberty, with his more or less undifferentiated sexual impulse, may be swept along into any one or more of the sexual aberrations or to intrafamilial sexuality. These goals exist only as POSSIBILITIES and should not, I contend, be referred to as predispositions or tendencies (almost as if they were instincts). The direction of the child's thought along this line before or at or after puberty may prove disastrous in one or more of many different ways.

Think of hinting at or talking about or harping upon matters of this sort to children, let alone to adults of the usual sort! It would be nothing less than a crime to society, to the family and to the growing child. In this respect I look upon the application of the Freudian theories as a distinct and glaring danger to the individual, to the family and to the community.

Efforts to stem the tide from flowing in this direction should be unfettered. It means much for humanity.

Even hinting (to the children) in a remote way about the various aspects of sexuality described by the Freudian school should not find its place and has no place in treating stammering per se in children.

Think of the effect of continual conversation and thinking of this sort upon a child at or before puberty, or at adolescence, or even upon an individual in adult life! His thoughts are continually drifted to his urogenital organs and the sexual possibilities of all sorts of human relationships, intrafamilial as well as extrafamilial.

The Freudians may object to any statements to the effect that they tell their patients about these sexual theories. I find Jones,[12] for instance, declares that Freud "deliberately withholds from his patients all knowledge of psychoanalyses except what they discover for themselves." Even granting this, the patient doesn't have to wait long or think much before he does discover for himself just what the Freudians mean.

[12] Ernest Jones: Professor Janet on Psychoanalysis; A Rejoinder. *Journal of Abnormal Psychology*, Feb.-Mar., 1915, p. 407.

But Freud[13] himself contradicts this statement by Jones when he says: "If with my patients I emphasize the frequency of the Oedipus dream—of having sexual intercourse with one's own mother—I get the answer: 'I cannot remember such a dream.' Immediately afterwards, however, there arises recollection of another disguised and indifferent dream, which has been dreamed repeatedly by the patient, and the analysis shows it to be a dream of this same content—that is, another Oedipus dream."

[13] Brill's translation of Freud's *Interpretation*, p. 242. Italics mine.

Then again, listen to Brill:[14] "With reference to the question of determining that a person is homosexual.

[14] *The Conception of Homosexuality*, *Journal of American Medical Association*, August 2, 1913. See Brill's discussion on pages 339-340.

"A patient came to me who was said to have nothing the matter with his sexual life, but who had convulsions. I had seen him not more than three times when I said to him: 'You are homosexual,' and I explained what I meant. He told me that while at college he never indulged in sexual acts, and that for this reason he used to wrestle, during which he would have ejaculation, and he selected his partners.

Unquestionably from the beginning of his existence he was homosexual, although he was able to have sexual intercourse with his wife, but he was compelled to marry when quite young; he was 'prodded into it,' as he said. He came to me to be treated for neurosis, but the neurosis was simply the result of homosexual lack of gratification.

"We should be particularly careful not to suggest anything. I never tell a patient that he is homosexual. Be reasonably sure that he is homosexual and you need not hesitate to tell him so."

It all depends on what one means by "reasonably sure" or what kind of and how much evidence one requires or demands to be "reasonably sure."

Furthermore the mass of popular Freudian literature is not by any means hidden from the patient.

In conclusion I may remind the members of the Freudian school that it behooves them to undergo that same self-analysis and self-scrutiny which they justly advise others to have. If they do this in a truly critical and impartial way they will find that the opposition which they have met has not been without foundation. They will find that there are serious and all-pervading flaws in their psychology and sexology, and that this is responsible for their one-sided and distorted analyses and interpretations. Most of the trouble will be found in the method of interpretation, flowing out of their attitude. They will find that they have been advocating a system of theories and conclusions which have been followed as a religion, a cult, a creed. And they will correct the errors which are so patent to so many of the rest of us.

It is or should be evident to him who reads between the lines and surveys this question as from a mountain top, that there is not the slightest proof, not one jot of testimony in support of the ideas which Dr. Coriat has given us in his paper.

As a final word I cannot refrain from remarking that it will be a sad day for humanity and for society when psychoneurotics of whatever sort, stammerers, normal individuals with their psychopathologic acts of everyday life, and all the rest of us, particularly children, shall be subjected to Freudian psychoanalyses, with the numerous sexual theories and sexual implications with regard to everything of vital or human concern, as seen especially in family and social relations. A study of the origin, nature and evolution of these is not only not out of place, but on the other hand finds a distinct place of honor for purely scientific purposes. Theories, however unfounded and untrue, may, not inappropriately, be offered for this purpose. But we come upon a decidedly different situation when we have to deal in a practical sort of way with individuals, particularly children, who are the objects of the experimental application of full-blown theories. Especially is this so in the case of sexual theories.

Propagation of such views concerning the origin and nature of stammering as are presented to us in Dr. Coriat's paper should be sternly discountenanced. Nay more, they should be unflinchingly denied and even severely condemned. I, for one, protest vigorously against the propagation of such views, especially when they represent nothing more than an inflated theory.

The writer wishes to assure Dr. Coriat and the reader that his remarks are intended in a thoroughly impersonal sort of way. He is concerned only with the problems involved. Personalities do not at all enter into the proposition. He hopes that his criticism will be accepted in the same spirit in which it is given. If, to the reader, it may seem at times that the writer has spoken too strongly, he can only say in defense that he has seized upon this occasion as the time and the place to so express himself briefly, frankly but without malice. The situation more than demands such outspoken expression of opinion.

ABSTRACTS

THE PSYCHIC FACTORS IN MENTAL DISORDER. Milton A. Harrington, *Am. Jour. of Insanity*. Vol. LXXI, No. 4, p. 691.

The writer has taken the scheme of the instincts which William McDougall has given in his book, entitled "An Introduction to Social Psychology" and has attempted to show how it may be used in studying the problems of mental disorder. The paper falls into three parts. In the first part McDougall's conception is presented, modified, however, so that it may be better fitted to the needs of the psychiatrist. Briefly it is as follows:

Man has instincts as well as the animals and all his mental activity is due to impulses coming from these instincts. An instinct may be defined as an innate specific tendency of the mind which is common to all members of any one species and which impels the individual to react to certain definite kinds of stimuli with certain definite types of conduct, without having first learned from experience the need of such conduct. For example, there is an instinct of pugnacity which impels us to attack that which

injures us or interferes in any way with the attainment of our desires, an instinct of flight which impels us to seek escape from danger, a parental instinct from which come the impulses that lead us to protect and care for our young. But, beside impelling the individual to react to certain definite kinds of stimuli with certain definite types of conduct, an instinct, when stimulated, gives rise in every case to an emotion which is characteristic of it. For example, with the instinct of pugnacity, we have the emotion of anger; with that of flight, the emotion of fear; with the parental instinct, the emotion of love or tender feeling. An instinct, therefore, is regarded as a mechanism made up of three parts:

First, an afferent or cognitive part, through which it is stimulated.

Second, an affective part through which it gives rise to the emotion which is characteristic of it.

Third, an efferent or conative part through which it gives rise to a characteristic type of conduct.

McDougall gives a list of about twelve instincts, each with its accompanying emotion. These he regards as primary and the source of all thought and action.

Considering the instincts from the standpoint of evolution, one may assume that they first developed in extremely low forms of life in order to produce the few and simple reactions of which animals low in the scale are capable. One might almost say in regard to such primitive organisms, that for each situation an instinct is provided and the situation calls forth its appropriate reaction almost as automatically as the pressing of an electric button causes the ringing of a bell. But, as animals rise higher in the scale, the kinds of conduct required become more varied and complex. For example, an impulse from the flight or fear instinct, in the lower animals, will always produce some simple reaction such as flight or concealment. But, in man, the forms of conduct, to which it gives rise, may be extremely varied. Thus in one case a man may be impelled to run away, in another to work hard at some disagreeable task in order to escape the harm which might result if he failed to do so. This capacity to direct the instinctive forces into various forms of activity, we call the capacity for adjustment and we may assume that it depends upon the operation of certain mechanisms which we may call the mechanisms of adjustment. The mind may, therefore, be regarded as made up of certain instincts from which come the impulses that give rise to all our mental reactions and certain mechanisms of adjustment by which these impulses are directed into the most useful forms of activity.

This conception of the human mind enables us to form some idea of how a mental disorder may arise from purely mental causes; for it is obvious that conditions may sometimes arise when the mechanisms of adjustment will prove inadequate to the demands made upon them, when they will be unable to control the instinctive forces or find for them satisfactory outlet and, as a result, these impulses will escape by undesirable channels, giving rise to forms of thought and action which we recognize to be abnormal. To show that this theory may be successfully applied to explain the facts of abnormal psychology, the analysis of an illustrative case is presented. This case, which is worked out in considerable detail, forms the second section of the paper. It is the case of a young man who, partly owing to inherited tendencies and partly to environment, developed during early life certain habits and characteristics which, when he approached maturity and the sexual instinct awoke to its full activity, caused the impulses from this instinct to be directed into wrong channels, giving rise to a psychosis which took the form of a catatonic stupor.

The conception of mental disorder here presented inevitably leads to certain views regarding the causes which give rise to it. Since mental health is dependent on capacity for adjustment being equal to the demands made upon it, mental disorder must always be due to failure to maintain this relationship between capacity and needs. The causes of insanity must therefore be of two kinds:

First, those which make the task of adjustment so difficult as to overtax the capacity.

Second, those which lessen the capacity so that it is unequal to the demands made upon it.

The third section of the paper is a brief discussion of what these causes are and how we should deal with them. Author's Abstract.

A STUDY OF SEXUAL TENDENCIES IN MONKEYS AND BABOONS. By G. V. Hamilton. *Journal of Animal Behavior*, September-October, 1914, vol. 4, No. 5, pp. 295-318.

The writer asserts that the work and problems in sexuality in human beings place upon the animal behaviorist an obligation to lay the necessary foundations for a scientific and thoroughly comprehensive investigation of sexual life. This has led him to formulate the following two problems in animal behavior: (1) Are there any types of infra-human primate behavior which cannot be regarded as expressions of a tendency to seek sexual satisfaction, but which have the essential objective

characteristics of sexual activity? (2) Do such sexual reaction-types as homosexual intercourse, efforts to copulate with non-primate animals and masturbation normally occur among any of the primates, and if so, what is their biological significance?

The author presents a list of the subjects (monkeys and baboons) employed in his study; gives a description of the environmental conditions in his laboratory which is in the midst of a live oak woods in Montecito, California, about five miles from Santa Barbara; gives a list of the types of situations that were arranged by the observer or encountered by the subjects in consequence of their spontaneous activities, and under each description of a typical situation one or more detailed descriptions of typical responses thereto; and finally offers the classification of sexual tendencies as expressions of reactive tendencies observed.

The author then enters into a discussion of the use of the term reactive tendency, and explains that this term, according to his definition, is meant to explain something more specific than an inclination to direct activity toward one of a limited number of general ends, and to include both the innate and the acquired features of an individual's reactive mechanism.

He then presents his conclusions which I shall here include in full and verbatim, because of the fact that these findings should prove of great importance, especially in the light of Freud's theories of infantile sexuality. The author states that "At least two, and possibly three, different kinds of hunger, or needs of individual satisfaction, normally impel the macaque toward the manifestation of sexual behavior, viz., hunger for sexual satisfaction, hunger for escape from danger and, possibly, hunger for access to an enemy.

"Homosexual behavior is normally an expression of tendencies which come to expression even when opportunities for heterosexual intercourse are present. Sexually immature male monkeys appear to be normally impelled toward homosexual behavior by sexual hunger. The fact that homosexual tendencies come to less frequent expression in the mature than in the immature male suggests the possibility that in their native habitat these animals may wholly abandon homosexual behavior (except as a defensive measure), on arriving at sexual maturity.

"Homosexual behavior is of relatively frequent occurrence in the female when she is threatened by another female, but it is rarely manifested in response to sexual hunger.

"Masturbation does not seem to occur under normal conditions.

"The macaque of both sexes is apt to display sexual excitement in the presence of friendly or harmless non-primates.

"It is possible that the homosexual behavior of young males is of the same biological significance as their mock combats. It is clearly of value as a defensive measure in both sexes. Homosexual alliances between mature and immature males may possess a defensive value for immature males, since it insures the assistance of an adult defender in the event of an attack." MEYER SOLOMON.

AN EXPERIMENTAL STUDY OF STUTTERING. By John Madison Fletcher. *American Journal of Psychology*, April, 1914; Vol. XXV, pp. 201-255.

This paper is a dissertation submitted to the faculty of Clark University, Worcester, Mass., in partial fulfillment of the requirements for the degree of Doctor of Philosophy. It is thus from the Psychological Laboratory of Clark University.

This interesting study of Fletcher includes some general remarks in the introduction, the question of differentiation and definition, the physiological aspects (including breathing, vocalization, articulation and accessory movements), psychophysical changes (including volumetric changes, changes in heart rate and galvanic changes), a consideration of the interpretation of the results, the psychological relations (including emotions, attitudes, imagery, responsibility for Aufgabe, psychoanalysis, and association), heredity and conclusions. A valuable bibliography is added, and seven illustrative plates complete the paper.

Fletcher would reserve the word "stammering" for mispronunciation or incorrect speech, this stutter being anatomical (due to malformation of one or more organs of articulation) or developmental (due to incorrect functioning of the organs of articulation resulting in certain cases of immaturity, such as lisping). Stammering, in this sense, is of no psychological interest. The reviewer is in favor of employing the terms "stammering" and "stuttering" synonymously, as is the practice in England and America. The writer (Fletcher) finds that he cannot accept the Freudian interpretation of stuttering which has been offered by a number of different members of that school.

Although the entire paper is of interest and of value to the student of psychopathology, the purposes of this review can best be served by citing the following conclusions of the author: The motor manifestations of stuttering are found to consist of asynergies in the three musculatures of speech—breathing, vocalization and articulation. Certain accessory movements, which tend to become stereotyped in each individual and which consist of tonic and clonic conditions of other muscles not involved in normal speech, accompany these asynergies. The type of asynergy and more particularly of accessory movements differ so widely that it is impossible to state that any special form of breathing, or articulation, or of vocalization is the fundamental factor in stuttering. Disturbances of pulse rate, of blood distribution and in psychogalvanic variations, appearing before, during and after the speaking interval, and the intensity of which varies approximately with the severity of the stuttering, accompany the motor manifestations of stuttering. The essential condition in stuttering is the complex state of mind, the quality rather than the intensity of these feeling states governing the rise of stuttering. Such feeling states as fear, anxiety, dread, shame, embarrassment, in fact, those feelings that tend toward inhibition and repression, are most likely to precede stuttering, and probably operate in a vicious circle as both cause and effect. The permanent condition of nervousness thought to be characteristic of stutterers should be regarded as effect rather than cause. The states of feeling that have to do with the production of stuttering vary in degree from strong emotions to mere attitudes or moods, the latter being often so slight in degree that it is difficult for the subject to report their presence. Stuttering also seems to be affected by the quality of mental imagery, by attention and by association. The affective and emotional experiences associated with the pronunciation of sounds rather than the nature of the sounds themselves determine the rise of stuttering. The author's final remarks are: "Stuttering, therefore, seems to be essentially a mental phenomenon in the sense that it is due to and dependent upon certain variations in mental state. Hence the study of stuttering becomes a specifically psychological problem; and it seems evident that a detailed analysis of all the various aspects of the phenomena of stuttering will furnish important contributions to general psychology." MEYER SOLOMON.

REVIEWS

THE FOUNDATIONS OF CHARACTER. By A. F. Shand. Macmillan and Company, London, 1914. Pp. xxx, 532.

In his preface the author says: "A great difficulty which I have found in the course of my work has been to collect the facts or observations of character on which I had to rely. Such material as I have obtained has been drawn much more from literature than from any other source; and this was inevitable, because psychology has hardly begun to concern itself with these questions." This reproach levelled against psychology rebounds on the author, for throughout the book he shows himself evidently unacquainted with those branches of psychology, notably the medical ones, that have contributed so brilliantly and extensively to the science of characterology. It need hardly be pointed out, further, that to rely on second-hand material, which cannot be checked, analysed, or immediately studied, as the living facts can is a procedure that is open to insuperable objections.

The author repudiates any analytical approach to his problems, preferring what he terms "a concrete and synthetic conception of character," and so "avoids breaking up the forces of character into their elements, and being driven to consider the abstract problem of their mutual relation." His method consists in assuming the existence of these forces, as part of his working hypothesis, and in formulating general laws based on a study of them. As he himself puts it, "It is in the first place a method of discovery rather than of proof;—a method reaching no further than a tentative formulation of laws; for organising the more particular under the more general; for interpreting the generalised observations which every great observer of human nature forms for himself, and by this interpretation making some advance towards their organization. "It follows from this that the book is predominantly descriptive in nature, and in this field it must be said that the author has accomplished great work, one that will be of almost indispensable value to future students of the various emotions.

The book is really a study of the emotions rather than of character, and so we have to pay special attention to what the author has to say concerning them. As is well known, he formulated some years ago a special conception—it can hardly be called a theory—of the emotions, and the most novel part of the present work is the way in which this conception is expounded and elaborated in detail. He rejects the usual sense of the term in which it is taken to express a certain degree of elaboration of the affective aspect of the mind, and adopts a much wider definition in which the conative, affective, and cognitive aspects are all represented. "'Emotion' for us will connote not feeling abstracted from impulse, but feeling with its impulse, and feeling which has essentially a cognitive attitude, however vague, and frequently definite thoughts about its object." He distinguishes, none the less, between an emotion and the entire system to which it belongs. It is the part of the system that is present in

consciousness, there being two other parts that are not; namely, the processes connected with it in the body, and the executive part concerned with its outward expression and modes of behaviour. The three main primary emotions are fear, anger, and disgust; other are curiosity, joy, sorrow, self-display, and self-abasement. The four emotional systems of anger, fear, joy and sorrow have an innate connection not only with one another, but also with every other primary system. Most of the book is taken up with a very detailed study of the emotions just enumerated, and in this study the author insists on the functional point of view, constantly enquiring into the dynamic aspects and tendencies of the emotion under consideration. This is perhaps the only respect in which it could be seen that the book was written within the last forty years.

Mr. Shand's view of the relation between the emotions and the instincts has led to an animated controversy with Dr. McDougall, published in the Proceedings of the Aristotelian Society for 1914-1915. According to the latter writer, every emotion has a corresponding instinct, and is merely the affective aspect of this instinct. Mr. Shand, on the contrary, holds that there are vastly more instincts than emotions, that a given instinct may enter into several different emotional systems, and that each emotional system may at various times, and according to its needs, make use of almost any number of different instincts. The reviewer is unable to determine whether these different points of view have any further implications than a difference in the definitions adopted by the two writers. McDougall obviously employs the term instinct in a much more comprehensive and inclusive sense than Shand does.

In the discussion of this interrelation there occurs, by the way, the following suggestive passage: "There are no fears so intense as those which arise in situations from which we cannot escape, where we are forced to remain in contemplation of the threatening events. There is no anger so intense as when the blood boils and all the sudden energy that comes to us cannot vent itself on our antagonist. The arrest of an instinct is that which most frequently excites the emotion connected with it; and therefore we feel the emotion so often before (or after: Reviewer) the instinctive behaviour takes place, rather than along with it." This seems to after-shadow the modern views on intrapsychical conflict and abreaction.

Another conception peculiar to the author, first propounded in 1896, is that regarding the sentiments. Sentiments, in the author's sense, are "those greater systems of the character the function of which is to organize certain of the lesser systems of emotions by imposing on them a common end and subjecting them to a common cause." A constant conflict seems to go on between the organizing tendency of these sentiments and the tendency of the constituent emotions to achieve freedom and autonomous action, a conception quite in harmony with the modern views of "complex-action," although Shand's "sentiments" are far from being synonymous with either "complexes" or "constellations" in our sense. The implications that follow from his conception of the sentiments, and the importance he attaches to it, are well shown by the following interesting passages. "The result of the modification which the systems of the emotions undergo in man, and especially the multiplication of the causes which excite and sustain them, is (1) to make man the most emotional of animals, and (2) to render possible the debasement of his character. For that which is a condition of his progress is also a condition of his decline,—the acquired power of ideas over emotions, and the subsequent power of each indefinitely to sustain the other. Hence the existence of the emotions constitutes a serious danger for him though not for the animals, and the balance which is lost when the emotions are no longer exclusively under the control of those causes which originally excite them can only be replaced by the higher control of the sentiments. There are then three stages in the evolution of emotional systems; the first and primitive, in which they are under the control of the stimuli innately connected with their excitement, undergoing a certain change through individual experience, but not radically altered; the second, in which they become dangerous and independent systems; the third, in which they are organized under the control of the new systems which they are instrumental in developing." "There are three principal stages in the development of character. Its foundations are those primary emotional systems, in which the instincts play at first a more important part than the emotions; in them, and as instrumental to their ends, are found the powers of intelligence and will to which the animal attains. But even in animals there is found, some inter-organization of these systems, or, at least, some balance of their instincts, by which these are fitted to work together as a system for the preservation of their offspring and of themselves. This inter-organization is the basis of those higher and more complex systems which, if not peculiar to man, chiefly characterize him, and which we have called the sentiments, and this is the second stage. But character, if more or less rigid in the animals, is plastic in man: and thus the sentiments come to develop, for their own more perfect organization, systems of self-control, in which the intellect and will rise to a higher level than is possible at the emotional stage, and give rise to those great qualities of character that we name "fortitude," "patience," "steadfastness," "loyalty," and many others, and a relative ethics that is in constant interaction with the ethics of the conscience, which is chiefly imposed upon us through social influences. And this is the third and highest stage in the development of character, and the most plastic, so that it is in constant flux in each

of us; and the worth that we ascribe to men in review of their lives, deeper than their outward success or failure, is determined by what they have here accomplished."

We have given some indication of the positive side of the book, one which deserves great praise for both its matter and style. On the negative side we have to remark on the following important omissions. As was mentioned to start with, no acquaintance whatever is shown with either the methods or findings of what may broadly be called medical psychology, the only psychology that has at its disposal the material on which a science of character could be founded. That the important work of Klages on characterology is not considered may be accounted for by the fact that there is not a single German reference given in the whole book. In the second place, the genetic point of view is almost completely overlooked, one of cardinal importance in such a field. Thirdly, the whole subject of the unconscious is treated as non-existent. It is a complete misnomer to entitle a book on descriptive psychology "The Foundations of Character" when no notice whatever is taken of that region of the mind where the very springs of character take their source, and where the most fundamental features of character are to be found. Last, but not least, is the absence of any study of the sexual instinct and emotions, surely of cardinal importance for any investigation of character. Apart from the general contributions made by this instinct to character, one thinks of such clearly-cut pictures as the masochistic, voyeur, and anal types of character.

An inadequate index closes an unsatisfactory, though in many respects valuable, book. We note no fewer than twelve references to "Seneca," but none to "sex" or "shame;" sixteen to Hudson, but none to Freud, Janet, Prince, Adler, or Klages. ERNEST JONES.

AN INTRODUCTION TO SOCIAL PSYCHOLOGY. By William McDougall. Published by John W. Luce & Co., Boston, 1910.

Although this book was published a few years ago, nevertheless it seems sufficiently important to the reviewer to have it brought prominently before psychopathologists.

In the introduction McDougall reminds us that the instincts are the prime movers, the mental forces, the sources of energy, the springs of human action, the impulses and motives which determine the goals and course of all human activity, mental and physical. These instincts, being the fundamental elements of our constitution, must be clearly defined, and their history in the individual and the race determined. For this purpose, comparative and evolutionary psychology is necessary, for the life of the emotions and the play of motives in mental life are the least susceptible of introspective observation and description. "The old psychologising," says McDougall, "was like playing 'Hamlet' with the Prince of Denmark left out, or like describing steam-engines while ignoring the fact of the presence and fundamental role of the fire or other sources of heat." A knowledge of the constitution of the mind of man is a prerequisite for any understanding of the life of society in any or all of its many aspects. And this applies to psychopathology. I venture to assert that had certain individuals read and digested a book of this sort it might have been a prophylactic against an exclusively sexual conception of human conduct.

The work is divided into two sections. Section one deals with the mental characteristics of man of primary importance for his life in society, while section two is concerned with the operation of the primary tendencies of the human mind in the life of societies. The successive chapters of the first section take up in order the following questions: the nature of instincts and their place in the constitution of the mind, the principal instincts and the primary emotions of man; some general or non-specific innate tendencies, the nature of the sentiments and the constitution of some of the complex emotions; the development of the sentiments; the growth of self-consciousness and of the self regarding sentiment; the advance to the higher plane of social conduct; and volition. In the second section the author considers the reproductive and the parental instincts, the instinct of pugnacity, the gregarious instinct, the instincts through which religious conceptions affect social life, the instincts of acquisition and construction, and there is a final chapter on imitation, play and habit.

McDougall dividends the instincts into specific tendencies or instincts and general or non-specific tendencies. He calls attention to the abuse of the term "instincts" and himself defines an instinct as an inherited or innate psychophysical disposition which has the three aspects of all mental processes: the cognitive, the affective and the conative—or a knowing of some object or thing, a feeling in regard to it, and a striving towards or away from that object. "The continued obstruction of instinctive striving is always accompanied by painful feeling, its successful progress towards its end by pleasurable feeling, and the achievement of its end by a pleasurable sense of satisfaction." He reminds us that "the emotional excitement, with the accompanying nervous activities of the central part of the disposition, is the only part of the total instinctive process that retains its specific character and remains common to all individuals and all situations in which the instinct is excited." We may experience the emotional

excitement and the impulse to the appropriate movements of an instinct or the re-excitement of an instinctive reaction in its affective and conative aspects without the reproduction of the original idea which led to its excitation. Pleasure and pain but serve to guide these impulses or instincts in their choice of means towards these ends.

One of McDougall's important conclusions is that "each of the principal instincts conditions some one kind of emotional excitement whose quality is specific or peculiar to it, and the emotional excitement of specific quality that is the affective aspect of the operation of any one of the principal instincts may be called a primary emotion." This is McDougall's definition of emotion.

McDougall then takes up for discussion and analysis the principal instincts and the primary emotions of man which include the following: the instinct of flight and the emotion of fear; the instinct of repulsion and the emotion of disgust; the instinct of curiosity and the emotion of wonder; the instinct of pugnacity and the emotion of anger; the instincts of self-abasement (or subjection) and of self-assertion (or self-display) and the emotions of subjection and elation (or negative and positive self-feeling); the parental instinct and the tender emotion, and such other instincts of less well-defined emotional tendencies as the instinct of reproduction (with sexual jealousy and female coyness), the gregarious instinct, the instincts of acquisition and construction; and the minor instincts of crawling, walking, rest and sleep. McDougall denies the existence of such instincts as those of religion, imitation, sympathy and play.

There then follows a consideration of some general or nonspecific innate tendencies or pseudo-instincts which are not specific instincts with special accompanying emotions, and this leads to the analysis of sympathy or the sympathetic induction of emotion, suggestion and suggestibility, imitation, play, habit, disposition and temperament.

The sentiments are now taken up for analysis and definition. A sentiment, according to McDougall, who accepts Shand's definition, is an organized system of emotional tendencies or dispositions centred about the idea of some object. Among the complex emotions not necessarily implying the existence of sentiments McDougall includes admiration, awe and reverence, gratitude, scorn, contempt and loathing, and envy. Among the complex emotions implying the existence of sentiments he considers reproach, anxiety, jealousy, vengeful emotion, resentment, shame, joy, sorrow and pity, happiness, surprise. The nature and the constitution of the sentiments and the complex emotions comes in for very illuminating analysis. The chapters on the growth of self-consciousness and of the self-regarding sentiment, the advance to the higher plane of social conduct, and volition are to be considered among the best chapters of this very excellent work. The discussion and analysis is very penetrating and clear. It is well worth while presenting the following abstract of the chapter on volition: All impulses, desires and aversions, motives or conations are of one of two classes: (1) from the excitement of some innate disposition or instinct; and (2) from excitement of dispositions acquired during the life of the individual by differentiation from the innate dispositions, under the guidance of pleasure and pain. When in the conflict of two motives the will is thrown on the side of one of them and we make a volitional decision, we in some way add to the energy with which the idea of the one desired end maintains itself in opposition to its rival. The idea of the self, or self-consciousness, is able to play its great role in volition only in virtue of the self-regarding sentiment. The conations, the desires and aversions, arising within this self-regarding sentiment are the motive forces which, adding themselves to the weaker ideal motive in the case of moral effort, enable it to win the mastery over some stronger, coarser desire of our primitive animal nature and to banish from consciousness the idea of the end of this desire.

Volition, therefore, following McDougall, may be defined as the supporting or re-enforcing of a desire or conation by the cooperation of an impulse excited within the system of the self-regarding sentiment. The sentiment of self-control is the master sentiment for volition and especially for resolution. It is a special development of the self-regarding sentiment. The source of the additional motive power, which in the moral effort of volition is thrown upon the side of the weaker, more ideal impulse, is ultimately to be found in that instinct of self-display or self-assertion whose affective aspect is the emotion of positive self-feeling. These remarks are given more or less verbatim.

McDougall next analyzes strength of character which he differentiates from disposition and temperament which are innate. In section two, as stated previously, the author takes up for separate and more minute analysis the family (the reproductive and the parental) instincts, the instinct of pugnacity, the gregarious instinct, the instinctive bases of religion, and the instincts of acquisition and construction. Imitation, play and habit receive separate treatment in the final chapter.

The reviewer can freely recommend this book as one of the best, if not the best book of this sort that has come into his hands. His personal opinion is that it is the best. McDougall presents us with an acceptable and clean-cut classification of the instincts, emotions and sentiments, he accurately defines these terms, he gives the analysis and constitution of these instincts, emotions and sentiments, and

develops the motive sources of human conduct. He adopts many original and novel standpoints. He is an independent thinker. He has here presented us with a book which, because of its clearness and its frank meeting of the problems, is of the utmost value to the psychopathologist and the psychiatrist. In fact the contents of just such a work as this should be the first lesson of every worker in this field. In this way only can he really begin to understand human conduct.

This work should find its place in the forefront of those books which should be read and digested by all workers in any of the social sciences.

For the reviewer it has been a genuine pleasure to read and to review this book and he most heartily recommends it to the reader of these pages. MEYER SOLOMON.

BOOKS RECEIVED

THE THEORY OF PSYCHOANALYSIS. By C. G. Jung. Pp. 133 and Index. Nervous and Mental Diseases Monograph Series, No. 19, 1915, \$1.50.

PSYCHOLOGY AND PARENTHOOD. By H. Addington Bruce. Pp. IX plus 293. Dodd, Mead & Co., 1915. \$1.25 net.

THE INDIVIDUAL DELINQUENT. By William Healy. Pp. XV plus 830. Little, Brown & Co., 1915. \$5.00 net.

HUMAN MOTIVES. By J. J. Putnam. Pp. XVII plus 179. Little, Brown & Co., 1915. \$1.00 net.

THE JOURNAL OF ABNORMAL PSYCHOLOGY

CONSTRUCTIVE DELUSIONS[*]

[*] Read at the sixth annual meeting of the American Psychopathological Association, May 5, 1915, New York City.

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and

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MOST psychiatrists state or tacitly assume that dementia praecox is a disease of a steadily progressive nature, where the first symptom of dementia is a signal for relentless degradation of the patient's mental capacity except in the sphere of the more mechanical, intellectual functions. Yet the experience of every institutional physician denies the universality of this deterioration, and the statistics in any good text book demonstrate that many cases are "chronic" rather than "deteriorating." Woodman[1] has made a careful study of 144 such chronic cases, and shows what a surprisingly large proportion of these develop a good adaptation to the artificial environment of the institution. So far as we know, however, no one has attempted to formulate any definite features of onset which could be taken as a guide in determining the gravity of the mental derangement. In fact Bleuler states categorically that "up to the present no correlation has been discovered between the symptoms of onset and the gravity of the outcome." Kraepelin has split off from dementia praecox a separate psychosis—Paraphrenia systematica—which he timidly defends as a clinical entity apparently because the course is a long one and the deterioration less marked than in dementia praecox. But he gives us no concise prognostic data; in fact one feels on reading his paper that the diagnosis must be made post hoc. This problem is manifestly of equal importance from the social and the scientific standpoint: until we can predict the outcome our treatment must be empiric and palliative; we confess ourselves ignorant of the disease process if we cannot make a prognosis.

[1] R. C. Woodman, N. Y. State Hospital Bulletin, Vol. II, No. 2, 1909.

It is possible to make certain a priori speculations as to prognostic criteria based on classification and what that implies. We know that pure paranoia is not a deteriorating psychosis—that it does not necessarily preclude the possibility of considerable social usefulness—and that it grades off almost imperceptibly into dementia praecox. The features differentiating these two diseases should therefore supply us with data for determining the prognosis. A case undoubtedly, praecox, which shows markedly the differential features of paranoia, should have a proportionately better outlook. In a vague way our

common sense uses this standard when it makes us "feel" that the case will have a long course which shows a relatively well retained personality in conjunction with praecox symptoms. But "feelings" are hardly objective criteria. What symptoms may we make use of? We may say that the praecox patient as opposed to the paranoia has a poverty or inappropriateness of affect, a scattering of thought and a lack of systematization in his delusions. The weakness of will on which Kraepelin lays so much stress may be included, though that can probably be derived from the scattering of thought. What of these symptoms may be analyzed for our purpose? Affect changes and dissociation in the stream of thought are themselves signs of the deterioration we wish to predict; to make use of them we should have at hand some theory as to the relation between their quality and quantity, and that we have not. There remains the content of the psychosis, a definitely objective material with which to work. This is naturally a big problem—almost as wide as insanity itself—and one brief communication cannot pretend to solve it. What we wish to do is merely to put forward tentatively the claim of one type of delusion formation to prognostic value.

Now if delusions are to be an index to deterioration they must in some way hold a mirror to the changes in the personality, repeat them or prefigure them. If we generalize our conception of functional dementia, we can say that one of its most striking features is a destruction of the faculty of appropriate reaction, a loss of what one may term the sense of reality. The patient in direct proportion to the degree of his dementia loses his capacity to recognize the reality of his environment or his relationship to it, and builds up more and more a world of his own in which he lives untroubled by the demands of adaptation. No one who has ever argued with a paranoid will forget how keen a sense of reality he may retain, how logical his arguments are, and how reasonable his delusions appear, if only some one point be granted. With the praecox, however, the opposite impression may be quite as striking. His delusions are bizarre, inconsistent, kaleidoscopic; he has no logical explanation and cannot even state them consecutively. And all gradations from pure paranoia to dementia praecox seem to have corresponding losses in the sense of reality as embodied in delusions.

May we not hope to find in the content of the psychosis some objective criterion as to the degree in which the sense of reality is lost, with all that it implies?

But what takes the place of the sense of reality or what causes it to go? With what tendency of the psychotic individual is it in conflict? The answer is a psychological truism—the indulgence in fancies. Imagination, of course, is essential to every human being, no purposeful action can be instituted without its first being carried out in imagination. Phantastic thinking begins when the subject fails to apply the test of reality to his mental image and exclude it if it be not adapted to realization. If environment or internal inhibitions prevent this realization, however, the craving: lying back of the fancy must be diverted to a more practical channel—the normal solution—or the fancy must persist in spite of its impracticability. This latter process is the germ of the psychosis. But not its development. A certain compromise may be reached—he who digs for gold in his back-yard is not so crazy as he who reaches out his hand for the moon. Nor is the paranoid who chooses to put his interpretation on the surliness of his employer as far estranged from reality as the praecox who recognizes his employer in the person of the physician. The content of the psychosis may then express the relative strength of the two antagonistic factors, sense of reality and fancy, the two factors whose relative importance decide the issue for sanity or insanity.

It is easier to imagine than to act, so no human being is free of this tendency. But what does the normal man do? He diverts these thoughts into channels where fancy has a legitimate place—he writes romances; he imagines himself using an instrument to talk with his friend miles away and invents the telephone; he imagines a better society than the one which galls him, and writes a "Utopia"; above all he theorizes and speculates. According to his age or ability these speculations give us alchemy or chemistry, astrology or astronomy, magic or religion, spiritism or psychology, the were-wolf or psycho-analysis, phrenology or psychiatry, and so on. Now three generalizations can be made about these primitive or elaborated philosophizings: first, they all represent a constructive tendency; second, the degree to which this constructive tendency is exhibited is historically a measure of the cultural development of any age, an index of the development of the sense of reality of the time, that is, the particular speculation is not only accepted as reasonable but has its practical application for the period; and third, the more primitive forms of these speculations are represented in the delusions of insane, particularly dementia praecox, patients. Following a suggestion of Dr. Hoch we have termed these ideas "constructive delusions." As they correspond to what was historically a compromise between reality and phantasy, they should represent a corresponding mildness or severity in the psychosis where they appear. Our observations—far from being extensive—have so far demonstrated this that we feel justified in offering the hypothesis that when such delusions are present one can base a mild prognosis on their presence with a rather specific relationship between the crudity of construction and the degree of deterioration. It must be borne in mind, however, that we make no claim as to the invariable presence of such delusions when marked deterioration does not take place. We hope only to

show that when present this particular form of content may constitute a valuable prognostic guide, as it represents the degree to which the patient has gone in recapitulating the history of his civilization.

It should be understood that we are not describing highly unusual cases; many such have been published. A highly typical one is given by Freud in his analysis of the Schreber case.[2] In this extremely stimulating paper Freud puts forward the claim that all delusions are an attempt at regaining health on the part of the psyche. From a broad psychological standpoint, this is undoubtedly true but the generalization is too wide to be of any practical psychiatric value. Moreover, by choosing for analysis a case which was neither dementia praecox nor paranoia but a combination of the two, he reaches conclusions which are valuable additions to our knowledge of psychotic processes but merely confuse the issue as to the specific mechanisms of paranoia and dementia praecox. In Schreber a profound psychotic reaction corresponded to crude formulations of his fancies, whereas, when he built these ideas into constructive speculations, he became relatively sane and an efficient citizen. If Freud had emphasized the point that this later formulation was more than a vehicle for the cruder thoughts, that it contained components which were potentially of social value, which implied a broader contact with the world—had he done this—then the present paper would be superfluous.

[2] Psychoanalytische Bemerkungen über einen autobiographisch beschriebenen Fall von Paranoia (Dementia paranoides). *Jahrb. f. psychoanalyt. u. psychopath. Forschungen*, Jahrg. III.

The first case we wish to present, John McM., is at present thirty-six years of age, unmarried, a Catholic. For at least nine years he has been objectively psychotic, though, according to his own account his delusional habit of thought began seventeen years ago. He had little education but made the most of it and has read widely (for one of his station) on such topics as socialism. He was always somewhat distant and did not make friends easily. From early childhood he was antagonistic towards his father and brother and, since his mother's death six years ago, to whom he was strongly attached, towards an aunt as well. He has struck both his father and his aunt. His antagonism towards his father is of great importance as a determinant for his later symptoms. When young he feared him, as he grew older disputed his authority and, according to the father, always disobeyed him. He was always shy with women and, as we shall see, his first conflict in the sexual sphere was solved by a psychotic reaction. Once an efficient salesman, for the past nine years he has drifted from one position to another. As he says himself, he lost ambition after he decided not to get married, and concluded he would not attempt to gain worldly possessions, but merely enough to subsist on. His early life showed not so much tendency towards elation and depression as towards imaginative thinking with a leaning towards day-dreaming and "mysteries." Of late years his reading has been confined to sexual topics, as discussed by various quacks, astrology, phrenology, Christian Science, and religion. Although he said he discovered God for himself he never gave up the Catholic religion. Gradually his energy has been so engrossed by these interests that he lost position after position as a result of continually talking of his ideas to his fellow workers or employers. This tendency eventually led to his commitment, but as long ago as 1906 a physician said he was insane. For the past six years he has been cross, stubborn and self-willed so that none of family dared to speak to him. He even left home and took a furnished room by himself. In spite of this evident anti-social tendency he speaks of himself as having been filled during this period with a great hope; he has been looking into the future and content that he will reach the goal and sees happiness in the future. For some months he had talked much of the world coming to an end and said that those who had money should spend it as it would soon do them no good. He wanted every one to divide his money with him as, he said, everything belonged to God. Many people were against him and he wrote letters about this to various officers. It was when he showed some of these to an assemblyman that he was advised to go to Observation Pavilion.

When he arrived at Manhattan State Hospital he was quiet and agreeable, cooperated readily with his examination and seemed to take his incarceration as a matter of course, though he has always had mild arguments to prove that he should be allowed parole. A certain degree of deterioration is evidenced by his failure to make much of an effort in this direction, although such effort would be immediately successful. In his manner he was quiet, occasionally somewhat affected and when talking of his ideas was apt to assume an expression bordering on ecstasy. At no time did he show an inappropriate affect or any evidence of scattering or flight. He could talk quite objectively of his idea. He had had only one hallucinatory experience and even it should, perhaps, be called merely an illusion. "On the 14th of March, 1912," he said "I came face to face with God Almighty. He spoke in a Jewish dialect and was dressed as a carpenter." The patient was in the Cathedral at the time and that night he had a vision of this man, though this may have been just a dream. He also heard Bishop H. speak of the man who had come to prepare the world for the second coming of Christ. The bishop looked at this patient which meant that he, the patient, was the man.

Before detailing his ideas it may be well to outline their general tendency. In his psychosis he

succeeded in fulfilling the wish of the Persian enemy of reality:

"Ah, Love, could you and I with Him conspire
To grasp this sorry scheme of things entire,
Would we not shatter it to bits and then
Remould it nearer to the heart's desire."

By the simple expedient of translating his interest from this world to that of spirits he built up a new Heaven and a new Earth, where he was supreme and his chief enemy, his father, was subject to him. Beginning with astrology he found that his father's sign and his showed different characters, the father's strong in earthly affairs, while the patient's showed preeminence in spiritual qualities. Passing from astrology to the Heavens, he discovered that his father had been Jehovah, while he had been Christ. There had been a struggle between them in which the father had been temporarily successful. But when his father's spirit had entered into a body, he had become subject to Christ. In the Heaven to come, Jehovah was to give way to precedence to Christ, was to enjoy with the Virgin Mary, his mother, a union of love, as much more fervid as it was to be free from carnal features. In extolling this life of the spirit the patient excluded that physical problem which had caused him so much trouble—the adult sexual demand which, in the form of marriage he could not agree to meet nor yet to put out of his mind. At the same time this religious formulation gave him a comfortable ascendancy over his hated rival, his father. But it gives him more than this: he has a mission, he says, he must prepare the way for the new world, the new heaven. This is an objective interest and it is that, we think, which has a causal connexion with his mild degree of deterioration—for he has been what we must regard as a praecox for many years and yet has lost so little of his personality that to a layman he would certainly be regarded as little more than a crank. Where his system fails of having a sane outlet it is of course in the fact that his prophecy has little to do with anything of advantage to others. It is merely a cover for self-glorification.

At nineteen he talked to his friend W. of sexual matters, and, being troubled with constipation and "rheumatism" at the time, he asked the physician who was treating him as to whether he should indulge himself sexually. The physician told him to, but he worried over this advice and went to a priest, who said for him to get married. This he did not wish to do, and so turned his attention to astrology and phrenology, the other subjects which his friend talked of. That this was only a cover for his original sex problem is shown by his conclusions: that he had a weakness in amateness—"the faculty of sexual power," his "concentration" on sexual matters was poor. "If I had more amateness there would be trouble; I am glad I haven't so much. I was always more of a companion to my mother, and when I wasn't with her I went to the theatre with W." He and his father, he learned, had strong faculties of destructiveness; the patient, however, could control his by reasoning; his reasoning was so strong that he could even control his father and settle disputes between father and mother. Phrenology also taught him his intellectual superiority to his father in other ways.

From phrenology he learned there was a time to be born; from this he passed to astrology. His father had arranged that he should be born in the sign of Virgo, which guaranteed his truthfulness and obedience to his father. He explained this by speaking of Adam and Eve disobeying God, from whose sexual intercourse all evils sprang. Manifestly, then, it was his father's arrangement that he should have to abstain from sexual intercourse.

His father was born in the sign Gemini; this is a fighting sign; the father selected this sign himself, by his great fighting power; the sign is not a spiritual one but a worldly one, and shows avarice in great grasping of worldly things. He never thought that his father was so great, until three or four years ago. He wrote a minister, asking him what became of God the Father; he asked another man about religion, and was told how obedient Christ was to his foster-father Joseph. He thought of how disobedient he was to his father, and then decided that his father was the God, the Father, and in the Kingdom of Heaven he was called Jehovah. (Here he identifies himself with Christ). He says about this "I tried to reason myself away from it many times, but was finally convinced"—The father came to this world as John; Jehovah was the patient's father in the other world. In the other world he had a falling out with the father, and now the father has that revenge in his soul. He had some kind of a falling out, a fight; his father, then Jehovah, ruled the third Heaven; one of the twelve, which he says is about the earth, the earth making the thirteenth; this formulation he derived from astrology: the first Heaven Aries, the second Taurus, and the third Gemini, etc.

His father was born in the sign of Gemini, whose symbol is the twins, which means a duel; and people born in this sign have a dual nature; the father had a dual nature; and when the father ruled in the third Heaven as Jehovah, a duel took place between the patient and the father, and the son's spirit was separated from a body and roamed about. After a time the patient's spirit got back into the Kingdom by worrying the father, but he was never admitted in the form of a body. The father and son while still in a body could both create man and woman; the patient then knew all about creation, and was endowed

with all the powers the father possessed, and helped the father to build up that kingdom; but when the patient's spirit was separated from the body his powers became less, so that he could not create a human being. His physical personality was weakened by this, but the spirit of love was increased; the father had carried revenge in his soul since then. The patient was never a ruler of a Heaven, but "I was my father's son—I was next to him—the sons never become rulers unless they win out;" the patient's spirit remained out of his body until he was born into this world; the patient's father came to this world as John, and married Mary McE.; when the father came on earth he placed himself under the jurisdiction of Christ this came about automatically when the father was born.

In the next Heaven the patient will be on the same plane as Christ, but perhaps in a lesser degree. There can be only one father, and he will be under Christ's jurisdiction. Christ will be supreme. He is part of the Trinity; there is one God as three united persons; they agree on everything; Father, Son, and Holy Ghost. These will be possessed of equal powers, but one will be looked upon as the father, and another Son, and another the Holy Ghost. In the new Heaven he will have equal rights and powers with the father.

After the father married two children were born, brothers, the younger being the patient. He says about this that he was born in the usual way, "The spirit entered the womb of the mother from outside, and from the seed of the father, and I was born by the will of the father." Christ was born of Mary through the will of Jehovah—simply the spirit entered the womb and the word was made flesh. When the father lived as Jehovah he created Adam and Eve, "I was simply my father's son and son of Jehovah—perhaps my name was John, which had some great meaning"—Jehovah was the greatest spirit in the universe, but is not now, for when he was born he placed himself under the jurisdiction of Christ; his name is now John, the patient's father. Christ was selected to be the son of Jehovah; he was selected by Jehovah because Jehovah had a great personality; his father arranged all of this, and he even selected the sign that the patient was to be born in. When asked who he is, he said, "I am who I am—When I was positive that I am who I claim to be."

When the patient's spirit was thrown out of the body, it caused Adam and Eve to be created—Eve was a great spirit in the third heaven—the father thought that if he could create two persons, and they were congenial to each other, that Adam's soul would be increased or developed by being in company with Eve. When Adam and Eve were created they were not to have sexual intercourse; they were merely to come in contact by spoken words—love could exist without intercourse; it started all the trouble. To Adam and Eve two sons were born, and the brotherly love that existed turned to fire and hatred. They probably became jealous of each other, and so one deceived the other. At one time he said that perhaps the mother made more over one than she did the other; again, perhaps father and mother might have favored one more than the other; hence jealousy arose; his brother was born in the sign of Capricorn, which ordinarily is a sign which is congenial to Virgo; his brother, however, is a crank and not congenial; the brother is jealous of the patient, because the mother favored the patient.

He did not take his mother's death to heart, as he had expected for two years that she would die. His aunt said that he told her it was a good thing the mother was dead. He says that in the other heaven, Jehovah's wife was Martha, a sister of the Virgin Mary. In this life she was Mary; the father may have had many wives in the third heaven; perhaps his mother's sisters were his wives, as they seem attracted to him. His mother's soul existed before birth, lived in Jerusalem in the time of Christ, and was Mary's sister. His mother was born in the eighth sign and could be trusted with great secrets; his mother kept things to herself. She was both feminine and masculine; that is, she was strong and sociable. In the sign in which he was born they have great spiritual conception, keen, searching and penetrating vision; The symbol is the Virgin, and pride makes them more feminine than masculine, and they are sensitive; he at one time was more feminine than now, which was due to his sensitiveness. The sign of Virgo is the mid-heaven, where love is more intent; there they understand each other, and there is no disagreement. "The magnet of the male and the magnet of the female are attracted, and they agree with each other in words spoken; this is true love, like that which existed between Christ and the Virgin Mother; the Virgin Mother was born in that sign—there's where she got her name."

When he dies the soul of his mother will enter heaven.

In heaven Christ is to raise his mother's soul from purgatory, and she will become the Virgin Mary. A spirit rapping in the house, which began shortly after his mother's death, is her spirit and his guardian angel.

Jehovah was jealous of Christ as a greater spirit, so had him crucified. Joseph was also jealous of Christ because Mary loved him more.

Further ramifications of his ideas are the cruder conceptions that semen is the equivalent of thought, and that thoughts of women cause him to have nocturnal emissions. Semen comes from food; to the sacrament he gives a definitely sexual significance, and it was following communion that he realized

that he was Christ.

At one time he thought he could live, and that he could marry a girl and not have sexual intercourse; because if he got married and had sexual love trouble would arise. He was convinced by what he saw of his friends and every one else he knew, his aunt, his mother and father, that they did not get along well. The Divine Power knowing that this could not be in this world, broke the affections he had for this girl; and he concluded he would never get married. From a worldly point of view he knew that he was a failure; he had failed in all his business. But he did not care for worldly things. When he reached this point he knew that he had a mission to perform, and began to write and preach religion to people who were qualified to understand. He wrote many letters, all dealing with religion, saying that he had to get things ready for the second coming of Christ; that he was the successor of Christ; and that he was to get things in readiness for the union of religion; when there should be one Shepherd and one Fold.

Case 2. The next case differs from the first in that the emphasis in the ideas was laid more on spiritistic and astrological than on religious lines. Another difference in the problems solved by the psychosis is that the personality of the patient was not incompatible with an outlet to the adult sexual demand through the channel of prostitution but a basic similarity lies in the fact that the delusions center around attachment to her father, again a family situation. The patient is an unmarried woman now forty-seven years of age, of whose early life we know nothing. She had applied for aid to a charity organization who, becoming suspicious on the report of a police captain that the woman was a street walker, sent her to the Cornell Psychopathological Clinic for mental examination. She had some petty complaints of not being fed properly where she lived, of things not being clean there and of the women around her being queer. Then she launched spontaneously into her delusional story, needing very few questions to stimulate a fairly complete recital. Throughout her talk she showed no abnormalities in her train of thought. She talked in a quiet way of her "knowledge" but with enthusiasm, smiling frequently but more in a satisfied or sociable way than with any silly expression. There was not a trace of ecstasy in her expression. It would have been hard to say definitely that she had any inappropriate affect. At a later interview, however, she admitted recent acts of prostitution with no embarrassment whatever.

Her psychotic experiences began some ten years ago when she entered into illicit relations with an elderly married man R., in the South. A year before she had met a "mastermind" who told her that she would never be seen in the right light. Everything came as he predicted. Her lover soon lost his sexual capacity and so began to show his power by keeping her under his control but still at arm's length. But she has fooled him for now she has his power. This power was in the form of "influences." When they worked on her she would have a throbbing like a typewriter in her head, and would then be forced to some act. Such acts included affairs with various men and through R.'s influences she also lost many positions. For some time she tried to get him to support her, as it was his "influences" that had ruined her, but he merely called her a blackmailer and had her put out of his office. Soon, however, as the result of visions she learned that her father (who is dead) had become Christ in the other world. It was all his influence that had been acting on her through the medium of R. From Astrology she learned that she had been born under two planets—Jupiter, Influence; and Neptune, Spiritual. Her father's sign was Neptune and he was therefore a spiritual man. Shortly after his death, she had a vision of him floating up towards the moon and then she knew that he was joining her ethereally. She had visions of this Father-Christ.

When we turn to the constructive side of these delusions we find that she regards all her experiences as having been designed by the Father-Christ to give her training, training that would increase her psychic powers. For instance, she said part of her training had been frequent accusations of dishonor with men she never knew. She had to acquit herself of these charges; thus she gained power. Then she found that she did not even need to expostulate. She could defy them, defy the whole world. As soon as she knew she was not guilty she felt power. Things she WAS guilty of, she knew were right for her, because she gained power by these experiences. This was because through them she learned spiritistic facts and knowledge is power. According to her system one mind acts over another by greater penetrating power, though the recipient must be powerful too. Sometimes she found that she had to be reduced by lack of food or other privation to receive influence. Naturally, too, she could communicate with the dead and had many examples of this power to offer. She had learned, also, about the influence of the planets over the human brain and how to learn of conditions which exist for any person—what he should avoid and what to accept. As the patient was only seen for little over an hour the details of her system of ideas could not be obtained but she assured the examiner that she never could tell all she knows about the spirit world. In general, however, she said that all her knowledge was useful to her and she could give it to others individually without effort to herself but that she had no way of giving it directly to the world. If she had a rest and got well connected socially perhaps she might be able to do it. People who had met her casually told her that she had done them good. But she could never tell them about having seen Christ, they don't understand. The egoism of her faith is shown by her

statement that, having met Christ in practical life, she had no more use for any church or ritual. Her great hope was for the future. When she passed away, she was to develop her powers more and when reincarnated was to come back with the big minds of the world. Once she had a vision of herself in some high trees and the "Master mind" told her what it meant. In the future she would have a great mind. She has it now, but the circumstances of her life are such that it is not recognized.

The essential feature of this case, for our purpose, is that we have in this woman a paranoid psychosis of a definitely dementia praecox type which after ten years has shown only suggestive signs of deterioration in her lack of purpose in work, and her dulling in emotional response. This failure to deteriorate seems to stand in definite relationship to her system of ideas. That these have a constructive tendency is shown by the translation of her cruder thoughts into the setting of the occult with the suggestion of propaganda and in their pragmatic value. With her "new religion" she has provided herself with an argument in favor of a life of desultory prostitution and general vagabondage. She was advised to go to a hospital but refused, though she will certainly be committed soon, as it is inevitable that she will run counter to society in some way.

Such cases as these first two are familiar to you all and these have been chosen for this paper practically at random. Any large hospital will provide dozens of similar history whose clinical pictures would serve as well as what we have given. The next two cases represent two special types of psychoses: one a chronic manic and the other a definite praecox with recurrent attacks. Any institutional physician is familiar with the chronically elated patient, who has become a hospital character—a good worker often who seems to be sufficiently repaid for his toil by the privilege of stopping the passerby to expound his ideas. Such a case is usually diagnosed as a chronic manic or a dementia praecox, according to the taste of the examiner.

Numerous works have demonstrated how the symbolism of the modern fraternal organization has grown out of alchemy, mysticism and rosicrucianism. Some centuries ago these symbols were charged with a literal meaning. If a man, however, in the 20th century attaches a similar significance to these symbols he is rightly adjudged insane. For instance, no one in a modern civilization can retain his mental balance and believe in a literal, physical rebirth. The patient whose case we shall now briefly recite had done this. He was observed at only one set interview because it was found that a few questions, apparently innocent, led to the awakening of some cruder ideas to which he reacted rather strongly with the statement that the physician was accusing him of harboring murderous designs which were, as a matter of fact, not even remotely suggested. The patient C. G., is a Hebrew, married, age sixty-one. When forty he had an attack of excitement lasting a few weeks. He was admitted to the Manhattan State Hospital in October 1899 and remained till April 14, 1900 with a similar attack. He was readmitted in April 1901 again in an excitement and has remained there ever since. It is claimed that these attacks were all preceded by a spree. The records of these admissions state that he was excited for some years, apparently with exacerbations, during which he is frequently noted as being delusional and hallucinating. No content is noted so that we cannot give the development of his ideas. He does not hallucinate now. All we know is that for five or six years he was a rather intractable patient, who worked intermittently but that of more recent years he has sufficiently adapted himself to the hospital environment to be granted ground parole which he uses largely to do a considerable amount of quite useful work. Any one who has once talked to him is saluted from a distance with the words—"Pleased to meet you, Doctor!" "Five fingers up!" or "Da liegt der schwarze Hund begraben!" All this is followed by an elated volubility. When asked what "Pleased to meet you!" meant, he said that was the password for entrance to the "Fellowship Lodge" of a certain fraternal order. He produced a match box with the insignia on it of a Grade in the Lodge. With this match box, once off Ward's Island, he insisted that it could get him his bread all the world over and hundreds of friends. He would never have been committed had he not been drunk and forgotten to make use of his signs. The world belongs to the Fellowship of Men. He spoke of his wife's ill treatment of him and then went on to "I am married to the American flag and it will go to the grave with me." This referred, he explained, to joining the red, white and blue lodge. "Five fingers up!" was shaking hands, the clasped hands on his match box. These hands, he said, were those of Moses and the Lord, for Moses was a "Fellowman," which is like the Fellowship of the Father, Son, and Holy Ghost. However, he went on to say that Moses, the Trinity and God were all a dream; Israel and the High Grade are real—the High Grade is the Lord. G. stands for God and he belongs to the G Lodge, therefore he belongs to God's Lodge. But he has a uniform of the High Grade at home, so he must be the High Grade himself. By using the symbols of his order in this way he disposes of his wife who has not treated him well, identifies himself with God (while he abolishes the regular God) and endows himself with the supremest power in a Lodge which he regards as omnipotent in the world. Another group of his ideas refer to his race. He has been put on Ward's Island as a result of the great struggle between Christians and Israel. But Israelites are the head of the Fellowship Lodge, so all Christians must follow him, the patient.

This is the explanation of "Da liegt der schwarze Hund begraben!" He is like a dog in the house and

he is considered to be nobody, a corpse on the floor. But he really lies here buried—the missing man of the tribe. Once off Ward's Island, therefore, he will come to life as head of Israel, and head of the omnipotent Lodge. Patiently, hopefully, he awaits rebirth. The egoism of these ideas is obvious. Wherein do the constructive factors lie? Simply in this: this expansiveness could easily be formulated directly. But he does not do so. His ideas include two objective and potentially altruistic interests his lodge and his race. He is interested in them; in fact one can probably say that it is just in so far as he is insane that the selfish determination for these interests become manifest.

We have also studied two cases of recurring excitements in patients one of whom was an evident praecox, the other of doubtful classification. Both showed queer behavior during their intervals with mild indications of their ideas which gained freer expression in their attacks. These episodes showed, of course, markedly a typical feature in a tremendous amount of queer behavior and more excitement than true elation. As there was nothing in their ideas essentially different in principle from the cases already quoted, they need not be further detailed.

The last case, R. E. O'M., is one of no less interest from a formal standpoint than from a psychological one, while the trend presented is so copious that it can well serve as a resume of the cases we have just recited. He is now an unmarried man of thirty-three, and although he was diagnosed dementia praecox ten years ago is now earning \$1200 year as a stenographer in the government service. His father was an Irishman banished from Great Britain because of his political agitations. His mother was a French woman of Huguenot extraction who died of cancer before the patient reached his teens but to whom he was greatly attached. He has a sister two years older than himself, given to hysteric attacks, for whom his love is "Platonic," to use his own term. Although of more than normal intellectual vigor, judging by his success in school work, he probably always had a psychotic tendency. At seven or eight he saw a vision of God in the clouds; at puberty he masturbated considerably and used to stand before the mirror and "hypnotize" himself. In the fall of 1903 (then twenty-one) he was staying at a summer hotel where he met a girl who made love to him, when he began to have frequent emissions. Being caught together out in a storm, in an effort to protect her his hand found its way to her hair. He was greatly upset. On returning to the hotel he endeavored to avoid her, and, his father being slightly ill, he became convinced he was going to die. A month or so later he moved from Baltimore, which had been his home, and began employment with the government in Washington. He had more emissions and immediately developed hysterical heart trouble, and from his retrospective account also had ideas of people influencing him. A year later (June 1905) a frank psychosis with considerable manic flavor developed. Secretary of State Hay had died, and peace negotiations between Russia and Japan were in progress. He got the idea that he was to succeed Hay (whose face he saw in the clouds) and that he would make peace between the nations. The accompanying excitement was so intense that when he came to see his father in Baltimore the latter had him committed to the Sheppard and Enoch Pratt Hospital.[3] He remained there for one year and eight months, during which time his mood showed great variability. At times he would be elated, again depressed or anxious, often silly with irrelevant laughter. Towards the end of his admission he had quite long intervals when he appeared normal. Eight months after his discharge he began to have monthly attacks lasting from one to two weeks. At the beginning of 1911 he came under the observation of one of us at the Johns Hopkins Hospital Dispensary. His case was followed minutely for some months when the following extraordinary clinical picture was seen to develop with regular periodicity. His interest would gradually withdraw from his work and an abstracted, "dim" look come into his eyes. He ceased to sleep either day or night. Ideas, in the intervals latent, would become more insistent, and he talked of them in a distracted way with occasional silly laughter and some scattering. At the same time he would show considerable physical unrest: rocking in his chair, nodding his head, sucking with his lips, and making occasional grimaces. A sharp word would, however, bring him to reality and normal behavior and speech, or the same result could be obtained by his own volition. In fact sufficient effort from either without or within could, it was several times demonstrated, postpone the further development of these symptoms for several days. Inevitably, however, control over his psychosis was lost. He became more excited; was assaultive till chastised by his father, after which that symptom no longer appeared; he would give none but irrelevant answers to questions; he masturbated openly. In the next phase he refused to answer questions altogether, sat in a chair by the window, rocking and tapping the floor or wall with his feet; reading a paper in a whisper or tearing it into scraps; spitting on the floor, his clothes or the window pane and then drawing pictures with his finger on the wet glass; intermittently chanting the same air over and over again with words, totally indistinguishable, except for the name "Jesus Christ" apparently interpolated irregularly in the course of the song. All this time he wore a silly smile occasionally breaking into a low chuckling laugh devoid of real emotion. In a short time his clothes and his immediate surroundings were in a state of horrid filth from his saliva and the torn papers. Towards the end of the attack he ceased making any sounds, simply rocked, spat and grinned. He would often pass twenty-four hours without emptying his bladder, though he never wet nor soiled himself. Few psychiatrists would have required more than a casual examination to give a diagnosis of hopeless deterioration, if they saw the patient only in the latter stage of one of these attacks. Yet in from seven to fourteen days after the first onset he would go

to bed, sleep well, and in the morning appear perfectly normal and resume his efficient work. And this story had been repeated regularly once a month for four years! When normal his memory was hazy for the external events occurring during his attack, corresponding with his objective lack of contact with his environment, but the recollections of his ideas showed that he had been living in a perfect riot of fancies. The inference from this is inevitable that what we regard as a "Trendless praecox" or a taciturn dement may simply be one who does not choose to talk and not necessarily a vegetative wreck with neither delusions nor hallucinations.

[3] For the privilege of using observations made on this patient at the Sheppard and Enoch Pratt Hospital, we wish most heartily to thank the Superintendent, Dr. Edward N. Brush.

His ideas were found to be no less interesting than his formal picture. In fact, if the theory we are now advancing be correct and we had had it then, we believe it would have been possible to state at the time of his first attack that his psychosis would not show rapid deterioration; we might even have gone further and predicted that he would reach some such stage of relative sanity as he now enjoys. He has presented three types of ideas. The first is crude expressions of bald sexual fancies; the second is transitional in that—as many praecox patients do—he gave these ideas a religious or philosophical setting, but in the hallucinations and delusions embodying them, still retained his personal connection with the fancies. For instance, he identified himself with Christ, or he suffered from psychological influences exerted by others on him. These two types occurred only during attacks. The third type represented the real constructive tendency, during his "normal" intervals when he objectivized these ideas in the form of speculations as to the origin of life, the laws of society, religion, etc. The second type—the transitional—represented reciprocally two tendencies: in the psychosis it showed his constructive, healing capacity, while the development of such fancies, as allied himself directly with his speculations when "normal," was invariably the signal for another attack, the severity of which was in direct proportion to the crudity which his formulations reached. The complexity and number of his theories when going about his work was tremendous, which could be partially accounted for by his omnivorous reading. He read all sorts of historical, occult, scientific and philosophical works, the material of which he absorbed only in so far as he could weave it into the fabric of his depraved speculations. This colored his transitional ideas as well, for in each attack he would have a new dramatization of his fancies determined by what he had just been reading. To present these ideas with anything like completeness would take hours. We must be content, therefore, with a few fragmentary examples.

The more important of his crude ideas were: His trouble was caused by loss of semen (his attacks were always ushered in by emissions), to prevent which he sometimes put rubber bands around his penis; numerous homosexual fancies, he was a woman, he had a vagina, there was a maiden head in his forehead which was operated on to cause him to lose semen; different people made immoral proposals or had designs on his virginity. These people he all identified directly or indirectly with his father. Finally there was an idea that his mother's marriage with his father was not right, that he was not his father's son, and that his father was inimical to him. He talked of killing different persons whom at other times he identified plainly with his father. During an attack he assaulted his father; not infrequently he would take his father's picture from the wall and spit on it. The relations between his father and mother were adulterous, he claimed.

If we now take the crude homosexual fancies and study their first elaboration we find that he had many ideas about eunuchs. They worked on him by psychological influence. The eunuchs, who could control sun and moon, influenced him through them. Once he had a vision of the sun approaching him with which he was physically connected; the vision would disappear if he lost his virginity. These influences when referred to himself were agencies causing loss of semen, so that he would become a eunuch himself. At the time of his heart attack and later he thought there was a snake around his heart. This was a man who had turned himself into a snake in order to incorporate himself into the patient's body. His religious fancies apparently began with his delusion that he was Christ and in connection with this we find he had the theory that Christ was a virgin. One setting of his "psychological influence" experience, when he was in bed in one room and eunuchs were influencing from the next. he duplicated by saying he was Jesus Christ in one room and God was in the next. He explained after one of his attacks that his attention was fixed on the windowpane on which he spat because there was a flower there. During an attack he was heard to say something about the struggle of men against being raped by ions and flowers. In these primitive elaborations we find an effort at distortion, a getting away from the absolutely crude and that the added elements which cause this distortion are in the form of ideas which imply a certain degree of philosophizing. The truly constructive delusions appear when he has ceased to dramatize these theories with himself as the hero and treats them objectively. We then find that eunuchs are very important people in his philosophy (the medium of their power we shall see shortly). All women are eunuchs because they have no testicles. There is no difference between men and women; if a woman is stronger than her husband, he takes on her qualities. In India men suckle the

children. He says that this is a well-known fact. A person could change himself into a cancer and so get into another's body. This is perhaps an echo of something he had read of Ribbert's theory of neoplasms. Another pseudoscientific theory concerns a method of reproduction which could be developed, he thought. If a beautiful, strong man reaches his normal growth, all life above that is moulded by his ideals. He can develop within himself another personality which may be divorced from his body. Immaculate Conception takes place this way. An argument he had in favor of this view was prenatal influence and the strong influence a woman's belief is supposed to have on pregnancy. Eunuchs control the sun and moon. The Jews have a secret process of eunuchry; they have a way of inserting an instrument (a drawing of which he made, showing distinctly phallic features) by psychological means into the glands or bodies of men, thus cleaning them out. The eunuchs of the Romans used to cure their fellow countrymen of snakes growing around the heart by ingratiating themselves into persons, thus displacing the snakes and killing them. The government has many eunuchs in their employ. The influences of these men are malign or beneficial. They can injure enemies of the government or the government can incorporate them into bodies of other men to save the latter. All cardinals, most diplomats and many missionaries are eunuchs. The psychological influence exerted by such individuals may cause a loss of blood to their victims or they may use this power beneficially. The Romans, for instance, put blood of crucified people into the hands of eunuchs, who impregnated it by psychological influence into others. This would save their lives and eventually save the nation.

The ideas we have mentioned showing rivalry with his father, apparently in relation to his mother, were largely elaborated in political and religious disguises in their transition states, which in turn led to an objective interest in politics and religions. He spoke of killing the President which may be taken as a disguise for killing his father since he often claimed that his father was this or that ruler. He also spoke of killing one of his employers. He was prone to speak of his father as Edward VII. His envy of this situation of authority was shown when he once told the physician that his face was suspended in the face of the physician who was a King of England. But not the real King, he added, Edward VII was the real King. Again he said that he was Robert Emmet and the physician was Lord Norbury, the judge who convicted Robert Emmet, after whom the patient was named. In that role the physician told him it was all up, that there was no more Irish race. (It must be remembered that his father was a Fenian.) A fruitful source of speculations about international politics was found in the transitional ideas he expressed about the extraction of his parents. Beginning with his cogitations about the friction which actually existed between his parents, he ascribed this to their differing nationalities and religions. This led in turn to his fancying that on both sides his blood was drawn from many sources. He was particularly fond, for instance, of identifying his father with Hebrews, or Chinese; his mother with Romans, Italians or Spaniards. His original interest in the union (or disharmony) of his parents was easily transferred to this international setting and most of his attacks were heralded by dramatizations of political or international situations with which he was intimately connected. This was true of his first attack when he had an idea that he was to succeed Secretary Hay and make peace between Russia and Japan (his mother and father). On recovery these fancies were objectivized into a most intense interest in diplomacy. He knew the history and achievement of every diplomatist in Europe, though of course his data were always being distorted to fit with his insane theories. Intermarriage, for example, was the cause of political trouble. He developed the ideas as follows: When an Irishman marries one of another race a confusion of races results; this was what took place in the tower of Babel; this is what causes disunion between states. He elaborated, too, on popular associations of certain customs with certain peoples. Gypsies, it is popularly supposed, frequently abduct children. With the patient this became an elaborate theory about an Egyptian custom or Egyptian influence. The Egyptians, he said abducted children and brought them up as their own acquiring a sinister influence over them because of the belief the children had that these adults who were their guardians were their real parents. In one attack he spoke of his father as "An Egyptian influence." This is plainly the same idea as he put into another form when he remarked that he would be all right if he could become English. When in his free intervals, he made it a practice sedulously to cultivate English people.

This undercurrent of rivalry with the father came out in a religious disguise as well. His first attack when he was for many months interned he described as a religious mania. By means of identifying himself with Christ he dramatized both his subjugation and defiance. He went through many crucifixion experiences; said he was commanded by God. On the other hand he said Christ was a virgin and retained his virginity in order that he might discover the secrets of the elders. For this reason he was crucified. The crudest expression he gave of defiance in a religious form was when he said "I was two persons in one—God and Jesus Christ. God was damned." The more constructive tendency was shown by his fasting. This was due to an experience of some duration when he was translated back to the first century, was in a convent (sic!) and was tempted by the devil to eat. His fasting, he claimed, saved the other patients. His most constructive delusion was that all the churches would come together and then there would be only one church. During his first attack this was his "prophecy," during his saner intervals there were endless ramifications of this idea which are too tedious to recite. It is important to note as evidence of the purely psychotic character of his ideas that he has never been either religious

in his spirit or in action a propagandist.

Perhaps the most luxurious fancies this patient evolved were around the theme of semen. We have seen that his emissions were his constant worry, an increase in their frequency heralded an attack and he was convinced that if he could but retain this secretion he would be permanently cured; nay more, if he could retain enough he would grow to be like the giants of old. Whenever he had an emission he felt on waking a pain in his head and could never get totally rid of the idea that this was cancer. In his attacks the cancer was the result of a homosexual assault and in his intervals he elaborated theories as to the origin of cancer; it came from friction, therefore coitus could produce it, it might be the result of adultery or cancer of the breast could come from a man rubbing his penis on the breasts of a woman; the cancer germs might come from semen if one believed in cancer and in germs. Life both as vital force and in the biological sense he identified with semen. Psychic activities too had the same origin which he explained thus: food taken into the mouth goes into the stomach and becomes chyle, chyle passes to the scrotum, thence to the spine and brain. Brain power is in direct proportion to the amount of semen retained. We see now why eunuchs had such power according to his philosophy. By childish reasoning, since they could not have emissions, their semen must be retained. He spoke of psychological influence in these terms: "It is the transformation from the moisture state of the life principle to the moist electric state of warmth and its transference from the central ducts and glands to the head and being thrown out of the head in waves from the top of the head and eyes. It redounds to the other person's good. Have an eunuch near you—it tends to make semen go to the head and gives the mental mouth something to think of. It could be used in a baleful way if one had will power over another person like hypnotism—(Svengali and Trilby)—In hypnotism the will goes on the same lines as psychological influence." The Jews, he said, lay around temples so much that their life had to go into sensuality or wisdom and it mostly went into wisdom. Continual seminal losses, he claimed, would lead to a change in personality. "Life," he said, permeated nature, it could not be lost. Wind was thus identified with it: "life" goes on a sheet (from an emission), the sheet is washed and the "life" passes to the water, then is taken up by the air and breathed. Thus he suffered both immediate and remote effects from emissions. The first result was to make him incapable of work; by breathing in the "life" later on he became a degenerate. Wind or the spiral movements of air was another origin of life. Wind is a spirit, in defence of which he quoted the Greek pneuma. The words wind and word are the same, the former being derived from the latter through *wird*. (Cf. "In the beginning was the word," or "The word was made flesh"). A cyclone is an effort hampered by civilization of what the world was originally. Life began as a spiral movement of air. Wind as the origin of life could be duplicated by mechanical methods or eunuchry. The sun he claimed was an accident. Men lived for centuries without it, till an accident, internally, led to vital forces being emanated and that was the origin of sun. The accident was the cutting of some man's testicles.

Now what was his further course? We have seen that in his attacks he expressed resentment against his father's domination. At the beginning of one of them, for instance, which he said was brought on by "Egyptian influence," he had a dream of an old Hebrew play of father and son. In this play they were trying to make him return to the old situation of bondage to his father. This bondage was an actuality. Owing to his monthly attacks he could hold no regular position and so worked for his father. The latter gave him no money except occasional small silver but bought for him clothes or anything else he might need. A psychotic man of nearly thirty, with a feminine character, he was hopelessly dependent on his father. It is small wonder that he sought relief in recurring psychotic episodes. But a change came. On May 12, 1911, his father died suddenly of heart trouble. The patient was beginning to go into an attack at the time but pulled himself together, managed the funeral three days later, got his sister home, who had a hysterical attack at the grave, and then proceeded to indulge in his postponed attack. The sister was unable to care for him so he was sent again to the Sheppard and Enoch Pratt Hospital. In a few days he recovered. He was then talked to, told that this baleful relationship was over and that there was no longer any reason for his having attacks. With the exception of one attack at the beginning of 1912 he has had none, and seems to be able to maintain the mental equilibrium that previously characterized his intervals. For two and a half years he has been employed in the Customs House, Baltimore, a position which he secured by competitive examination, and has received an advance in salary from \$900 to \$1200 a year. He was recently written to and replied in exceptional literary form detailing more of his ideas. They seem to be essentially similar to those held four years ago. One may be quoted. A favorite "scientific" method with him has always been (from boyhood, he said) to divide up or distort words so as to get at their true meaning. This is now his explanation of the word "cancer."

"You may remember the origin of the word 'cancer' was once the topic of our meeting and strangely this matter has kept revolving itself in my mind ever since. My new solution is 'Kahns' and 'Ur.' You know there are a good many people named 'Kahn' and as probably you have noted in the Bible allusion to the ancient race of the name 'Ur.' Now, you can place what construction you will on the combination. There are several; here is one: I have heard it stated that the word 'Ur' originally meant 'wife' hence, from our point of view the solution is easy, Kahn's Ur or Kahn's wife, but what has puzzled me is what

she is doing in so many people.

"Here's another: Signifying the overcoming of the Jew by Ur or Kahn by Ur (Kahn by 'er) much on the same principle as the words 'Spanish-American' and 'Graeco-Roman' are used with reference to the late 'unpleasantness' and the ancient one.

"Here's another: Simply meaning that Kahn is not a Jew at all but simply an Ur.

"So you see I have not altogether forgotten some of the topics of our meeting."

If our claims be allowed we should be able to make some deductions of value to psychiatric theory. The first is an explanation of scattering of thought. We find that, in all our cases showing constructive delusions, the utterance of these highly elaborated fancies is not accompanied by scattering. On the other hand it is an every day experience that a dementia praecox patient may show no scattering when conversing on indifferent subjects but that his train of thought loses logical sequence when he launches into his ideas. These findings may be reconciled by studying the reaction with types of ideas such as the last patient showed. In his intervals he was (and is) continually busy with delusional thoughts but of a constructive character, but was never scattered as long as these were alone present. As soon, however, as an attack commenced and cruder ideas appeared he became scattered. Where were these crude ideas in the intervals? They were represented in his constructive delusions it is true, but in their native form they did not appear. The cruder fancies must therefore have been in the unconscious during his intervals. Now actual verbatim records show with him that these crude ideas did not come to expression in logical sequence but that each appeared in response to an idea previously in his consciousness which was a distorted formulation of the crude fancy next to appear. His utterances during these attacks would have a logical sequence if they were translated into terms of the underlying crude ideas. The scattering, therefore, was due to the fact that his utterances were a mixture of crude and elaborated fancies. Had they been entirely one or the other there would have been no scattering. During his intervals he dealt with objective fancies and was logical. As these fancies, however, could be easily demonstrated to be derived from the unconscious crude ones, which appeared during his attacks, we are safe in assuming that one factor at least in the production of an attack was the lifting of some inhibition which kept the cruder ideas from entering consciousness except in a form in which they could be objectively viewed and so logically arranged. Scattering of thought therefore arises from the intermittent action of this censor or from an incomplete abolition of the inhibition allowing varying formulations of the crude ideas to gain expression which have no logic surface connection. If entirely done away with, of course, the latent ideas appearing in perfect crudity would have a logical connection. The content of consciousness is what is within the sphere of introspection. We can therefore say that the praecox who is scattered really does not know his own ideas. This is, of course, an every day experience for those who examine such patients. A suitable case left to himself will give expression to a limited number of delusions which he does not correlate. A few suggestive questions, however, will educe a mass of delusions, which when pieced together demonstrate the logical unconscious ideas that give rise to them. If such a patient be asked "What are your ideas?" he can give no reply. Ask him, however, if any one is mistreating him and you will start a train of thought in which one fancied insult leads to another or to delusions which do not represent mistreatment at all. On the other hand approach a patient with constructive delusions with the same question as to his ideas and he will produce a theory of the universe, often with a chronological account of how these ideas developed. He is insane in that his fancies do not reach an outlet in action being an end in themselves; but he is sane in so far as he keeps his ideas within the range of introspection and has not allowed them to become autonomous. The inferences from this to the laws of normal association are obvious.

The second point is really a historical one. Psychiatrists are often asked, "Was Joan of Arc crazy?" "Was Saint Louis a dementia praecox?" In an endeavor to answer such questions wise books have been written detailing the "psychoses" of historic or religious leaders. There is probably not a single delusion expressed by any one of the patients whose cases have just been recited that is not duplicated or paralleled by the belief of savants of a few centuries ago or the uneducated of to-day. The last patient said "All nature is artificial, man made it all. All the world would disappear, if man lost the power of reproducing. The reproduction of nature by man is founded on faith—constant reiteration and association with a thing will produce that thing." Is this not analogous to the working hypothesis of the alchemists? The more sincere among them sought salvation for their souls. To gain this they worked with metals to which they ascribed abstract or moral qualities. Their metallurgy was primarily symbolic, yet they seriously hoped for results by working with symbols. And to what extent of absurdity and crudity did they go? Many of their metallurgic terms were sexual processes. Their "prima materia" was called by the name of many of the secretions or excretions of the body. A whole school—the Seminalists—adhered to the view that the great original substance was semen. Other thought it was hermaphroditic. Paracelsus spoke of the birth of monsters as a result of sodomy. A natural history[4]

written three centuries ago tells of semen being carried by wind. Notoriously there was no limit either to the absurdity or crudity of these conceptions. Were these men—the wisest of their time—insane? Here again we may quote the last patient—"Insanity," he says, "is the elemental human mind left to itself, unimproved by other minds." The last is the important phrase. What minds were there to improve those of the alchemists? What critic was there to tell Joan of Arc that visions and voices were pathological? That was the regulation form of inspiration in her day. Comparative mythology like a comparison of mysticism, alchemy, rosicrucianism and masonry shows that the human mind left to itself will formulate similar ideas. These ideas, however, are modified by the advance of learning as time goes on. The individual whose critical faculty allows him to maintain an idea incompatible with the knowledge of his age and his fellows is insane.

[4] *The Historie of Fouere-Footed Beastes*, by Edward Topsell, London, 1607.

Our last point is a corollary to the claim we have just made. It has been the sport of iconoclasts for many years to discount all religious beliefs as psychopathic. This is not the forum where the problem of science versus religion may be discussed but these cases have certain features which should warn us to be wary of such generalizations. We have seen that religious formulations have been used to embody crude fancies. That does not preclude the possibility of the formulations having an actual basis. A flag may gain its importance to a given individual because it symbolizes for him his native land but that does not prove that the flag has not an existence of itself. This, however, is a matter of logic and not of psychiatry. Let us now grant that all religious formulations have an unconscious origin. But there still remains a wide gulf between patients such as we have been describing and the devout church-goers. The former show in their productions how their religious ideas arise, their egocentric quality is patent, they manifestly are but thin cloaks for selfish wishes. The latter, however, never in consciousness connect their religious formulations with their subjective creations. To the true believer his God is as objective a reality as is the electron of the physicist. Finally, real religious faith has a pragmatic value. Granting it be only a theory it nevertheless produces results in conduct. This is in sharpest contrast to religious delusions. They never lead to sustained effort, they bring with them no social potentiality. They exist for the comfort of the patient alone.

To sum up: We have endeavored to establish the claim that delusions in dementia praecox which takes the form of objective speculations rather than subjective experiences are an evidence of a milder psychotic reaction and hence warrant a prognosis of chronicity rather than deterioration. From the cases presented we argue that scattering of thought arises from a failure to formulate underlying fancies in an objective way; that the insanity of ideas depends not on themselves but on the critical judgment of the age which produces them, and lastly that there are essential psychological differences between creeds and religious delusions.

SOCRATES IN THE LIGHT OF MODERN PSYCHOPATHOLOGY

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"CONSCIOUSNESS had reached this point in Greece, when in Athens, the great forum of Socrates, in whom subjectivity of thought was brought to consciousness in a more definite and more thorough manner, now appeared. But Socrates did not grow like a mushroom out of the earth, for he extends in continuity with his time, and this is not only a most important figure in the history of philosophy—but perhaps also a world famed personage." Hegel.

"When Columbus set sail across the untraversed western sea, his purpose was to reach by a new path, a portion of the old, known world, and he lived and died in the belief that he had done so. He never knew that he had discovered a new world. So it was with Socrates. When he launched his spiritual bark upon the pathless ocean of reflected thought, his object was to discover a new way to the old world of little commonwealths and narrow interests, and he probably died thinking he had succeeded. He did not dream that he had discovered a new world—the world of humanity and universal interests. But so it was; and tho mankind are still very far from having made themselves at home in that world, and from having availed themselves of its boundless spiritual treasures, it can never be withdrawn from their sight, or, the conquest of it cease to be the object of their highest aspirations." Thomas Davidson.

INTRODUCTION

The Hellenic influence upon the intellectual development of the world is infinite. The intellectual force emanating from the sources of Greek art, literature and philosophy permeated thru the ages and have helped to shape the destiny of our civilization. "Except the blind forces of Nature," says Sir Henry Sumner Maine, "nothing moves in this world which is not Greek in its origin." [1.] Without a shadow of doubt, Greek Philosophy forms the firm background of progressive and reflective thought in all its phases and ramifications.

In the history and evolution of Hellenic thought, we find two tendencies of inquiry,—one dealing with the objective manifestations of the universe, and the other directed towards the study of the mind. To the former class belong Thales, Anaximander, Anaximenes, Pythagoras, and others that attempted to discover some principle for the explanation of the natural phenomena. To accomplish this end, mathematics, physics, metaphysics, etc., were resorted to. The other great epoch, which may be termed the Renaissance of Greek Philosophy, was conceived by the Supreme Greek thinker, Socrates, who forms the subject thesis of this paper.

Socrates was the father of psychology and the grandfather of modern psychopathology. He was the first one that attempted to study man from the point of view of subjectivity. In the words of Snyder, "In Socrates, the human mind burst forth into knowing itself as thinking." [2.] And Zeller very thoughtfully remarks: "The interests of philosophy being thus turned away from the outer world and directed towards man and his moral nature, and man only regarding things as true and binding of the truth of which he was convinced himself by intellectual research, there appears necessarily in Socrates a deeper importance attached to the personality of the thinker." [3.] In Phaedrus, Socrates speaks: "I am a lover of knowledge, and in the cities I can learn from men; but the fields can teach me nothing." [4.] Although Aristophanes pictures Socrates in the clouds as preaching natural philosophy, yet there is no authentic record of this.

The source of information regarding the biography of Socrates and his philosophy comes from two authors, Xenophon and Plato. The former portrays him as a moral philosopher and in his book, *Memorabilia*, he seems to eulogize his master. The latter however presents him as a thinker, and it is maintained by many critics that Plato put into the mouth of Socrates his own ideas. It is lamentable that this great philosopher committed nothing of his monumental work in writing.

THE PERSONALITY OF SOCRATES

It is difficult to construct a biographic sketch of Socrates in a chronological and systematic order. He was born in the year 469 B. C. His father was Sophroniscus, a sculptor, and his mother Phaenarete, a midwife. He followed his father's vocation and it is believed that he showed poor skill in the profession. We know nothing of his early intellectual and moral development. Since he was bred in Athens, he most probably received the usual education peculiar to that age. He was a soldier and took part in military campaigns and wars. It is maintained that in military life he displayed considerable bravery, endurance and fortitude. The exact date of his appearance in public arena is difficult to ascertain, however, "in the traditions of his followers he is almost uniformly represented as an old, or as a gray-headed man." [5.]

There are distinctive traits in the personality of Socrates that are worthy of emphasis because of their dynamic import.

He was described as eccentric in his general mode of conduct. He "strutted proudly barefoot along the streets of Athens; he was careless and shabby in his dress; in his manner he was affected and haughty and was subject to ecstatic trances and visions. During these trances he would maintain a standing posture for hours, buried in his thoughts, and was quite oblivious to the external world. There was a celebrated occasion in the camp at Poteidaice, when Socrates was not quite forty; on that occasion he stood motionless from early morning on one day till sunrise on the next, right through a night when there was a very hard frost. When the sun rose he said his prayer and went about his business." [6.] It is also claimed that he would give vent to bursts of anger and fiery passion.

Ever since early boyhood Socrates is supposed to have heard an inner voice, which he called a divine sign. It came to him quite often both on important and on insignificant occasions. According to Xenophon, this voice gave him both negative and positive warnings; however, Plato holds that this voice only exercised its influence in opposing the execution of certain things. "And not only was he generally convinced" says Zeller, "that he stood and acted in the service of God, but he also held that supernatural suggestions were communicated to him, not only through the medium of public oracles, but also in dreams, and more particularly by a peculiar kind of higher inspiration which goes by the name of the Socratic *daimovion*." [7.]

Even by his contemporaries he was regarded as singular and eccentric and his general behavior was ever foreign to his compatriots. Indeed Lelut [(8)] boldly asserts that Socrates was "un fou." Nevertheless "attempts were not wanting to excuse him," so writes Zeller, "either on the ground of the universal superstition of his age and nation, or else of his having a physical tendency to fanaticism." [9.]

Another interesting feature in the life of Socrates is that he married late and that his matrimonial life was far from being happy, and in the words of Schweigler, "He nowhere shows much regard for his wife and children; the notorious, though altogether too much exaggerated ill-nature of Xantippe, leads us to suspect, however, that his domestic relations were not the most happy." [10.] It is also important to note that there was a turning point in the history of his life when he took up the preaching of philosophy. It must be borne in mind that he took no money for his teaching and at the same time he left his wife and children destitute. In regard to this Draper remarks, "There is surely something wrong in a man's life when the mother of his children is protesting against his conduct, and her complaints are countenanced by the community." [11.]

It is also significant that Socrates displayed a certain degree of masochism; our historians tell us that Socrates would deny himself bodily comforts and insist on enduring hardship. Xenophon in *Memorabilia* says: "But they knew that Socrates lived with the utmost contentment on very small means, that he was most abstinent from every kind of pleasure, and that he swayed those with whom he conversed just as he pleased by his arguments." [12.] Again, "Is it not the duty of every man to consider that temperance is the foundation of every virtue, and to establish the observance of it in his mind before all things? For who, without it, can either learn anything good or sufficiently practice it? Who, that is a slave to pleasure is not in an ill condition both as to his body and his mind? It appears to me, by Juno, that a free man ought to pray that he may never meet with a slave of such a character, and that he who is a slave to pleasure should pray to the gods that he may find well-disposed masters; for by such means only can a man of that sort be saved." [13.] And, "He appeared also to me, by such discourses as the following, to exhort his hearers to practice temperance in their desires for food, drink, sensual gratification, and sleep, and endurance of cold, heat and labor." [14.]

Although he condemned *poederastia*, yet he was always fond of the male sex, particularly of the young. This, however, may be explained on the ground that his object was to appeal to the young. Nevertheless, dynamic psychology demands a deeper meaning for such a motive. In this connection it would be interesting to quote Xenophon: "As to love, his counsel was to abstain rigidly from familiarity with beautiful persons; for he observed that it was not easy to be in communication with such persons, and observe continence. Hearing, on one occasion, that Critobulus, the son of Criton, had kissed the son of Alcibiades, a handsome youth, he asked Xenophon, in the presence of Critobulus, saying, "Tell me, Xenophon, did you not think that Critobulus was one of the modest rather than the forward, one of the thoughtful rather than of the thoughtless and inconsiderate?" Certainly," replied Xenophon. "You must now, then, think him extremely headstrong and daring; one who would even spring upon drawn swords, and leap into the fire." "And what," said Xenophon, "have you seen him doing, that you form this opinion of him?" "Why, has he not dared," rejoined Socrates, "to kiss the son of Alcibiades, a youth extremely handsome, and in the flower of his age?" "If such a deed," returned Xenophon, "is one of daring and peril, I think that even I could undergo such peril." "Unhappy man!" exclaimed Socrates, "and what do you think that you incur by kissing a handsome person? Do you not expect to become at once a slave instead of a freeman? To spend much money upon hurtful pleasures? To have too much occupation to attend to anything honourable and profitable? And to be compelled to pursue what not even a mad man would pursue?" "By Hercules," said Xenophon, "what extraordinary power you represent to be in a kiss!" "Do you wonder at this?" rejoined Socrates; "are you not aware that the Tarantula, an insect not as large as half an obolus, by just touching a part of the body with its mouth, wears men down with pain, and deprives them of their senses?" "Yes, indeed," said Xenophon, "but the Tarantula infuses something when it bites." "And do you not think, foolish man," rejoined Socrates, "that beautiful persons infuses something when they kiss, something which you do not see? Do you not know that the animal, which they call a handsome and beautiful object, is so much more formidable than the Tarantula, as those insects instil something when they touch, but this creature, without even touching, but if a person only looks at it, though from a very great distance, instils something of such potency, as to drive people mad? Perhaps indeed Cupids are called archers for no other reason but because the beautiful wound from a distance. But I advise you, Xenophon, whenever you see any handsome person, to flee without looking behind you; and I recommend to you, Critobulus, to absent yourself from hence for a year, for perhaps you may in that time, though hardly indeed, be cured of your wound." Thus he thought that those should act with regard to objects of love who were not secure against the attractions of such objects; objects of such a nature, that if the body did not at all desire them, the mind would not contemplate them, and which, if the body did desire them, should cause us no trouble. For himself, he was evidently so disciplined with respect to such matters, that he could more easily keep aloof from the fairest and most blooming objects than others from the most deformed and unattractive. Such was the state of his feelings in regard to eating, drinking, and amorous

gratification; and he believed that he himself, with self-restraint, would have no less pleasure from them, than those who took great trouble to pursue such gratifications, and that he would suffer far less anxiety." [15.]

There is another interesting anecdote which is worthy of mention: "The Syrian soothsayer and physiognomist, Zopyrus, saw in the countenance of Socrates the imprint of strong sensuality. Loud protests were raised by the assembled disciples, but Socrates silenced them with the remark: 'Zopyrus is not mistaken; however, I have conquered those desires.'" [16.]

It is also evident that Socrates' mother must have played some role in his mental life. It should be recalled that at first he followed his father's profession, which seemingly made no impression upon him, and later he took up his new vocation, preaching philosophy, which he loved to identify with that of his mother, and indeed by reason of this the positive side of the Socratic method is known as "the art of intellectual midwifery." "Socrates compared himself," writes Schwegler, "with his mother, Phaenarete, a midwife, because his office was rather to help others bring forth thoughts than to produce them himself, and because he took upon himself to distinguish the birth of an empty thought from one rich in content." [17.]

Further evidence of the deep reverence for his mother is seen in Memorabilia where his eldest son, Lamprocles, finds fault with his mother, and Socrates, though apparently entertaining very little love for his wife, yet takes up a defensive attitude towards her and offers the following argument to his son: "Yet you are displeased at your mother, although you well know that whatever she says, she not only says nothing with intent to do you harm, but that she wishes you more good than any other human being. Or do you suppose that your mother meditates evil towards you?" "No indeed," said Lamprocles, "that I do not imagine." "Do you then say that this mother," rejoined Socrates, "who is so benevolent to you; who, when you are ill, takes care of you to the utmost of her power that you may recover your health, and that you may want nothing that is necessary for you, and who, besides, entreats the gods for many blessings on your head, and pays vows for you, is a harsh mother? For my part, I think that if you cannot endure such a mother, you cannot endure anything that is good." [18.]

And in Crito, Socrates relates a dream shortly before his death, in which his mother appeared, and to quote Plato: "Crito says, 'And what can this dream have been?' Socrates replied, 'I thought a woman came to me, tall and fair, and clothed in white, and she called me and said 'Socrates, Socrates, in three days' time you will come to the fertile land, Phthia.'" [19.]

To sum up briefly, the personality of Socrates showed some psychopathic traits. It must also be borne in mind that in that critical period, middle age, a sudden change occurred in his mental life when he suddenly commenced to exhibit profound interest in preaching philosophy. Moreover, it must be emphasized that he apparently reacted to hallucinations of an auto psychic nature. The self-asceticism, and most probably the mother-complex cannot be passed without mention. Although he presented these negative qualities, nevertheless he left a great school of philosophy, which beyond doubt is still felt in the intellectual and moral world. Despite this, Athens committed an unpardonable crime in putting Socrates to death. He, like other martyrs, shared the same fate of the mob. Lowell's verse very justly applies to Socrates:

"Truth forever on the scaffold; Wrong forever on the throne." [20.]

With this characterization of Socrates, we are now in a position to discuss that part of his philosophy which has a definite bearing on modern psychopathology. Three important phases of his philosophy come under consideration:

1. The dialectic method; 2. The conception of virtue; 3. Know thyself.

THE DIALECTIC METHOD

In Socratic philosophy the Dialectic Method occupies a lofty position. By this method he was enabled to penetrate deeply into human nature and unfold all phases of man's experience. Aristotle characterizes this method as the induction of reasoning and the definition of general concepts. Gomperz, speaking of the great zeal that Socrates exhibited in this method, says, "to him (Socrates), a life without cross-examination, that is, without dialogues in which the intellect is exercised in the pursuit of truth, is for him not worth living." [21.] And Schwegler pertinently asserts "that through this art of midwifery the philosopher, by his assiduous questioning, by his interrogatory dissection of the notions of him with whom he might be conversing, knew how to elicit from him a thought of which he had been previously unconscious, and how to help him to the birth of a new thought." [22.]

Briefly stated, the Dialectic Method is divided into two parts, the negative and the positive. The former is known as the Socratic Irony. By this method the philosopher takes the position that he is ignorant and endeavors to show by a process of reasoning that the subject under discussion is in a state of confusion and proves to the interlocutor that his supposed knowledge is a source of inconsistencies and contradictions.

On the other hand, the positive side of the method, "the so-called obstetrics or art of intellectual midwifery"[23] leads to definite deductions. To illustrate the two phases of this method, the following example may be taken. A youth of immature self-confidence believed himself to be competent to manage the affairs of state. Socrates would then analyze the general concept of the statecraft, and reduce it to its component parts, and by continuous questions and answers would show to this supposed statesman that he was lacking true knowledge. Again, a young man of mature judgment, but of an exceedingly modest temperament, being reluctant to take part in the debates of the Assembly, Socrates would prove to him that he was fully competent to undertake such a task.

In a word, the Socratic method presents two striking tendencies; one destructive, the other constructive; the former annihilates erroneous conceptions, and the latter aids the building up of a healthy mental world, in which men may find pleasure. In a broad sense, the dialectic method bears some resemblance to the psychoanalytic, inasmuch as both seek to analyze human nature in the light of individual experience; to find the ultimate and predominating truth underlying such an experience; both attempt to make the individual realize the extent of his limitations and capacity of adjustment by subordinating the antagonistic forces and at the same time aiding the construction of a world of healthy concepts.

SOCRATIC CONCEPTION OF VIRTUE Before attempting to discuss the Socratic Conception of Virtue, it is important to call attention to two facts;

1st, The principles of mental life, and

2nd, The Greek conception of the state.

Roughly speaking, mental life is composed of two parts; the unconscious, or instinctive, and the conscious. In the early development of the child, mental adjustment is purely instinctive or unconscious. As the child grows older, the unconscious life becomes gradually subordinated to the conventional and cultural requirements. The influence of education, religion, morality and environment begin to exert their influence upon the child and the conscious life commences gradually to assert itself. The characteristic difference between a very young child and the conventional adult, lies in the fact that the former's behavior is not controlled by conventionalities or tenets, whereas the latter conforms with all the rules and customs of society.

The Greeks entertained a very high idea of the function of the state. It was invested with a high moral value and pedagogic aim. In fact, Plato's republic demonstrates this very well. An important point must be emphasized, that the state exercised a potent influence upon the development of the conscious life of the individual.

Now we can understand the Socratic Conception of Virtue in relation to the conscious and unconscious life. What Socrates maintained was that true virtue must depend upon knowledge; hence knowledge is the strongest power of man and cannot be controlled by passion. In short, knowledge is the root of moral action, and, on the other hand, lack of knowledge is the cause of vice. In other words, no man can voluntarily pursue evil, and to prefer evil to good would be foreign to human nature. Hence, in the Socratic sense, in the unconscious lies the root of antisocial deeds, and, as Forbes puts it: "Socratic view of sin, in fact, keeps it in a region subliminal to knowledge. The sinner is never more really than an instinctive man, an undeveloped, irrational creature; strictly speaking, not a man at all." [24.]

Since Socrates identified virtue with knowledge, and made knowledge a conscious factor in mental life, it is evident that education, environment, religion and conventionality are the determining factors in the cultivation of the conscious. "What may be called institutional virtue," writes Snyder, "is for Socrates the fundamental and all-inclusive Virtue, the ground of the other Virtues. He believes in the State, obeys the Laws, performs his duties as a citizen. This does not hinder him from seeing defects in the existent state and its Laws, and trying to remedy them. Indeed, his whole scheme of training in Virtue is to produce a man who can make good Laws, and so establish a good State. 'What is Piety?' he asks, not a blind worship of the gods, but worship of them according to their laws and customs, which one must know. That is, one must know the law of the thing, the time of mere instinctive action and obedience is past." [25.] And Zeller expresses himself in a similar manner: "Of the importance of the

state and the obligations towards the same, a very high notion indeed is entertained by Socrates:—He who would live amongst men, he said, must live in a state, be a ruler or be ruled. He requires, therefore, the most unconditional obedience to the laws, to such an extent that the conception of justice is reduced to that of obedience to law, but he desires every competent man to take part in the administration of the state, the well-being of all individuals depending on the well-being of the community. These principles were really carried into practice by him throughout his life. With devoted self-sacrifice his duties as a citizen were fulfilled, even death being endured in order that he might not violate the laws. Even his philanthropic labors were regarded as the fulfillment of a duty to the state; and in Xenophon's Memorabilia we see him using every opportunity of impressing able people for political services, of deterring the incompetent, of awakening officials to their sense of their duties, and of giving them help in the administration of their offices. He himself expresses the political character of these efforts most tellingly, by including all virtues under the conception of the ruling art." [26.]

To recapitulate briefly; the Socratic conception of the unconscious conforms in many respects with our present knowledge of it, especially insofar as our psychoanalytic experience shows us conclusively what a potent factor is exercised by the unconscious in the determination of psychotic and neurotic phenomena. Indeed in the Socratic sense such manifestations are anti-social and cannot be identified with virtue, hence they are not conscious. One may say that Socrates unconsciously conceived the modern idea of the dynamics of the unconscious.

KNOW THYSELF

The great Socratic Maxim, "Know Thyself," is one of the strongest moral precepts in Ethics. Although the sophists had already called attention to the fact that "man is the measure of all things," however they applied to the individual and not to human nature in general. "But Socrates proclaimed that this self-knowing Ego knows itself likewise as object, as the principle of the world, in which man is to find himself in order to know it." [27.]

To know one's self implies calmness of self-possession, fearlessness and independence. Furthermore it leads one to a striking realization of one's limitations and shortcomings, which form the foundations of success, and, as Forbes expresses it, "in this self-knowledge is the secret of blessing and success in the handling of human affairs, and right relationship with others." [28.]

Socrates, discussing his maxim with Euthydemus, gives a clear and comprehensive idea of this interesting subject: "Socrates then said: 'Tell me, Euthydemus, have you ever gone to Delphi?' 'Yes, twice,' replied he. 'And did you observe what is written somewhere on the temple wall, Know Thyself?' 'I did.' 'And did you take no thought of that inscription, or did you attend to it, and try to examine yourself to ascertain what sort of a character you are?' 'I did not indeed try, for I thought that I knew very well already, since I should hardly know anything else if I did not know myself.' 'But whether does he seem to you to know himself, who knows his own name merely, or he who (like people buying horses, who do not think that they know the horse that they want to know, until they have ascertained whether he is tractable or unruly, whether he is strong or weak, swift or slow, and how he is as to other points which are serviceable or disadvantageous in the use of a horse so he), having ascertained with regard to himself how he is adapted for the service of mankind, knows his own abilities?' 'It appears to me, I must confess, that he who does not know his own abilities, does not know himself.'

" 'But is it not evident,' said Socrates, 'that men enjoy a great number of blessings in consequence of knowing themselves, and incur a great number of evils, through being deceived in themselves? For they who know themselves know what is suitable for them, and distinguish between what they can do and what they cannot; and, by doing what they know how to do, procure for themselves what they need, and are prosperous, and by abstaining from what they do not know, live blamelessly, and avoid being unfortunate. By this knowledge of themselves too, they can form an opinion of other men, and, by their experiences of the rest of mankind, obtain for themselves what is good, and guard against what is evil.'

"But they who do not know themselves, but are deceived in their own powers, are in similar case with regard to other men, and other human affairs, and neither understand what they require, nor what they are doing, nor the character of those with whom they connect themselves, but, being in error as to all these particulars, they fail to obtain what is good, and fall into evil.

"They, on the other hand who understand what they take in hand, succeed in what they attempt, and become esteemed and honoured; those who resemble them in character willingly form connections with them; those who are unsuccessful in their affairs desire to be assisted with their advice, and to prefer them to themselves; they place in them their hopes of good and love them, on all these accounts, beyond all other men.

"But those, again, who do not know what they are doing, who make an unhappy choice in life, and are unsuccessful in what they attempt, not only incur losses and sufferings in their own affairs, but become in consequence, disreputable and ridiculous, and drag out their lives in contempt and dishonour. Among states, too, you see that such as, from ignorance of their own strength, go to war with others that are more powerful, are, some of them, utterly overthrown, and others reduced from freedom to slavery." [29.]

What Socrates attempts to show, is that self-knowledge is conducive to human happiness. Indeed, sanity in a broad sense, depends upon insight into one's true knowledge of his limitation and capacity for adaptation. However, Socrates holds that madness is not ignorance, but admits that for "A man to be ignorant of himself, and to fancy and believe that he knew what he did not know, he considered to be something closely bordering on madness. The multitude, he observed, do not say that those are mad who make mistakes in matters of which most people are ignorant, but call those only mad who make mistakes in affairs with which most people are acquainted; for if a man should think himself so tall as to stoop when going through the gates in the city wall, or so strong as to try to lift up houses, or attempt anything else that is plainly impossible to all men, they say that he is mad; but those who make mistakes in small matters are not thought by the multitude to be mad; but just as they call 'strong desire' 'love,' so they call 'great disorder of intellect' 'madness.'" [30.]

This Socratic principle plays an important role in psychopathology; in psychoanalysis, what the physician does is to acquaint the patient with the unconscious mental processes, thus putting him in full knowledge of his condition to enable him to adjust himself to his environment. In mental diseases the prognosis of a psychosis is not looked upon so gravely when the patient has some realization of his situation, and likewise the recovery from a mental infirmity is more hopeful when the patient exhibits considerable insight into his condition. It is a well known fact that in a malignant psychosis, self-knowledge does not exist, and this in part is responsible for its malignancy. On the other hand the benignant nature of a psychoneurosis may be in part attributed to the patient's appreciation of his affliction.

However, the Socratic maxim has another moral and social value, that is, by only knowing one's self can one understand his fellowmen. Indeed, Plato makes Socrates say, in *Phaedrus*, that it is ridiculous to trouble one's self about other things when one is still ignorant of one's self. It is well known to every psychoanalyst that a patient cannot be analyzed by the physician unless the latter has conquered his own resistances and adjusted his complexes. The Immortal Poet, Shakespeare, truly says:

"This above all—to shine own self be true And it must follow as the night the day, Thou canst not then be false to any man. " *Hamlet Act I, III.*

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PSYCHONEUROSES AMONG PRIMITIVE TRIBES[*]

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THE complex construction of a psychoneurosis in an adult, due to the influence exerted by the multiplicity of factors of civilization and cultural advancement, is sometimes so bewildering as to almost defy all attempts at analysis. In children, the organization of a psychoneurosis is usually very simple, almost monosymptomatic, and in children too, we often discover these neuroses in the actual process of making. When adult life is reached, the individual has left behind him all the factors of his childhood life and all the repressed experiences and desires which tend to produce his adult characteristics. Among adults of primitive races however, where the mental organization is far less complex than that of civilized man, certain psychoneurotic disturbances are found, which if analyzed, might disclose the mental mechanisms of these disturbances reduced to their simplest terms.

It has been my good fortune to be able to secure data of this sort, pertaining to certain curious nervous attacks which occur among the primitive races of the Fuegian Archipelago. These facts were supplied me, following along the lines of a questionnaire, by the well known explorer Charles Wellington Furlong, F. R. G. S., who in 1907-1908, was in charge of the first scientific expedition to cross through the heart of Tierra del Fuego. Mr. Furlong's keen powers of observation, have made the data unusually complete. While he had no theory to offer in explanation of the attacks as seen among these primitive tribes, yet it is interesting to note, that certain of the facts corroborate the well-known ideas of sexual repression as elaborated by Freud. The mental organization of these people likewise, seems to substantiate certain psychoanalytic conceptions. For a clear comprehension of these attack, certain preliminary anthropological and geographical data are necessary.

The following data relates to the running amuck or outburst, among the Yahgan and Ona tribes of the Fuegian Archipelago. This data was obtained in 1907 and 1908 during expeditions through the regions of the Fuegian Archipelago.

The Yahgans, some forty years ago, numbered perhaps 2,500 but in 1908 had been reduced through contact with civilization and principally through an epidemic of measles to 173. These peoples are

canoe Indians and inhabit today the island coasts from Beale Island to the Wollastons inclusive, in the neighborhood of Cape Horn; from about 54 degrees 50' S. Lat. to about 55 degrees 56' S. Lat., making them the southern-most inhabitants of the world. The Ona Indians, a taller and finer race physically, who are foot Indians, occupy the mountain and forest regions of southern Tierra del Fuego from approximately 53 degrees 50' S. Lat. to 55 degrees 3' S. Lat. The Onas formerly occupied the entire northern half of Tierra del Fuego and possibly numbered some 3,000, but through contact and warfare with the whites, who drove them south off the open lands of the north, they have been reduced to about 300. These peoples are of a light cinnamon colored skin, black haired, and of a decided Amerindian type. The Onas are above average stature, the Yahgans below it.

It is not an infrequent occurrence for individuals among both the Yahgans and Onas to be subject to sudden outbursts of furor and violence. At such times the individual will generally dash from the wigwam and rush wildly away, and will continue running until nearly or completely exhausted. The one afflicted may dash madly through the woods or sometimes climb up dangerous cliffs. At such times, however, it is the custom of some of the men to follow closely behind to see that harm does not come through injury against trees, stumbling, or falling from the cliffs. However, at such times they rarely touch the afflicted one except to prevent harm, and finally will lead him back to the camp, when the attack is over or when he is exhausted.

While the attack occurs both among men and women, it seems to be more prevalent among men. The individuals in whom these attacks predominate are men in the prime of life, ranging from 25 to 35 years of age. These people are polygamous and as it is the custom for the old men to marry young girls, thus leaving the old women to the younger men, which in many instances causes a scarcity of women, it leaves a somewhat undesirable condition.

In many instances the character of the attack confines itself to the mad rushing away, as above described, at other times attempts to injure or kill others are made. For instance, a rancher of Tierra del Fuego, was in the company of some Onas when suddenly a hatchet whizzed by him, barely missing his head, and buried itself in a log of the Indian shelter. This was the result of an attack which seized upon one of the Onas who was afflicted thus from time to time. The actual outburst in this case was sudden, although it is difficult to tell how long it might have been coming on in the form of brooding, which seems to be a premonitory phase of this condition.

Concerning a personal experience with one of the early phases of an attack, Mr. Furlong states as follows:—"I am fully convinced that one night, while camping alone with Onas in the heart of the Fuegian forests, that my head man Aanakin, who had a good many killings to his credit, was brooding as he sat in his wigwam, which opened towards the fire; he watched me for nearly an hour with an attitude and expression which reminded me of the look a dog takes on sometimes before he snaps. Aanakin I knew to be of a very moody nature but this particular mood was so marked and portended evil so noticeably toward me without any apparent cause, that I decided to do something to break its mental trend. So putting fresh wood on the fire, to make a more brilliant blaze, I walked directly into his wigwam and motioned to one of his two wives, who were lying beside him. There was a passing look of half-anger, half-surprise, but I gave no time for his mind to dwell in the same mood, for simultaneously I produced my note book and pencil and began to make drawings of animals and other things they were familiar with. They like to watch one draw and name the thing, and so I kept them busy for perhaps an hour, and finally had them in gales of laughter. I am quite convinced that I forestalled an attack or a condition akin to it."

It seems that an attack usually begins suddenly. However, an instance is given where an Ona became moody and realized that one of these attacks was coming on and putting his hands together begged to have his wrists and feet bound in order that he would not do himself or others any harm, or that it would not be thought that he meant to kill and consequently be shot in self defence. This would in a way seem to indicate that there was no amnesia for the attack, as the Indian undoubtedly realized what he had done in previous attacks.

The moody state and the realization of what might follow as the attack comes on demonstrates a sense of uneasiness as the premonitory symptom of an attack, which ends in a state of utter exhaustion and sleep. The normal condition is resumed, practically on the awakening from sleep and recovery of strength.

From a description of Donald McMillan the explorer, the Eskimo Piblokto strongly resembles these attacks of the Ona and Yahgan Indians with the exception that Piblokto was particularly prevalent among the women.

How an attack begins is shown by the case of Aanakin, an Ona of Furlong's expedition. A certain form of melancholia, brooding or moodiness, seems to precede many of these attacks, with a realization sometimes that an attack is coming upon them. The Onas not being naturally a quarrelsome people, it

may be that this realization and foreboding of the attack accounts for their tendency to run away from their associates, when they have endured the strain as long as they can, thus placing themselves in a position to avoid deliberate attack or injury to those about them.

It was further stated, in answer to the questionnaire—"I cannot give you absolute data regarding laughing or crying in an attack, screaming, yells, foaming at the mouth, biting of tongue, tearing of clothes, although I am of the opinion that any or all of these things may and do occur. As to violent resistance, the case, where the man wished to be bound, would show there was violent resistance, and it is probable that partly for this reason the Onas and Yahgans do not molest the afflicted except to prevent them from harming themselves, preferring to wait until the paroxysm exhausts them. I cannot state positively as to whether the attack is explained by the natives as being due to an evil spirit. While these people are polygamous, though having no religious form of worship, they usually believe when any one has a disease that something has entered them or some one who dislikes them has surreptitiously sent some small animal or an arrow into them. Among the Yahgans the 'Yuccamoosh' (doctors) or magicians proceed to pretend to extract these objects by a form of squeezing and hugging the patient, in the meantime blowing, hissing, etc., to force the object or evil out. I have never known of their doing this, however, to a person suffering from an attack.

"I am unable to supply any direct data as to the relation of love, hunger, sexuality, death of relatives or absent relatives to an attack. On the death of a relative the Yahgans go through incantations in the form of a sort of weird death chant, which they often sing in unison at certain times of the day and night. They paint their faces to show the death to strangers, but they rarely mention the name of the dead, in fact by most it is considered an offence to do so. They say simply 'He is gone,' 'He is no more'; they feel the loss of relatives very keenly and sorrow for them, and sometimes become violent with grief and rage.

"Regarding the primitive type of mental organization among these natives,—despite Darwin's first opinion of them, which was subsequently modified, I consider these people inherently intelligent, though of a very primitive type as far as their culture is concerned, probably the most primitive in this hemisphere, perhaps in the world, as the Onas are today living in the Stone Age. Dr. E. Von Hornbostel of Berlin University, who has collaborated with me in making a special study of my phonographic records of their songs, informs me that these songs are the most primitive American-Indian songs of which they have any record." Of importance for a clear understanding of the mental traits of these Indian tribes, as the source from which these attacks develop, are the study of their dreams, their system of taboos and their myths. So far as could be determined from the data supplied, the dreams of these primitive races strongly resemble the dreams of children, as these aboriginal tribes possess many childlike attributes. In fact up to a certain age the civilized child is really a little savage, with his strong egotism and feelings of rivalry, his taboos, his jealousies and his few or no altruistic tendencies. In the child as in the savage, the wish and the thought are synonymous, both want their desires immediately gratified, although such gratification may be impossible in reality. The dreams of the Yahgan Indians are simple wish fulfilments, without disguise or elaboration, like the dreams of a civilized child.

The Yahgan attitude toward death is the same as that of many primitive races. Any reference to death is strongly tabooed amongst them and to transgress this taboo, exposes the individual to grave danger and severe punishment, even the punishment of the thing tabooed. Thus the person who transgresses this taboo becomes himself taboo by arousing the anger or resentment of other members of the tribe. However, a certain ambivalent tendency seems to be present, for while the word death and the mention of the dead is prohibited, yet they feel deep grief and sorrow for dead relatives. Transgression of the taboo may arouse the other aspect of the ambivalent attitude, (for instance anger instead of sorrow) and it thus becomes a source of danger to the guilty individual and so by contagion and imitation to the community. This ambivalent tendency which leads to taboos is prominent among primitive races as well as in civilized children for instance, in the latter, the taboo of pronouncing certain words which leads to stammering or the taboo of objects possessing a sexual significance in producing kleptomania. As civilization and cultural advancement increase or as the child becomes the adult, the taboo tendency gradually declines, yet under certain conditions it may manifest itself as a psychoneurotic symptom. Since these particular primitive races have no conception of immortality, this taboo cannot be a religious or a moral obligation or prohibition, but a social phenomenon for the benefit of the tribe or for the physical welfare of the individuals comprising the tribe. Freud also has pointed out how the avoidance of the names of the dead because of fear of offence to the living is found among certain South American tribes.

A third factor of importance is a study of their myths. These are the savage's day dreams. The relation between myths and dreams is well known, both having their roots in the unconscious thinking of the race. In the individual this unconscious mental process produces dreams, in the race and society, myths. Only one instance will be cited, the legend of the Yahgan Indians concerning the creation of the first man and woman. When one of the tribe was asked how the first human being came into the world,

he replied that a long time ago the first man came down from the sky on a rope and later, the woman followed. Here is a striking instance of how an adult Indian had applied his knowledge of individual births literally to a cosmic process, a genuine creation myth as a form of symbolic thinking. There seems little doubt in this case, that the sky, which to all savages appears like a bowl, represented the uterus and the rope, the umbilical cord. The resemblance of this myth to certain birth and parturition dreams, as encountered in the psychoanalytic investigations of civilized adults, is certainly striking.

How is this mass of material to be interpreted? The mental traits of these people, as shown by an analysis of their taboos, myths and dreams, are very primitive in organization, in fact, according to Mr. Furlong, they represent the most primitive types of culture in the world and are today actually living in the Stone Age. Individuals of such primitive mental traits have not learned to successfully repress their emotions and hence are liable to sudden emotional outbursts. Substitution and repression in civilized races are utilized to cover our complex and multifarious ways of expressing our social wishes and wants. In the savage there is little or no repression and substitution, because his desires are simple and easily satisfied.

These primitive people therefore resemble children, without inhibitions or repressions and hence their attacks of violence and furor as above described are sudden emotional reactions, perhaps hysterical, but without any phenomena of conversion. The relation of the attacks to an unsatisfied sexual craving is shown by the fact that the attacks occur only in young men whose libido remains unsatisfied, because according to tribal custom they are compelled to marry old women, or, in the words of the explorer who lived among these people, "old derelicts." This factor, combined with the observation that the victims of the attacks are free from loss of consciousness and amnesia and the absence of an absolute evidence pointing to foaming at the mouth or biting of the tongue, would seem to indicate that the outburst was hysterical rather than epileptic in nature. It would thus correspond to the Piblokto of the Eskimos as described by Brill. This resemblance was also noted by the explorer in his comparative description of the two disorders.

It seems that the attacks themselves are motivated, not so much by the actual gross sexual as by an ungratified or only partially gratified love which would occur in a man who is compelled by social and tribal custom to marry an old woman. Among the Eskimos this factor is at work in the women, among the Fuegians in the men. Conversion phenomena were absent, because their mental organization is very simple, in the same way that childhood hysteria is free from conversion symptoms or at the most is monosymptomatic.

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TWO INTERESTING CASES OF ILLUSION OF PERCEPTION

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THE first case here reported came to the notice of the writer through the attending physician; the second case was reported by the father of the child after the attending physician had failed of satisfactory treatment. The second case is especially interesting and serviceable in connection with the phenomenon of visual space perception.

The first case is that of a boy, nine years of age, healthy, vigorous, who in his play ground and street reactions parallels that of any normal boy of his age. Aside from measles and an occasional disturbance of digestion he has been singularly free from childhood's common diseases. The father and mother are strong Hanoverian Germans holding with puritanic strictness to the dogmas of the Lutheran religious faith. So far as is ascertainable there can be no question of faulty inheritance, at least not so far as the immediate parents and grandparents enter into the problem.

The child upon retiring and usually while still wide awake uttered wild screams of terror. Upon

inquiry the child complained of falling and clutched vigorously to the bed clothes and the arms of the parents. Usually the phenomenon disappeared when he was taken out of bed and walked about but reappeared when he lay down. He complained of pain in his eyes, neck and fore- and after-parts of his head. No amount of persuasion dispelled the illusion. It should be emphasized that the illusion occurred in full waking state and rarely as a dream.

An attempt was made to correlate the illusion with the momentum of the day's activity. According to the parents the illusion appeared in aggravated form when the neighborhood boys congregated in a cluster of trees at the edge of the village and when playing "train" in which case the barn-top functioned as the locomotive while a high board fence and an adjoining neighbor's barn functioned as the cars and caboose respectively.

The village physician offered no explanation. He prescribed a hot bath and a "closer supervision of the evening meal." The dilatation of the cutaneous capillaries consequent to the bath lowered the cerebral circulation and to some extent reduced the intensity of the illusion.

The cue to the cure appeared when the child, in expressing his fear, complained because he could not see the parent who sat beside him on the bed. Upon lighting the room the child seemed pacified but still held tightly to anything within reach. As a rule the illusion disappeared within thirty minutes after illumination. It was then suggested that the child be put to bed in a well lighted room. This was done but the phenomenon reappeared although in a less aggravated form. Degree of illumination and intensity of the illusion appeared related. The phenomenon failed to appear at all when a coal oil lamp was placed beside the bed not over two feet from the child's head. For six months the boy went to sleep facing the full glare of the lamp. Gradually the lamp was removed until it occupied a position in the hall. Whenever the illusion recurred the lamp was replaced in its original position.

It is quite probable that the intensity of the visual stimulus (the lamp) deflected the nervous current from the neural processes underlying the illusion and thus changed the direction of attention. Any intense distraction, other than the one employed, would probably have served the same purpose. At the end of a year and a half the phenomenon entirely disappeared.

The second case is that of a six-year-old girl, the daughter of highly educated parents. With reference to this case two interesting phenomena were observed: (a) that of mirror-writing of the common variety and (b) that of ambiguous interpretation of the retinal impressions.

The phenomenon of mirror-writing here observed parallels that of many other cases in which the left-right direction is reversed. These commoner cases take on an added interest when considered in connection with a case of double space inversion. Such a case is on record.[1] The double inversion consists in writing all verbal symbols and digits up side down and backward. In this case the boy had perfect pseudoscopic vision at the beginning of his school work. Stratton, by a system of lenses, artificially produces the same distortions and throws some light on the phenomenon.[2]

[1] G. F. Arps, a Note on a Case of Double Space Inversion. *Annals of Ophthalmology*, July, 1914, Vol. XXIII, p. 482.

[2] *Psychological Review*, Vol. IV, pp. 341-360 and 463-481.

It is in the phenomenon of ambiguity in the interpretation of the retinal eye processes that this case finds its value. At the dinner table the child complained of the decrease in size of a number of objects in the room, especially was this true of the apparent size of the father's head. The frequency of the complaint led the father to seek the advice of an oculist who pronounced the child's vision perfect in every way. Over and over again while seated at the dinner table the child would exclaim, "O father how small your head is!"

The explanation of this phenomenon is found in the method employed to dispell the illusion. It was suggested that, at the moment of the appearance of the phenomenon, the child be requested to fixate the end of the father's index finger which was revolved, in the air, to form various geometrical figures. This had the desired effect. Clearly we have here a case of the object altering its apparent size without altering its distance. Under normal conditions a change in size is followed by a corresponding change in the distance. It is probable that we have here inadequate convergence and that the optic axes do not intersect at the object but beyond, so that the axes are more or less parallel. Thus the feeling of convergence is less intense than experience teaches is necessary to perceive the object as such a size and at such a distance. If degree of convergence is a criterion for distance and if distance is a measure for the apparent size of an object then we have the conditions necessary for the appearance of the illusion.

Here we have the retinal image constant for the apparent and the real size of the object (head).

Obviously the retinal processes are constant for the two interpretations of magnitude and the ambiguity is due to the concomitant factor of convergence.

The conditions necessary to decrease the real size of an object while still maintaining an unaltered image are produced without artificial means. Wheatstone, a long time ago, arranged his stereoscope so that a negative correlation obtained between the degree of convergence and size of the retinal image. [3]

[3] Philosophical Transactions, 1852.

Very interesting is the fact that Stratton demonstrated by artificial means what was naturally the case in that of the boy reported in the Annals referred to above. Wheatstone demonstrated by artificial means what was naturally the case in that of the girl here reported.

REVIEWS

FEEBLE-MINDEDNESS, ITS CAUSES AND CONSEQUENCES. By H. H. Goddard. The Macmillan Co., N. Y., 1914. 599 pp., illustrated.

Two comprehensive attempts have been made in recent years to study the inheritance of mental abnormality, one in England at the Eugenics Laboratory of the University of London, the other in this country under the leadership, more or less immediate, of the Eugenics Record Office. Both the English and the American school of workers agree that different grades of mental ability, mental defect and insanity are strongly inherited. But the two schools have reached very different conclusions as to the manner of inheritance of mental traits and mental defects. Each school entertains profound disrespect for the scientific methods and conclusions of the other and with the frankness and honesty which devotion to truth demand has freely criticised the other. By this criticism, at the bottom friendly though sometimes caustic, science has undoubtedly profited. The later work of each school begins to show the chastening influence of adverse criticism.

The English school has leaned backward in its devotion to the inductive method of accumulating inheritance data, ostensibly without prejudice for or against any particular theory but in reality with an ill-concealed bias against anything savoring of "Mendelism." The American school recognizing in Mendelism a great advance and an important instrument for the discovery of new truth, has ignored the possibility that other undiscovered laws of heredity may exist and has cast aside as superfluous the valuable biometric tools wrought with much patient toil by Galton and Pearson. It will be the part of wisdom for students of genetics to imitate the hostile attitude of neither school, but to utilize the positive results of both. This is what Dr. Goddard has done in the work under review.

He apparently began studying the inheritance of feeble-mindedness without theoretical prejudice, but with a practical end in view, to discover, if possible, the causes of feeble-mindedness so as to deal intelligently with the inmates of the Vineland (N. J.) institution with which he is connected. Goddard received inspiration and suggestion from the Mendelian principles which dominate the work of the Eugenics Record Office, but has published his observations in detail so that the reader may test by them any theory he likes. This method can not be too highly commended for it gives permanent value to the publication, however much prevailing theories may change. The book contains a detailed study of 327 "cases," each being the family history of a different inmate of the Vineland institution, as made out by trained investigators who visited the homes of the inmates and held interviews with their parents, relatives, friends and neighbors. English criticism of American work of this sort had prepared the reader to expect carelessness of method and inaccuracy in the accumulation of data, but Dr. Goddard is evidently on his guard against this. He goes very fully into the method of obtaining and verifying the data, and in doing so gives a very strong impression that the data are "reliable." His treatment of the data is also cautious but thorough, so that when he works his way to a conclusion it stands firmly established. The conclusions reached are numerous and important, but the one of greatest theoretical interest is this, that feeble-mindedness is inherited as a simple recessive Mendelian unit-character. This conclusion, so far as earlier publications were concerned, might be regarded as insufficiently established, but the evidence presented in this work renders it, I think, beyond question. Goddard was himself apparently considerably surprised at the conclusion reached. He had expected to find different kinds or grades of mental defect independently inherited as units and confesses to leanings toward views of the physiological independence of different mental functions, but his "cases" give him no evidence of such inheritance. He finds only that feeble minds are minds of arrested development in regard to all functions, and that different grades of feeble-mindedness correspond with different stages of normal mental development completely arrested. How different grades may occur in one and the same Mendelian unit is apparently a puzzle to Goddard, who does not attempt its explanation. It is indeed an absurdity to the "pure line" Mendelian, but not to one who appreciates the fact that

Mendelian units are subject to quantitative variation sometimes continuous, sometimes discontinuous. An example of the former is found in the hooded pattern of rats,[4] of the latter in albinism and other Mendelizing characters which assume multiple allelomorphous conditions.[5] Pearson has steadfastly refused to admit that albinism in man is a Mendelizing character, because it may assume various forms ranging from colorless to quite heavily pigmented conditions (blondes). We now find that albinism in guinea-pigs shows an even greater range of variation,[6] yet there can be no doubt of its fundamental unity as a Mendelian character, each grade of which is allelomorphous to every other grade and to normal pigmentation.

[4] Castle and Phillips, 1914, Publ. No. 195, Carnegie Inst. of Wash.

[5] Castle and Fish, Amer. Nat., Feb., 1915.

[6] Wright, S. Amer. Nat., March, 1915.

Goddard's findings as regards feeble-mindedness fit in perfectly with this scheme. That Goddard was unaware of it when his conclusions were reached is all the more evidence of their soundness because it shows that they were reached independently. Among albinos every higher grade of pigmentation dominates all the lower grades in inheritance, and so apparently it is with mental development; the higher grades dominate the lower. At every point there appears to be agreement in method of inheritance between albinism and feeble-mindedness. Each is a unit character but showing graded allelomorphous conditions which correspond probably with different stages of arrested development of pigmentation or mentality respectively.

The fact noted by Goddard that the feeble-minded resemble savages, that is backward races of low mentality, has much interest to the student of evolution. It indicates that the evolution of intelligence has occurred by a gradual progressive advancement, stages in which reappear as the higher grades of feeble-mindedness. Of course it is not certain that the ontogenetic stages, at which mental development may be arrested, correspond accurately with earlier phylogenetic stages, but the idea receives considerable support from the observed resemblance between the mentality of morons and that of savage peoples, if the observation may be accepted as accurate. I do not understand however that Goddard makes any claim to first-hand familiarity with the mental life of savages, so that no great emphasis should be laid on the point. But the mere fact that RETROGRESSIVE variation in mentality is GRADED favors the view that its PROGRESSIVE evolution has been gradual, rather than the view that it has arisen by mutation or sudden loss of inhibitors. (Bateson, Davenport).

Goddard points out that a high grade moron may be a useful and self-supporting member of society in some environments (usually rural) whereas he would be quite helpless in the keen competition of urban life. This suggestion leads the reader to wonder whether many peasant and peon populations of the old and new world represent survivals of an older and lower grade of mental evolution than has been attained in the more advanced nations, or whether it is merely lack of opportunity that makes these populations backward. The fact that in every generation great men come from the lower social levels shows that the lower classes are not entirely devoid of capacity; nevertheless it seems probable that a low grade of intelligence would stand a better chance of escaping elimination in the struggle for existence when placed in a simple environment than when placed in a complex one. Consequently, under modern conditions, we might expect a peasant or peon population to average lower in mental capacity than a community more advanced in civilization. Whether the peasant population would equal in average intelligence a band of North American Indians or a tribe of native New Zealanders is very doubtful, for in such peoples natural selection for intelligence was undoubtedly severe because of their intense struggle with nature and with other tribes, unaided by the accumulated knowledge and tools of civilized communities. Among such peoples greater demands were probably made on inborn intelligence than among modern industrial populations.

As regards the CAUSES of feeble-mindedness Goddard's findings are wholly negative, but not less valuable on that account. His case histories statistically studied indicate no causal relation to a number of reputed agencies in the creation of feeble-mindedness, such as alcoholism (which he regards as oftener a symptom than a cause), tuberculosis, sexual immorality, insanity, syphilis, accident and consanguinity. He recognizes HEREDITY as its principal source, i. e. he recognizes feeble-mindedness as a stage of mentality already existing and transmissible by the ordinary mechanism of heredity, but does not attempt further to account for it, either as a survival or as an atavism.

That humanitarian governments by shielding and supporting the moron without putting a limit on his naturally high reproduction will speedily increase this class at the expense of the more intelligent classes of the community is self-evident, if it is admitted that feeble-mindedness is hereditary, as all who have investigated the matter carefully now declare. Goddard shows further that a large percentage (probably more than half) of the alcoholism, pauperism, prostitution, and crime, of the

United States are directly traceable to hereditary feeble-mindedness, another strong reason for taking measures to reduce it.

How is this to be done? Goddard has no cure-all to offer but urges first of all that the mental grade of each individual be accurately determined and education and occupation be provided suited to his capacity. This will tend to make the moron a useful and contented member of the community, not a menace to it. Segregation is recommended so far as practicable, but in view of the large number (estimated at 300,000 to 400,000 in the U. S.) Goddard considers segregation of all impracticable. Nevertheless he urges further and energetic efforts in this direction, that as many as possible may be segregated as a safeguard against their reproduction. In individual cases "sterilization wisely and carefully practiced" must be employed to insure non-reproduction.

In this volume there is a pleasing absence of the rant which pervades some eugenic literature. The author has something of importance to contribute to science and he presents his contribution in a sober, dignified manner in keeping with the important character of his contribution. W. E. CASTLE.

CHRISTIANITY: THE SOURCES OF ITS TEACHING AND SYMBOLISM. By J. B. Hannay.
(Francis Griffiths, London; pp. 394).

This is an attempt to expound the symbolism of the Christian religion. It is divided into three main parts: ancient cults (phallism and sun worship); ancient cults in the Old Testament; ancient cults in the New Testament. The author's main thesis can be stated in a sentence: the essential constituents of every religion, and the underlying meaning of its symbolism, are phallicism and sun worship. Of these the former is the more important, more primary, and more wide-spread; the latter is a superimposed layer better adapted to more civilized and educated people, but rarely penetrating into the hearts of the common people to the extent that the former has. "The great branches under which all the religious systems of the past have developed may be classed as based, on the one hand on the consideration of our world and the continuity of life upon it, expressed in Phallic symbolism, and on the other hand, on the Sun as the great giver and sustainer of man, expressed in Solar symbolism." (p. 21). "As the Phallic cult was much the older, it retained its position after the rise of the Solar cult. It required a much higher intelligence to grasp the facts of Solar worship, so it never entered the 'hearts' of the common people as did the Phallic worship, but it had a much more intelligent priesthood, and was the arbiter in all questions of dates, and regulated all feasts; and, what was more important to the people, fixed the time for payments of debts or interest, and regulated the times of sowing and harvesting, so it became a much more 'official' religion than Phallism." In support of these conclusions the author marshals a huge number of facts, so that the work becomes a veritable encyclopaedia of symbolism.

Now in spite of the fact that the reviewer fully accepts the main thesis of the book, as stated above, and therefore has no prejudice or hostility on the score of the conclusions enunciated being distasteful, his judgment of the book is entirely unfavourable, for the following reasons: In the first place, any presence of the book to be a scientific, and therefore impartial, contribution to knowledge is invalidated by the author's moral bias evident from beginning to end, against religion in general, and Christianity in particular, which he maintains is the most phallic of all religions. His point of view is that of the older rationalists, to whom religion is nothing but an unfortunate instinct for "delight in the miraculous," expressing itself in phallic and sun worship, and fostered by the exploiting tendencies of priests. His desire seems to be, in writing the book, to "show up" religion and, by discrediting it, hasten its end.

In the second place, there is not a single new idea in all its closely packed pages, and therefore no excuse for writing them, since the material here laboriously brought together is easily accessible in other books. It never seems to dawn on the author that pointing out the sexual basis of religion, which countless other writers have already done, is but the beginning of the problem, the starting-point of all sorts of complex riddles. Having dogmatically divided all religious symbols into male and female, he is self-satisfied enough to think that he has explained religion. There is no inkling of the points of view suggested by such words as determinism, significance, genesis, so familiar to the modern psychologist.

Side by side with all this goes a disorderly arrangement and very imperfect powers of criticism. The latter feature is especially marked in the field of etymology, where the author fairly lets himself run wild. The following gem is a typical example (p. 110): "Bacchus became degraded into the God of Wine, and his fetes became drunken orgies, but he was originally the beneficent sun who ripened the fruits, and hence God of Wine, from which, indeed, is derived the English name of all our gods, angels, prophets, or even parsons,—"divines," "dei vini," "Gods of Wine." Jesus was the "True Vine."

The merits of the book are that it may direct the attention of some people to the connection between sex and religion, if there are any who are still unaware of this, and that it possesses a good index that

may be useful to readers with limited facilities for looking up particular symbolisms; it is also well illustrated. ERNEST JONES.

LAUGHTER: AN ESSAY ON THE MEANING OF THE COMIC. Henri Bergson. Translated by C. Brereton and F. Rothwell. (Macmillan, London, 1913. Pp. 200).

In this stimulating little book Professor Bergson propounds his theory of the comic, which is shortly to the following effect. Noting first that laughter is purely a human phenomenon, and therefore probably has a social significance, he seeks for this by trying to define what are the essential features of the comical. He reduces the various characteristic features in the main to one, namely, automatism on the part of the comical person or thing. This automatism is of a special kind; especially is it an automatism that is out of place, that occurs at the expense of spontaneity, vitality, and freshness. It may thus be defined as "something mechanical in something living," "a kind of absentmindedness on the part of life." "The comic is that side of a person which reveals his likeness to a thing, that aspect of human events which through its peculiar inelasticity, conveys the impression of pure mechanism, of automatism, of movement without life." "To imitate anyone is to bring out the element of automatism he has allowed to creep into his person. And as this is the very essence of the ludicrous, it is no wonder that imitation gives rise to laughter. "This bald statement of Bergson's conclusion is, in the reviewer's opinion, made very convincing by the delicate analysis he proffers of numerous illustrations.

Up to this point Bergson's theory of the comic fairly well coincides with that of Freud. The latter author, it is true, summarises his conclusions in different language. But the meaning is not very different. For him the feeling of comicality is an "economy of ideational expenditure," and it is evoked by the sight of another person who in a given performance displays either a lack of mental activity or an excess of physical, i.e., who is either stupid or clumsy. Compare this formulation with Bergson's. The latter says that the opposite of the comic is gracefulness, rather than beauty. "It partakes rather of the unsprightly than of the unsightly, of rigidness rather than of ugliness." The replacement of mental by physical activity is insisted on in the following passage: "Any incident is comic that calls our attention to the physical in a person, when it is the moral (i. e. mental) that is concerned." Again, he compares a comical person to "a person embarrassed by his body." His automatism is essentially a lack of mental nimbleness, a formal lack of mental elasticity, a defective capacity for rapid adjustment, in short, a mental laziness. And especially is this defect one of consciousness. The failure is on the part of the higher mental activities, which should be the most alert, and what happens is a relapse into unconscious, automatic modes of functioning, a form of absentmindedness. "The comic is that element by which the person unwittingly betrays himself—the involuntary gesture or the unconscious remark. Absentmindedness is always comical. Systematic absentmindedness, like that of Don Quixote, is the most comical thing imaginable No one can be comical unless there be some aspect of his person of which he is unaware, one side of his nature which he overlooks; on that account alone does he make us laugh."

In substantial agreement on this general conclusion as to mental rigidity and bodily clumsiness, the two views diverge from here. According to Bergson, the comic presupposes "something like a momentary anaesthesia of the heart;" "laughter is incompatible with emotion." For Freud this absence of emotion is much more characteristic of humour than of the comic, two matters that Bergson quite fails to distinguish. Then, whereas Freud explains the subjective side of the comic purely on hedonic principles, Bergson sees in it an important social function. According to him, laughter is one of society's weapons for dealing with tendencies that threaten to diverge from the conventional and accepted norm. It "restrains eccentricity" and "corrects unsociability." "Any individual is comic who automatically goes his own way without troubling himself about getting into touch with the rest of his fellow-beings. It is the part of laughter to reprove his absentmindedness and wake him out of his dream Each member must be ever attentive to his social surroundings; he must model himself on his environment; in short, he must avoid shutting himself up in his own peculiar character as a philosopher in his ivory tower. Therefore society holds suspended over each individual member, if not the threat of correction, at all events the prospect of a snubbing, which, although it is slight, is none the less dreaded. Such must be the function of laughter. . . . It represses separatist tendencies." "Unsociability in the performer and insensibility in the spectator—such, in a word, are the two essential conditions." This interesting theory leaves some questions unanswered. Why, for instance, should onlooking society remain emotionally cold in one case, and merely laugh, and in another case adopt much graver measures? Bergson deals with this point rather imperfectly. It is not the seriousness of the case that decides, for "we now see that the seriousness of the case is of no importance either: whether serious or trifling, it is still capable of making us laugh, provided that care be taken not to arouse our emotions." Nor is it the immoral nature of the deviation from the normal. "The comic character may, strictly speaking, be quite in accord with stern morality. All it has to do is to bring itself into accord with society." "It is the faults of others that make us laugh, provided we add that they make us laugh by

reason of their UNSOCIABILITY rather than of their IMMORALITY." The most specific criterion seems, in Bergson's opinion, to be that of vanity. "It might be said that the specific remedy for vanity is laughter, and that the one failing that is essentially laughable is vanity."

We may briefly refer to some other matters dealt with more incidentally; wit, and the relation of the comic to art and to dreams. The discussion of wit is perhaps the weakest part of the book. No analysis is given of the different forms of wit, and the important subject of what may be called its technique is quite passed by. Wit is identified in a superficial manner with the comic in general, the fundamental differences between the two, which Freud has dealt so exhaustively with, being altogether ignored. Bergson gives a more interesting and profitable study of the relation of the comic to art; especially of the nature of comedy as distinct from other forms of drama. According to him, comedy portrays character types rather than individual persons. He repeatedly insists on this point, adding that "it is the ONLY one of all the arts that aims at the general; so that once this objective has been attributed to it, we have said all that it is and all that the rest cannot be." Further, "comedy lies midway between art and life. It is not disinterested as genuine art is. By organizing laughter, comedy accepts social life as a natural environment, it even obeys an impulse of social life. And in this respect it turns its back upon art, which is a breaking away from society and a return to pure nature. "The discussion of the relation of the comic to dreams is, on the other hand, less satisfying. Comic absurdity is stated to be of the same nature as that of dreams. The main point of resemblance seems to be that in both cases there occurs an absence of social contact. In both there is a mental relaxation from the effort of "seeing nothing but what is existent and thinking nothing but what is consistent." This really applies much more to wit than to the comic itself.

As may be expected, the whole book is written in Professor Bergson's pleasing style, and is full of suggestive hints and fresh points of view. The most significant contribution, one which pervades the book throughout, is the view of laughter as a social censor. Even if this hypothesis is substantiated by detailed investigation, however, it cannot rank as a complete theory of laughter, or of the comic, until it is supplemented by some explanation, not given by the author, of the most striking feature of laughter, its capacity for yielding pleasure.

It only remains to say that the translation is literally excellent. ERNEST JONES.

ADDRESSES AND PAPERS AT THE OPENING OF THE PHIPPS PSYCHIATRIC CLINIC, JOHNS HOPKINS HOSPITAL. The American Journal of Insanity, Special Number, Vol. LXIX, No. 5. The Johns Hopkins Press, 1915.

This special number of the American Journal of Insanity contains the exercises and papers delivered at the opening at the Phipps Psychiatric Clinic at the Johns Hopkins Hospital, Baltimore, Md. The contents of the entire volume should prove to be of the greatest interest to all students and lovers of psychiatry. The volume opens with a brief but fitting Introduction by Dr. Adolf Meyer, Director of the Clinic, a man to whom American psychiatry owes so much for the stimulus and inspiration which he has injected into others. This is followed by A Word of Appreciation by Henry D. Harland, President Trustees, The Johns Hopkins Hospital, some brief remarks on The Psychiatric Clinic and the Community by Stewart Paton, the heart-to-heart talk on Specialism in the General Hospital by Sir William Osler, and a short talk on The Purpose of the Psychiatric Clinic by Prof. Adolf Meyer. There then follow a series of fascinating and inspiring papers, as follows: The Sources and Direction of Psychophysical Energy, by William McDougall; Autistic Thinking by E. Bleuler; Personality and Psychosis by August Hoch; The Personal Factor in Association Reactions by Frederic Lyman Wells; A Study of the Neuropathic Inheritance by F. W. Mott; On the Etiology of Pellagra and its Relation to Psychiatry by O. Rossi; Psychic Disturbances Associated with Disorders of the Ductless Glands, by Harvey Cushing; Primitive Mechanisms of Individual Adjustment by Stewart Paton; Demenzprobleme by K. Heilbronner; The Inter-relation of the Biogenetic Psychoses by Ernest Jones; Prognostic Principles in the Biogenetic Psychoses, with Special Reference to the Katatonic Syndrome by George H. Kirby; Anatomical Borderline between the So-called Syphilitic and Metasyphilitic Disorders in the Brain and Spinal Cord by Charles B. Dunlap; and Mental Disorders and Cerebral Lesions Associated with Pernicious Anemia by Albert Moore Barrett. The number is concluded by the penetrating Closing Remarks of Prof. Adolf Meyer.

The papers by Mott, Rossi, Cushing and Heilbronner are of the greatest interest. The discussions by McDougall and Bleuler are fascinating and uplifting. McDougall's paper is a masterpiece. Kirby, Jones and Hoch present us with the modern standpoints in the conception of the psychoses. Throughout the volume one sees the adoption of the broad biological standpoint in mental life. The adoption of the term "biogenetic psychoses" is indicative of the general trend. The adoption of this well-chosen phrase is, I venture to suggest, the product of Dr. Meyer.

The reviewer regrets that the papers do not very well lend themselves for brief reviews. Furthermore, he would not attempt to briefly present the views which have been so lucidly and succinctly expressed by the individual writers.

Prof. Meyer is to be commended for the very splendid program presented at the opening exercises of the Phipps Psychiatric Clinic.

May it be a lasting inspiration for those who drink at the fountain of psychiatry and psychopathology.
MEYER SOLOMON.

BOOKS RECEIVED

SLEEP AND SLEEPLESSNESS. By H. Addington Bruce. Pp. IX + 219. Little, Brown & Co., 1915. \$1.00 net.

THE MEANING OF DREAMS. By I. H. Coriat. Pp. XIII + 194. Little, Brown & Co. \$1.00 net.

THE JOURNAL OF ABNORMAL PSYCHOLOGY

A PSYCHOLOGICAL ANALYSIS OF STUTTERING[*]

[*] Paper read May 6, 1914, at Albany, New York, before the American Psychopathological Association.

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THE object of this paper is to carry the analysis of stutter phenomena deeper than before. In my last year's paper I showed that chronologically the diagnosis of dyslalia mounted step by step from a material external affair, up through the nerves until we came to the basal ganglia. I showed conclusively that it was an involvement that did not exist in any of these places. I further took steps to demonstrate and present evidence that indicated that dyslalia was in its essence some trouble with the personality. I mean by this: that the trouble was located in the nervous system beyond the lower sensory areas of the sensorium; and also above the lower motor areas on the motor side. By the broad term "personality" I mean the total of the activities and interrelations of mental activities that occur above our lower sensory and motor areas. The paper of last year clearly located the trouble vaguely in this region of the personality.

Since that time I have been interested to ascertain just what the nature of this changed personality is. In order to do so, I have carried on an investigation that has reached interesting conclusions. To me it is new truth. It may not be all the truth, but as far as it goes, and as for what it is, it surely is truth and a new finding! This research is an effort to show not only where it is but WHAT IT IS.

The method was as follows: For the purpose of finding out some of the activities going on in the area of collaboration during speech, I asked my stuttering patients two simple questions. I thus found that their methods of collaboration complied to a certain mental type.

Then I carried this same method into the study of normal individuals in the collaboration of their ideas, just before and during speech in order to establish a norm; and to see whether or not it differed from my preliminary test of stuttering cases just mentioned. It did, and therefore I formulated a series of questions in order to pin the type of collaboration down to certain fields of mental action. To make this clear, let me present an outline of these different steps in tabular form.

1. Orientation tests on stutterers.
2. Orientation tests on normal individuals.
3. The research, its objects and methods.
4. Final detailed results.

Let us now pass to a minuter description of each of these procedures and a tabulation of the data that resulted.

1. PSYCHOLOGICAL ORIENTATION TESTS ON STUTTERERS:

By orientation test I mean simply a vague try-out to see just where the problem lies; an initial step to see what further steps are necessary; or in other words enough of an investigation to know where to look next.

The orientation tests consisted in requesting a series of twenty stuttering cases to answer two questions. Following their answers an immediate inspection was made of the content of their consciousness before, during, and after speech. These two questions were as follows:

1. Where do you live?
2. Say after me "The dog ran across the street."

After these questions I asked the patients to state whether there was any picture in the content of consciousness and how long it lasted; also whether that was detailed, intense or weak. I noted the presence of stuttering in relation to the presence or absence of this mental imagery; and also made a note of any other unusual data that happened. The results of the tests indicated above can be summarized as follows:

Of the twenty stutterers examined, ten made no visualization of their homes, some even after a residence of years; one of these twenty visualized home very faintly; two others visualized home clearly but the picture vanished on speaking; seven others visualized home clearly but these had been under treatment.

On repeating the dog statement, ten stutterers made no visualization whatever; one visualized faintly; four visualized well but the picture vanished on speaking; five others reported visualization, and four of these had been under treatment.

At first I did not know but what this was the norm of average visualization methods; so I tried this same series upon a number of normal individuals for comparison; by normal individuals, I mean, at this time, merely anyone who is free from stuttering, and chosen in a haphazard way from the hospital community; for example, one was our executive secretary, another a typewriter, another a telephone operator and so on.

2. PSYCHOLOGICAL ORIENTATION TESTS ON NORMAL INDIVIDUALS

The results of these orientation tests upon normal individuals were as follows:

The normal individuals examined almost without exception visualized clearly before and during speech. Sometimes this visualization was very marked in detail and resulted in emotional responses, such as pleasures, etc.

From the above two sets of figures were thus obtained a fair norm of visualization for ordinary individuals; and in comparison a marked variation from this in stutterers. This data therefore warranted the tentative conclusion that stutterers have a loss or diminished power of visualization. This assertion may seem a little more than is warranted by such meagre data and perhaps would be better revised pending further data into the following: As compared with the normal, stutterers show a weakness in visualization.

3. THE RESEARCH, ITS OBJECTS AND METHODS:

These general orientation tests for a norm and its pathological variation were the basis upon which I proceeded on broader lines with a further and more exhaustive investigation with the following points in view:

To what extent is visualization weak?

Is it weaker in the worst cases?

Is it less and less weak as cases appear less severe?

Is it the same for past, present and future memories?

Is visualization equally at fault in all sensory areas of the cortex?

Do cases approach normal visualization processes in proportion as they progress in their cure? and

Lastly, numerous other minor queries presented themselves.

All these questions were answered in the following research, which after thus much orientation found a more complete and final form.

In order to answer these questions I formulated the following series of tests to the number of twenty-four in all, and asked them in series to nineteen stutterers, making almost four hundred tests:

1. Speech:

Say, Today is sunny.

The dog ran across the street.

Submarines will sink all the steamers.

2. Motor:

Do you dance?

Did you ever skate?

Would you sew for a living?

3. General Sensory:

How does a pinch feel?

Did you ever get hurt?

What would you like to do if it was very hot next summer?

4. Hearing: (Eyes closed)

Do you hear anything?

Did you ever hear a rooster crow?

What sounds would you like to hear next summer?

5. Sight: (Eyes closed)

What do you see now?

What did you see yesterday?

What would you like to see next summer?

6. Smell: (Eyes closed) (Pen to nose)

Do you smell anything?

What have you told by smell?

What would you like to smell next summer?

7. Taste: (Eyes closed)

Do you taste anything?

What have you been able to tell by the taste?

What would you like to taste next summer?

8. Muscle Sense: (Eyes closed)

Put one arm up; the other like it.

Put one arm up, down; the other like it.

How would you hold a hand to read from it?

This long series of questions with careful introspection tests upon the content of consciousness constituted then my main research in the field of stuttering. Perhaps further details in explanation of the questions chosen is unnecessary. Three or more questions on introspection were asked at each test.

4. FINAL DETAILED RESULTS are found in the following conclusions as drawn from 1440 answers.

In our average conversation a visual picture is created before we begin utterance. Severe stutterers never visualize at all. In direct proportion that these cases become less severe, does visualization increase in frequency, strength and continuation in consciousness before and during utterance.

When severe stutterers are free from spasms they visualize, and when they stutter they do not visualize.

When mild cases are free from spasms, they visualize, and when they stutter they fail to visualize.

In a word, when visualization is present stuttering is absent; when visualization is absent stuttering is present.

This is true not only of EACH UTTERANCE, in most cases, but is true of severe as well as mild forms as a whole.

Stutterers gain in visualization as they approach cure.

For past, present and future memories: visualization is slightly more frequent for past and future.

Therefore stuttering is an indication of absent or weak visualization either in isolated words, occasional stutterers, mild stutterers or the severest type, either before or during speech, or both.

The slump, then, in personality which I showed last year as the main thing in stuttering as its cause and condition, is thus found by further psychological analysis, to be a slump in the power to consciously visualize.

By personality I mean as mentioned above the composite of collaborative activities that lie between the low sensory repository areas and the low motor expression areas. In other words, personality includes all those collaborative processes that lie between the sensory intake areas and the motor output areas; in a word, any unexpressed use the mind makes of its intake. Conscious visualization is a part of personality processes, then. In my last year's paper([1]) the whole matter was left vague. Here something definite and constant is found. In other words the psychoanalytical method revealed no conscious subconscious cause. Granted there is room here to "interpret" (or create according to Freudian mechanisms) a definite subconscious complex, a step which I could not feel justified in taking; I leave this to better psychoanalysts than I. For me to twist stutter phenomena to comply to a theoretical complex is unscientific to say the least. But the psychological method—as represented by this paper—shows a definite constant cause for all the phenomena of stuttering.

FAULTY VISUALIZATION EXPLAINS ALL PHENOMENA:

Upon this basis of an involved visualization all the intricate phenomena of stuttering may be explained. Let us take some of these up in detail.

THE START. Visualization processes are a matter of growth through exercise and development and use from the sensory area mostly of the eye. If these processes in their early start and evolution receive a setback through the treatment of people in the environment, such as interruptions of their early speech efforts, constant inattention of those to whom they speak, and persistent refusal by older people to answer questions propounded or the allowing of the little one to ask the same question without hopes of answer for a great number of times, these visualization processes receive a setback. This kind of treatment in the home is one of the chief causes of the slump of visualization processes. Another cause is hearing other stutterers interrupt their own visualization processes as they stutter; and still other minor causes may be almost any psychic trauma; these traumata, such as an operation, an accident or a severe illness, are sufficient to bring to the surface or intensify a growing lack of visualization that has been started by bad environment long before.

THE DEVELOPMENT OF STUTTERING. When the habit of visualization is lessened, the action upon speech is the same as the withdrawal of an inhibiting or regulating reflex arc.

It is thus that visualization processes act like reflex inhibition. When visualization is present a higher inhibition arc is functioning and we have a normal speech as a consequent reflex expression. When and in proportion as visualization is absent this higher inhibition arc is not functioning; and the speech thus uncontrolled flies away in spasms which we call stutter. It should be called an exaggerated or uninhibited speech reflex.

The stutter, then, is merely the externalization of an exaggerated reflex of motor speech, exaggerated through the loss of the inhibitory action of a more or less weakened visualization process.

Not only does this explain the phenomena at large but seems to be a satisfactory explanation for all its intricate, minute details. Some examples may, perhaps, be welcome at this point. I say to two stutterers: "Tell your first name." One of them stutters and the other one does not. On furthering questioning, it is found that the one who did not stutter visualized, and the one who did stutter did not visualize.

CONCRETE: These conditions are also seen when stutterers talk about concrete and abstract matters or when they promulgate some important plea that cannot be visualized. On concrete matters that can be easily visualized the stuttering is gone; and on abstract matters where visualization is hard, the stuttering again appears.

ANGER: In anger, when an intense visual picture is presented and occupies the mind, there is then no stuttering, and also in other similar situations there are periods when the individual is abandoned to some visual concept which acts in the same manner.

SINGING: We all know that stutterers can sing without stuttering. The process here is a similar one;

only that there is held up over the speech before utterance an auditory image of a melody in place of the visual image as held in normal speech. This auditory image may be more easily applicable as supplying the needed inhibition reflex arc than the visual because it is nearer to the speech area.

PRAYER: For the same reason prayer is uttered without stuttering when there is faith enough in a God to hold an image of Him during utterance. There may also be other images held during prayer.

FAMILIAR SIGHTS: Familiar sights are less stuttered upon than the detailing of situations that are less familiar and therefore can be less well visualized. This is also true of sights that have been recently seen or that have been repeatedly seen, or that in some other way have been made intense as pictures in the visual field.

AS CURE PROCEEDS: In the process of recovery where visualization is seen to increase as the stutter decreases, there is another illustration where this visualization attitude explains the whole situation. I have taken a severe stutterer and told him a story that could be well pictured, got him to work up the pictures properly by several complicated processes (which we will not consider now) and when he had them well in hand, I have seen him stand up and relate the story from beginning to end with little or no stuttering. If at any point he would trip up, the inevitable confession would be that at that point he dropped the picture, or, in other words, the visualization could not be held over in its inhibitory action; and therefore the stutter came. On further request to hold it over that point, the same passage would be again expressed smoothly if he succeeded in holding the picture.

This constancy, this presence and absence of the picture, its presence to make smooth talk and its absence to cause stuttering, is so constant at every turn of the situation, that I would offer it as a new interpretation of all these phenomena. I know of no other interpretation that can EXPLAIN EVERYTHING UNDER ONE HEAD as does this absence, weakness or interruption of visualization processes.

TERMINOLOGY. We have found in our orientation tests that in a vague way the visualization was at fault. We have also found in normal individuals that a marked visualization was an automatic process that preceded speech, and lasted during utterance; and we have found in the long series of stutterers that visualization is entirely absent in severe cases; that it is weak in milder forms; that it is intermittent in most cases, and that on words that are smooth it always appears, and in occasional stutter it is as occasionally absent.

We have also found that the form of visualization common in normal speech is the visualization of eye sensations; that in unusual situations we may have visualizations from other sense areas, such as the ear, taste or smell, but these are the RARE EXCEPTION.

From all this data it would naturally follow that some sort of term is needed to designate this condition. Last year I probed to find such a term without much success.

At present I see no reason why it should not be called an Asthenia; it is surely the weakening of a mental process that is strong in normal individuals. The evidence here presented shows that. I doubt whether there is any marked pathological change, since the individual may be educated out of it; but this does not necessarily follow as proven with my dog in Berlin.[2] As a general designation, then, I should consider Asthenia as apropos.

One objection to this is that the weakness is by this terminology lacking in localization. Our data above has shown us that the location of the trouble is visual; that is, it is situated about a centre of sensory registration that deposits data from the eye; this must naturally then be located somewhere in or near the cuneus. We could therefore add to the terminology this idea of a minute localization and call it a Centre Asthenia.

Some may prefer to carry the matter one step farther and add the name of the centre in which this weakness is located, but I fear if I take this step and complete my terminology by the word "Visual Centre Asthenia," it will, as such, not cover quite all the cases, for I find that sometimes the visualization is absent in other areas as well, and also the holding of an emotion of pleasure or pain and of other dominating mental attitudes that are sometimes visualized would not, therefore, be included. I would therefore retract the broader claim in order to place the term on a conservative basis and call the essence of the lesion simply no more or less than a Centre Asthenia. As well as visual Asthenia, the following terms might be considered as applicable: collaborative centre asthenia; imaginative centre asthenia; visual creative centre asthenia; picture producing centre asthenia. We say neurasthenia when the trouble is not in the nerves as such, so much as it is in the collaborative centres. More of this later. Here in stuttering the trouble is also collaborative, and we can be still more definite than that and say the trouble is with the collaboration of visualization. So if I were forced, however, to choose one term from all these, my choice would be "Visual Centre Asthenia." This indicates a new and rational

treatment. But of this later.

SUMMARY: Psychoanalysis reveals stuttering as some vague trouble in the personality[1]. Psychological Analysis shows stuttering is an absent or weak visualization at the time of speech. This new concept of stuttering as faulty visualization may be called Visual Centre Asthenia. This lack or weakness in visualization accounts for all the numerous phenomena of stuttering in severe, medium, or mild cases. A new treatment is indicated.

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THE ORIGIN OF SUPERNATURAL EXPLANATIONS[*]

[*] Read at the 7th Annual Meeting of the American Psychopathological Association, New York, May, 1915.

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THERE is a general impression that the explanations of natural phenomena, including human destinies, to which the term superstitious is given are usually attributable to the vestiges of traditional cosmogonies of our tribal ancestors handed down to children at the knees of their parents or guardians. This explanation however, is only true of a portion of the beliefs which we call superstitions. The demand for superstitious explanations depends upon psychophysiological tendencies of the human organism, the root of which is comprised in the affect which we call craving. This theorem I have tried to develop as follows:—

I

Craving is a sign of physiological need. It is a sensory phenomenon, of which, however, explicit awareness cannot always be discovered. It is conspicuously noticed in cases of disturbance of the body secretions, such as occurs in over-function of the thyroid gland. It is regarded as a crude body-consciousness that something is the matter. In motorial organisms it causes visible reaction: this expresses itself in what is termed restlessness. But the unrest may show itself by a fixation more particularly in the muscles of emotional expression, although the manifestation is not confined to these; shallow respirations and restricted amplitude of movement in limbs and trunk may be observed also. In cerebrate animals the reaction of the individual is under the guidance of preceding impressions stored in the pallium and known as memories; whereas in the animals without a pallium all reaction is accomplished through stable mechanisms known as instincts. Both of these types of reaction are tropisms merely; but the former are labile, conditionable; whereas the latter cannot be modified. The science of conditionable reactions of cerebrate animals is called psychology, and the means by which the reactions are influenced are called psychogenetic, whether these are healthy or diseased. It must not be forgotten, however, that the genesis of a psychological disturbance may be purely somatic, although the manner in which the reaction shows itself is contingent mainly upon the features of the individual which have been derived from previous sensory impressions and their resultant motor reactions commonly known as experience. It is the influence of these upon the hereditary dispositions of the individual which constitute what is known as "make-up" or character; and it is this which determines the form which reaction to stimulus must take, whether the stimulus is purely psychological or somatic.

Now physiological discomfort is an experience universal at one time of life or another; but the reaction to it is infinite in variety; and while part of it depends upon the congenital dispositions which are the common property of humanity, a larger part is contingent upon the psychogenetic factors which have stamped the individual.

II

Now an influence which has been of great significance to every human being since the traditional period, at least, has been the concept of the universe regnant at the period of that individual's life. The insistence by its protagonists upon this concept as the ultimate motive of human endeavour made its acceptance almost universal at periods when it was the custom to lean upon the dicta of authority for guidance in life even when blind obedience was not the rule. Now in natural affairs, inconvenient questionings and scepticisms towards dogmatisms would ultimately reach truth. But as inaccessibility to verification of what was called supernatural made authority, rather than investigation, its criterion, excommunication from the tribe would still all criticism.[1] Thus every act of life became permeated by motives, originated in arbitrary interpretations of a super-nature.

[1] A dramatic study of this occurrence is presented by Grant Allen in "The Story of Why-Why" in his book "The Wrong Paradise."

These influences were specially conspicuous concerning the difficulties of man's almost blind struggle against the uncomprehended astronomical and geodetic phenomena marvelled at and fled from, as well as the pestilences which ravaged him. In his sociological affairs too, every act or thought became imbued with relationship to an extraneous power.

It is by these social and physical phenomena that the greatest appeal is made to the states of feeling termed emotions and sentiments. So that it became the custom to invoke, concerning ill states of feeling, the reference to a supernatural influence. Thus, from the cradle up, the ordering of social relationships was made dependent upon the simple expedient of the supernatural extraneous agent, rather than upon the more difficult and elaborate analysis and synthesis which would have been required for a proper investigation of each perturbing circumstance in its relation to life as a whole. The power of this influence was inversely proportional to the resiliency and tenacity as well as the general well-being of the individual.

But not only is reference to the supernatural favoured by traditional cosmogony, but because of certain psychological features of the individual himself there is a tendency towards supernatural explanations of the introspective observations. The Occasions of introspection of this kind are two, and I am not speaking of the inculcated introspection of the moralists. One of these Occasions is the self-examination into his conduct which is a normal character of a thinking being. This may give rise to supernatural explanations even when the introspection is not determined by the tradition of which I have already spoken.

The second kind of Occasion demanding introspection, is the autochthonous emanation of feeling of unaccustomed character. Such feelings occur at the physiological epochs;—but at these times they are readily explained in a familiar and simple way, and hence no supernatural agency is usually invoked. A similar explanation is made readily enough in cases of evident bodily disease, even where mental symptoms are prominent, for it is no longer the custom to speak of demon-possession even in the acute deliria. But even where no physiological epoch or clearly defined physical disease stands forth, unusual feelings are no uncommon phenomenon, and they demand explanation. Such occur conspicuously in the psychopathological syndrome so completely described by Janet under the term psychasthenia. Persons thus afflicted feeling an incapacity and an impediment to their free activity and not recognizing that they are sick, endeavour to interpret their feelings. Of course, the interpretation varies somewhat in accordance with the nature of the feelings, and with the person's information about the world and his psyche. But quite apart from modifications of this type, I have found it very common for patients to declare "I feel as if there was another person in me," or "I feel compelled as if by another agency to act thus." The explanation of a supernatural agent weighing upon them becomes very easy. For the purpose of this discussion, it is not important whether psychasthenia arises purely from degeneration of structure, or from faults in the chemistry of the plasma which bathes the nerve structures, or whether it is a purely psychopathological condition to which the physical phenomena are secondary, as some would have us believe. Our object is merely the setting forth of the fact that it is a diseased condition which disposes its victim towards metaphysical explanations.

It is a sort of uneasiness which prevents comfort in the feelings of certainty, in the operations of the intellect and decision of action. The patient finding himself abulic, and perhaps too critical minded to accept the mundane supports in his vicinity, seeks a solace in that which to him seems powerful because incomprehensible, that is to say in something supernatural.

For this, it is not essential that the victim's mind be pervaded by the infantine cosmogony which parades often as religious truth. Without anything of the sort, there may arise naive interpretations, hardly even having explicit reference to supernatural agents. For example, a patient may say "If I begin on Friday, a certain undertaking will fail," "If I do not turn my vest twice, misfortune will occur," "It is incumbent upon me to turn round in my chair, or the negotiations will fail." The enumeration of expedients would be useless. The above are from three different patients, one a boy of fourteen now

completely cured; the second from the son of a prominent public man now quite restored to health; the third from a case still under care. In none of these was the bodily state of importance, the psychological reactions were the sole object of therapeutic effort, and their ordination was accomplished by purely psychological means.

DATA CONCERNING DELUSIONS OF PERSONALITY WITH NOTE ON THE ASSOCIATION OF BRIGHT'S DISEASE AND UNPLEASANT DELUSIONS.[*]

[*] Presented in abstract at the Sixth Annual Meeting of the American Psychopathological Association, held in New York City, May 5, 1915. Being Contributions of the State Board of Insanity, Whole Number 47 (1915. 13). The material was derived from the Pathological Laboratory of the Danvers State Hospital, Hathorne, Massachusetts, and the clinical notes were collected by Dr. A. Warren Stearns, to whom I wish to express my indebtedness but to whom no one should ascribe the somewhat speculative character of the present conclusions. (Bibliographical Note.—The previous contribution was State Board of Insanity Contribution, Whole Number 46 (1915.12) by D. A. Thom and E. E. Southard entitled "An Anatomical Search for Idiopathic Epilepsy: Being a First Note on Idiopathic Epilepsy at Monson State Hospital, Massachusetts," accepted by Review of Neurology and Psychiatry, 1915.)

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ABSTRACT

Previous work on somatic delusions. Suggestion that allopsychic delusions are as a rule in some sense autopsychic. A genetic hint from general paresis (frontal site of lesions in cases with autopsychic trend.) Mental symptomatology of general paresis. Work on fifth-decade psychoses. Statistical summary. Group with pleasant (or not unpleasant) delusions. Three cases of senile dementia, delusions of grandeur, and frontal lobe changes. Three cases with religious delusions. Remainder of pleasant-delusion group. Group with unpleasant delusions. Nephrogenic group.

THE suggestions here put forward concerning personal (autopsychic) delusions are based on material of the same sort as that previously analyzed for a study of somatic and of environmental (allopsychic) delusions. Our conclusions are also influenced by two analyses of the types of delusion found in general paresis. Moreover, at a period subsequent to the analysis presented here, some work on fifth-decade insanities had been completed, and the delusional features constantly found in the functional cases of insanity developing at the climacteric, entered to modify our general point of view.

The situation may be summed up as follows:

The accessibility to analysis of the clinical and anatomical data at the Danvers State Hospital was such as to prompt the use of its card catalogues for statistical work upon delusions. The more so, because in a period of enthusiasm over the Wernickean trilogy (autopsyche, allopsyche, somatopsyche) of conscious phenomena, the Danvers catalogue had attempted to divide the delusions recorded into the three Wernickean groups. Putting these clinical data side by side with the anatomical data, we were speedily able to single out those cases with normal or normal-looking brains and thus to secure a group approximately composed of functional cases of insanity.

It shortly developed, as to the CONTENT of delusions, that somatic delusions were exceedingly prone to parallel the conditions found in the trunk-viscera and other non-nervous tissues of the subjects at autopsy.) A subsequent study has confirmed this conclusion for the distressing hypochondriacal delusions found in climacteric insanities, which delusions, however distressing, are often far less so than the true conditions found at autopsy. And it may be generally stated that the clinician can get very valuable points concerning the somatic interiors of his patients by reasoning back from the contents of their somatic delusions.

But how far can we, as psychiatrists, reason back from the contents of environmental delusions, e. g. those of persecution, to the actual conditions of a given patient's environment? In a few cases it seemed that something like a close correlation did exist between such allopsychic delusions and the conditions which had surrounded the patient—the delusory fears of insane merchants ran on commercial ruin, and certain women dealt in their delusions largely with domestic debacles. But on the whole, we could NOT say that, as the somatic delusions seemed to grow out of and somewhat fairly represent the conditions of the same, so the environmental delusions would appear to grow out of or fairly represent the

environment.

Thus, however brilliant an idea was Wernicke's in constructing the *allopsyche* (or, as it were, social and environmental side of the mind) for the purpose of classification, our own analysis promised to show that for genetic purposes the *allopsyche* was much less valuable. These delusions having a social content pointed far more often inwards at the personality of the patient than outwards at the conditions of the world. And case after case, having apparently an almost pure display of environmental delusions, turned out to possess most obvious defects of intellect or of temperament which would forbid their owners to react properly to the most favourable of environments. Hence, we believe, it may be generally stated that the clinician is far less likely to get valuable points as to the social exteriors of his patients from the contents of their social delusions than he proved to be able to get when reasoning from somatic delusions to somatic interiors. Put briefly, the deluded patient is more apt to divine correctly the diseases of his body than his devilments by society.

Our statistical analysis, therefore, set us drifting toward disorder of personality as the source of many delusions apparently derived *ab extra* and tended to swell the group of autopsychic cases at the expense of the *allopsychic* group,

In the statistical analysis of a group of cases corresponding roughly with the so-called functional group of diseases, we find false beliefs about the some on a somewhat different plane from those about the patient's self and his worldly fortunes. We can even discern through the ruins of the paretic's reaction that his false beliefs concerning the body are often not so false after all, and that his damaged brain of itself is not so apt to return false ideas about his somatic interior as about his worldly importance and plight. There then seems to be more reality about somatic than about personal delusions: the contents of somatic delusions are rather more apt to correspond with demonstrable realities than the contents of personal delusions. Accordingly our analysis of delusional contents includes a hint also as to genesis. Taken naively, the facts suggest a somatic genesis for somatic delusions exactly in proportion as these delusions are not so much false beliefs as partially true ones.

What genetic hint have we for the delusions concerning personality? One genetic hint was obtained from a correlation of delusions with lesions in general paresis,[2] in which disease perhaps the most profound and disastrous of all alterations of personality are found. Amidst the other alterations of personality found in paresis, autopsychic delusions are characteristic: indeed *allopsychic* delusions are conspicuously few in our series. And, as above, the somatic delusions, fewer in number, can be fairly easily correlated with somatic lesions, or else with lesions of the receptor apparatus (thalamus) of the brain.

Now it was precisely the cases with autopsychic delusions, as well as with profound disorder of personality in general, that showed the brunt of the destructive paretic process in the frontal region. The other not-so-autopsychic cases did not show this frontal brunt, but were less markedly diseased at death and had a more diffuse process.

Our genetic hint from paresis, therefore, inclines us to the conception that this disorder of the believing process is more frontal than parietal, more of the anterior association area than of the posterior association area of the brain. And if we can trust our intuitions so far, the perverted believing process is thus more a motor than a sensory process, more a disorder of expression than a disorder of impression, more a perversion of the WILL TO BELIEVE than a matter of the rationality of a particular credo.

Again we may appear to burst through from an undergrowth of statistics into the clear field of truism. False beliefs are more practical than theoretical, more a matter of practical conduct than of passive experience, more a change of reagent than a reaction to change. The man on the street or even many a leading neurologist would perhaps accept this formula as his own.

Certainly in general the least satisfactory of these chapters on the nature of delusions was the chapter on environmental effects,[3] and this perhaps because the results seemed so nearly negative.

A further contribution to delusions of environmental nature was somewhat unexpectedly derived from a piece of work on the general mental symptomatology of general paresis.[4] Dichotomizing the paretics (all autopsied cases) into a group with substantial, i. e., encephalitic, atrophic or sclerotic lesions of the cortex and a group without such gross lesions or else with merely a leptomeningitis, I found the latter (or anatomically mild) group to be characterized by a set of symptoms which were all "contra-environmental," whereas the former (or anatomically severe) did not thus run counter to the environment. The conclusions of that paper, so far as they concern us now, are as follows:—

The "mild" cases showed a group of symptoms which might be termed contra-environmental, viz. *allopsychic* delusions, *sicchasia* (refusal of food), resistiveness, violence, destructiveness.

The "severe" cases showed a group of symptoms of a quite different order, affecting personality either to a ruin of its mechanisms in confusion and incoherence, or to mental quietus involved in euphoria, exaltation, or expansiveness.

The most positive results of this orienting study appear to be the unlikelihood of euphoria and allied symptoms in the "mild" or non-atrophic cases and the unlikelihood of certain symptoms, here termed contra-environmental, in the severe or atrophic cases. Perhaps these statistical facts may lay a foundation for a study of the pathogenesis of these symptoms. Meantime the pathogenesis of such symptoms as amnesia and dementia cannot be said to be nearer a structural resolution, as these symptoms appear to be approximately as common in the "mild" as in the "severe" groups.

But in both papers dealing with paresis [2,4] we rest under the suspicion that the delusions are possibly of cerebral manufacture. Of course, a lesion somewhere outside the brain is not unlikely to be projected through the diseased brain, and SOMATIC delusions in the paretic are rather likely to represent something in the viscera.

It was desirable to get back to normal-brain material, to learn how the INTRINSICALLY NORMAL brain[5] could perhaps produce delusions from a particular environment. Could a particularly "bad" environment actually PRODUCE delusions?

By chance, at about this stage in our studies of delusions, some work on fifth-decade insanities[6] was completed. This work seemed to show that the most characteristic (non-coarsely-organic) cases of involuntal origin were much given to delusions (each of 24 cases studied), somewhat more so than to the hypochondria and melancholia which we commonly ascribe to the involution period. But this result is equivocal as to the environmental (i. e. allopsychogenic) power to produce delusions, since one could not rid oneself of the suspicion that the delusions were due to the degenerating brain.

To return to our former results with the normal-looking brain:

Case after case of the quasi-environmental group proved to be more essentially personal than environmental, until at last it almost seemed that the environment could seldom be blamed for any important share in the process of false belief. In short, we seemed to show that environment is seldom responsible for the delusions of the insane.

Be that as it may, we secured several lines of attack on the delusions of personality by our study of quasi-environmental delusions. First, we were irresistibly led to a consideration of the emotional (pleasant or unpleasant) character of the delusions. We heaped up a large number of unpleasant delusions in that (quasi-environmental, but actually) personal group. It is interesting to inquire, accordingly, whether our more obviously autopsychic cases will also be possessed of an unpleasant tone. Secondly, we came upon the curious fact that cardiac and various subdiaphragmatic diseases were correlated with unpleasant emotion as expressed in the delusions. It was therefore important to inquire whether similar conditions prevailed in the new group. Thirdly, we found ourselves inquiring whether our patients were victims of what might be termed a spreading inwards of the delusions (egocentripetal) or a spreading outwards thereof (egocentrifugal delusions). But this difference in trend, clear as it often is from the patient's point of view, remains to be defined from the outsider's point of view.

Again, it remains to determine, if possible, how far delusions are dominated respectively by the intellect or the emotions, or even by the volitions.

As before, I begin with a brief statistical analysis.

SUMMARY

Danvers autopsy series, unselected cases 1000
Cases with little or no gross brain disease 306
Cases listed as having autopsychic delusions 106
Cases listed as having only autopsychic delusions 50
Cases for various reasons improperly classified 13
Cases of general paresis in which gross brain lesions were not observed 15
Residue of autopsychic cases 22

The group of 22 cases thus sifted out can be studied from many points of view. We may recall that our former study of allopsychic delusions proved that a large proportion of delusions concerning the environment were in all probability not essentially derived from the environment. Their contents might relate to the environment, but their genesis could better be regarded as autopsychic (intrapersonal). In

fact we really found only 6 out of 58 cases of pure allopsychic delusions, which could be safely taken as showing so much coincidence between anamnesis and delusions that a correlation could be risked.

Following the method of our former work on somatic and on environmental delusions, we sought in the first instance PURE cases of autopsychic delusion-information. For a variety of reasons, more than half of the original list, namely, 28 cases, had to be excluded. Many of these exclusions were due to the strong suspicion that the cases were really cases of general paresis, despite the normality of the brains in the gross. The residue of 22 cases include, we are confident, no instance of exudative disease of the syphilitic group, though general syphilization cannot safely be ruled out in all cases.

There are two groups of cases, a group of eleven cases with delusions of a generally pleasant or not unpleasant character (in which group there is a small sub-group of three cases of octogenarians with expansive delusions reminding one of those of general paresis) and a group of eleven cases with delusions of an unpleasant character.

I. CASES HAVING DELUSIONS OF A NATURE PLEASING OR NOT UNPLEASING TO THE BELIEVER

The true emotional nature of the beliefs placed in this group cannot fairly be stated to be pleasurable. But, if not pleasurable, they may perhaps be stated to be complacent, expansive, or of air-castle type. The criteria of their choice have been largely negative: the patients are not recorded as expressing beliefs of a painful or displeasing character: in the absence of which we may suppose the beliefs to be either indifferent or actually pleasing in character.

Of the 11 cases whose delusions were supposedly of an agreeable nature or at least predominantly not unpleasant, there were 3 with delusions reminding one of general paresis. The ages of these three were 80, 84, and 87 respectively. They did not show any pathognomonic sign (e.g. plasma cells) of general paresis. They all showed in common very marked lesions of the cortex, including the frontal regions (in two instances the extent of the frontal lesions was presaged by focal overlying pial changes). 999 was a case of pseudoleukemia with marked cortical devastation but without brain foci of lymphoid cells. Two of the cases showed cell-losses more marked in suprapostellate layers; in the third there was universal nerve cell destruction, with active satellitosis caught in process.

Condensed notes concerning the cases with pseudoparetic delusions follow. Two of them, it will be noticed, yielded some delusions also of an unpleasant nature.

CASE I. (D. S. H. 10940, Path. 999) was a clever business man, Civil War veteran, who began to lose ground at 75 and died at 84. He was given during his disease to boasting and perpetual writing about elaborate real estate schemes and said he owned a \$100,000 concern for the purpose.

The case was clinically unusual in that the picture of a pseudoleukemia was presented, with demonstration at autopsy of great hyperplasia of retroperitoneal lymph nodes and grossly visible islands of lymphoid hyperplasia in liver and spleen. The brain weighed 1390 grams and showed little or no gross lesion, if we except a pigmentation of the right prefrontal region under an area of old pia hemorrhage. There was also a chronic leptomeningitis, with numerous streaks and flecks along the sulci, especially in the frontal region. There was little or no sclerosis visible in the secondary arterial branches and but few patches in the larger arteries. Microscopically the cortex proved to be far from normal: every area examined showed cell-loss, perhaps more markedly in the suprapostellate layers than below.

CASE 2. (D. S. H. 11980, Path. 1024) was a Civil War veteran who failed in the grocery business, was alcoholic, was finally reduced to keeping a boarding-house and grew gradually queer. Mental symptoms of a pronounced character are said to have begun at 75. Death at 80. Delusions reminded one of general paresis: worth \$5,000,000 a month, 108 years old, was to build a church: also, a woman was trying to poison him.

Autopsy showed caseous nodules in lung, coronary and generalized arteriosclerosis (including moderate basal cerebral), mitral and aortic stenosis (the aortic valve also calcified). The frontal pia mater was greatly thickened and, although no gross lesions were noted in the cortex, the microscope brings out marked lesions in the shape of cell losses (especially in suprapostellate layers) in all areas examined. There were no plasma cells in any area examined.

CASE 3. (D. S. H. 12767, Path. 1185) was a widowed Irish woman, who died at 87. Previous history blank. Extravagant delusions of wealth were associated with a fear of being killed.

The autopsy showed little save chronic myocarditis with brown atrophy, calcification of part of thyroid, non-united fracture of neck of left femur, moderate coronary arteriosclerosis. The brain was abnormally soft (some of the larger intracortical vessels showed plugs of leucocytes possibly indicating

an early encephalitis—Bacillus cold and a Gram-staining bacillus were cultivated from the cerebrospinal fluid.) Though the convolutions were neither flattened nor atrophied and absolutely no lesion was grossly visible, the cortex cerebri and also the cerebellum were found undergoing an active satellitosis with nerve-cell destruction in all areas examined.

The following three cases (IV, V, VI) present a certain identity from their delusions concerning messages from God (V thought he was God). It is very doubtful whether VI should be placed in the present group of Pleasant or Not Unpleasant Delusions, since the patient appears to have been "theomaniacal" as the French say, in a rather passive and unpleasant manner (God occasioned foolish actions!) Placed on general statistical grounds at first in the Not Unpleasant group, Case VI should be transferred to the Unpleasant group. Case V's delusion (identification with God, expression of atonement?) was in any event episodic in a septicemia. Case IV ("happiest woman in the world"), was phthisical (cf. VII) Notes follow:

CASE 4. (D. S. H. 4019, Path. 218) Housewife, 37 years always cheerful, became the happiest woman in the world, hearing God's voice and being specially under God's direction. "Acute mania." Death from bilateral phthisis with numerous cavities and bilateral pleuritis. There were no other lesions except a small sacral bed-sore, a small fibromyoma of the uterine fundus, small slightly cystic ovaries, a slight dural thickening, and possibly a slight general cerebral atrophy. (wt. app. 1205 grams, marked emaciation.)

CASE V. (D. S. H. 11742, Path. 852) was a victim of streptococcus septicemia (three weeks) who said he was God. Patient was a Protestant iron-worker of 59 years, who had lost an eye and had become unable to work about three months before death. Aortic, cardiac, renal lesions at autopsy. Prostatic hypertrophy. Dr. A. M. Barrett found few changes in nerve cells, except fever changes. One area in left superior frontal gyrus showed superficial gliosis.

CASE VI. (D. S. H. 5345, Path. 867) was a "primary delusional insanity," a salesman of 37 years, whose beliefs concerned impressions direct from God, in consequence of which he habitually knelt and prayed. Yet many of the actions which he felt he must perform were foolish actions. The patient died of pneumococcus septicemia during a lobar pneumonia. The brain showed a few changes suggestive of fever (A. M. Barrett). There were a few flecks of atheroma in the aorta. There was an acute parenchymatous nephritis with focal plasma cell infiltrations suggesting acute interstitial nephritis. This case appears to have shown one of the most nearly normal brains in the whole Danvers series.

The remainder of the Pleasant or Not Unpleasant Group as originally constituted consists of VII, a phthisical case (cf. IV), VIII, probably feeble-minded romancer, not deluded in the sense of self-deception (probably best excluded from present consideration); IX, probably not safely to be assigned to the Pleasant or Not Unpleasant Group, feeling passive in somewhat the same sense as Case VI (see above), suffering from auditory hallucinosis (superior temporal atellitosis, data of the late W. L. Worcester); X, delusion of birth to superior station, possibly the object of mixed emotions, probably not pleasant; and XI, manic-depressive exaltation with grandiose utterances, long prior to death (if there had been lung tuberculosis at the basis of the ileac ulcers, it had long since healed).

Notes follow (VII-XI) and at the end a brief summary of the entire group (I-XI).

CASE 7. (D. S. H. 8878, Path. 521) It is questionable whether the delusions classified in this case entitle it to inclusion in the present study. e.g. "I was baptized in the Catholic Church (patient a Protestant housewife) with holy water, ink, and Florida water." Patient was variously designated, as "dementia" and as "acute confusional insanity." Death in second attack at 26 (first attack at 22). Father also insane. Death due to bilateral phthisis with tuberculosis of intestines and mesenteric glands, emaciation. It is noteworthy that the brain weighed but 1038 grams. Dr. W. L. Worcester's microscopic examination showed acute nerve cell changes probably of the type of axonal reactions.

CASE 8 (D. S. H. 8807, Path. 556) very probably a feeble-minded subject. At all events patient had done no work in his life, had been given to spells of restlessness and excitement, and had talked disconnectedly. Symptoms were thought to have dated from the tenth year. It is questionable whether a statement that he was managing the Electric Railway and Shipbuilding Company can be regarded as delusional, that is, as believed by the patient. Death was due to (perhaps septicemia from one abscess of jaw and to hypostatic pneumonia), the brain appeared normal but Dr. W. L. Worcester found, besides certain acute changes, also satellitosis. The question remains open whether the case should be regarded as defective or as belonging to the dementia praecox group.

CASE 9. (D. S. H. 8605, Path. 568) had an ill-defined attack of mental disease and was in D. S. H. at 29. Thereafter, lived in Gloucester Almshouse, but at 51 became excited and was returned to D. S. H. where she died at 59. Possibly hallucinated: someone called her mother (single woman). Delusion: the

spirit is here (Protestant). Patient was given to a stream of muttered, vulgar and incoherent talk. Possibly the case was residual from hebephrenia. Dr. W. L. Worcester found cell changes in the superior temporal gyri (finely granular stainable substance in practically all nerve cells) and not elsewhere. The correlation is suggestive with the probably auditory hallucinosis. The brain weighed 1190 grams. Death due to bronchopneumonia. Heart and kidneys normal.

CASE 10. (D. S. H. 10145, Path. 928) a Danish fisherman possibly manic-depressive, victim of three attacks at 40, 50, and 69 years. The first attack followed loss of wife, and delusions concerning being born again developed. The last attack showed few well-defined delusions, as patient was in a bewildered and incoherent state. One statement is characteristic: if patient had remained in Denmark, he might have inherited the throne. The autopsy showed most extensive arteriosclerosis, including basal cerebral. Death from general anasarca and jaundice. (cholelithiasis). There was some question of an acute encephalitic lesion in the tissues lining the posterior half of the third ventricle. Various chronic lesions (splenitis, endocarditis, diffuse nephritis), malnutrition.

CASE 11. (D. S. H. 7767, Path. 792) was a case possibly of manic-depressive type (previous attacks Hartford Retreat and Danvers State Hospital) who worked as machinist between attacks and died at 70, having been in D. S. H. 8 years. Patient was greatly emaciated and anemic from chronic ulcers of ileum. There was also cholelithiasis. There was a mild coronary atheroma and slight mitral valve edge thickening.

The delusions expressed were those of great wealth. Patient also thought he was a great poet. No brain changes were found (A. M. Barrett).

Having attempted on the basis of certain statistical tags to constitute a group of cases having relatively normal brains and pleasant (or not unpleasant) delusions, we are forced to reconstruct our group upon viewing several cases more attentively.

Case VIII should be excluded as probably not delusional.

Case X might perhaps be transferred with propriety to the unpleasant-delusion group.

Certain cases of felt passivity under divine influence separate themselves out from the group; indeed VI and IX probably belong in the unpleasant-delusion group (see below).

These subtractions leave seven cases to deal with. Three of these seven, viz. I, II and III, are apparently best regarded as examples of frontal lobe atrophy, and their grandiosity may resemble that of certain cases of general paresis.

Of the remaining four, two, Cases IV and VII, are phthisical; one, Case VI, showed an episodic identification with God (incident in fatal septicemia), and one, Case XI, uttered manic-depressive exalted statements about wealth and poetical power.

I turn to a consideration of the unpleasant-delusion group, which as first constituted was to contain eleven cases (XII-XXII) but to which must be added three more (VI, IX, X).

Case XII should be at once excluded from present consideration on account of its microscopy.

CASE 12. (D. S. H. 12282, Path. 942) died in a second attack of depression (manic-depressive insanity?). Catholic, always of a quiet and reserved disposition, happy in married life. Delusional attitude concerning an abortion which she said she had induced. "Soul lost," "I'll see hell."

Autopsy: Death from gangrene of lung and acute fibrinous pericarditis. Erosion of cervix uteri. The edema of the brain, irregular pink mottlings of white substance, and an exudative lesion of one focus in the pia mater of the right side suggested an encephalitis more marked on the right side. Microscopically a few small vessels showed plugs of polynuclear leucocytes. The nerve cells were affected by various acute changes. The visuo-psychic portion of an occipital section (right) showed suprapellate cell-losses of a somewhat focal character

Of the remaining ten (XIII-XXII), one, Case XIII is another of mixed emotions ("am Eve and have to suffer;" "in Purgatory;" etc) of a religious type. It is the only case in the unpleasant group with phthisis pulmonalis, (combined, however, with abdominal tuberculosis and nephritis).

CASE 13. (D. S. H. 7361, Path. 499) was a somewhat defective Catholic woman (mother insane) always of a melancholy and reserved temperament. She had been ill-treated by husband, child had died, another had followed soon. She developed a belief that she was Eve and had to suffer. At hospital decided that she was in purgatory and expressed a variety of other religious beliefs. She also thought she was ill-treated at hospital. Her head was asymmetrical: skull thick and eburnated. Brain (1130

grams described as normal). Chronic interstitial nephritis. Pulmonary and mesenteric tuberculosis.

Of the remaining nine (XIV-XXII) all had grossly evident kidney lesions except two (XIV and XV). Of these two, XIV probably had renal arteriosclerosis and was in any case very gravely arteriosclerotic in general and suffered from cystitis. Case XV died apparently of starvation with hepatic atrophy; it is a question whether "poverty" was or was not a delusion. Notes of XIV and XV follow:

CASE 14. (D. S. H. 8741, Path. 500) was a German teacher, college-bred, of a reserved and melancholy turn of mind (mother insane). An attack at 39, another at 70. "Both poor wife and son will starve." "Perhaps they should be put out of reach of poverty," later felt he "had caused death of wife and son on account of his expensive living." Autopsy: chronic internal hydrocephalus, cerebral arteriosclerosis. Brain weight 1180 grams. Coronary sclerosis with calcification throughout, aortic and pulmonary valvular calcification hypertrophy of heart. Cystitis.

CASE 15. (D. S. H. 4454, Path. 237) was presumably a manic-depressive case, had in all four attacks, and died in the fourth attack (66 years). The day he arrived at the hospital, having not eaten for several days at the end of several months of delusions of poverty the case was called "acute melancholia," and the cause of death assigned was starvation. The liver weighed 1102 grams and was fatty. There was a diffuse thickening and clouding of the pia mater, and the dura was firmly adherent everywhere to the skull.

Notes follow of seven cases (XVII-XXII) which show many lesions, are in a number of instances cardiorenal and in all instances renal. If it is permitted to count XIV also as renal, a list of eight cases out of the original list of eleven unpleasant-delusion cases is obtained in which nephritis of some type has been found. Case XIII, nephritis and phthisis, belongs also in the renal group.

CASE 16. (D. S. H. 4168, Path. 226) feared death and refused food on the ground that she should not eat. Patient had always been of a despondent and reserved nature (sister also insane) and, after her husband's death, when she was 53, grew unable to carry on her house, dwelt constantly on griefs, entered hospital at 61, and died at 64 ("chronic melancholia"). Death from internal hemorrhagic pachymeningitis. The liver of this case weighed 1074 grams and was fatty. There was chronic interstitial nephritis.

CASE 17. (D. S. H. 4707, Path. 498) originally cheerful and frank, lost her situation as companion, grew despondent at failure to get employment, had a "hysterical" attack at 52. It is doubtful whether her beliefs were delusional: "can never be better," "will not be taken care of," "no place for her." "Subacute melancholia." The autopsy showed gastric dilation (over 3000 cc.), and an atrophic liver and pancreas, and slightly contracted kidneys. The heart was normal. Death from ileocolitis. Moderate chronic internal hydrocephalus. Dr. W. L. Worcester's microscopic examination showed rather unusual degrees of nerve cell pigmentation (precentral and paracentral).

CASE 18. (D. S. H. 8898, Path. 570) was an unmarried daughter of a fire insurance company president. Both her mother and she developed mental disease after the company failed (Boston and Chicago fires). Both mother and father died, and patient was in several hospitals after 36, obscene, denudative, onanist. Delusions concerning crimes committed. Satyriasis. Could hear fire kindled to burn her. Diagnosis, "secondary dementia."

Death at 54 from bilateral bronchopneumonia. Atrophic uterus. Cystic right ovary with twisted pedicle: atrophic left ovary: contracted kidneys. The brain was not abnormal in the gross— but showed (Dr. W. L. Worcester) some acute changes (also larger cells pigmented).

CASE 19. (D. S. H. 10106, Path. 663) a cheerful Irish house-wife (mannerism of drawling words) underwent a maniacal attack at 41, and another at 44. Delusions: "sorry she had lived": "broken her religion" Given to self recrimination.

Autopsy: Death from hypostatic pneumonia. Healed gastric ulcer. Moderate arteriosclerosis, slight cardiac hypertrophy. Granular cystic kidneys. Mucous polyp and subperitoneal fibromyoma of uterus. The brain was macroscopically normal, but showed superficial gliosis (frontal and precentral) and thinning out of medullated fibers superficially (frontal).

CASE 20. (D. S. H. 8963, Path. 679) an epileptic shoe-maker, 50 years, was of the belief that he was sent to Hospital for hitting a boy and was to be executed.

Autopsy: Aortic and innominate aneurysm, hypertrophy and dilatation of heart. Interstitial nephritis. The brain, normal macroscopically, proved microscopically to show, in all areas examined, superficial gliosis. There was gliosis in parts of the cornu ammonis, but no demonstrable nerve cell loss (interesting in relation to the epilepsy).

CASE 21. (D. S. H. 4584, Path. 861) cabinet-maker of melancholy temperament, Civil War veteran. Said to have been feeble-minded after six months in rebel prison. Violent at times for twenty years. Did no work, thought "soul lost."

Death from pneumococcus and streptococcus septicemia. Chronic diffuse nephritis. The brain was described grossly as normal: but microscopically there was marked superficial gliosis in all areas examined and considerable cell loss in supracerebellar layers of precentral cortex. The calcarine sections show little or no cell-loss. But one section from the frontal region is available (right superior frontal). This shows little cell-loss except in the layer of medium-sized pyramids.

CASE 22. (D. S. H. 8250, Path. 909) an unmarried woman without occupation, two attacks of "melancholia" at 36, and 40. Always of a retiring and shy disposition. Mental disease began after father's death. Delusions (if such): has been selfish and wicked. Constant self condemnation. Suicidal. Exophthalmic goiter.

Autopsy: Thyroid glandular hyperplasia. Mitral sclerosis. Aortic sclerosis with ulceration. Chronic endocarditis. Chronic diffuse nephritis. Scars of both apices of lungs, with small abscess of left apex. Emaciation. Brain weight 1050 grams. No gross lesions described; microscopically profound alterations; extreme or maximal cell-losses in small and medium-sized pyramids in both superior frontal regions. Smaller somewhat less marked cell-losses elsewhere.

Upon reviewing the unpleasant-delusion group, then, we exclude one (XII) altogether. It is questionable whether XV actually exhibited delusions at all. We then discover that eight (in all probability all) of our nine remaining cases are renal in the sense of grossly evident lesions at autopsy.

But it will be remembered that we transferred three cases originally thought to entertain "not-unpleasant" delusions to the unpleasant group, because their constraint, although conceived to be of divine origin, seemed to be unpleasant (VI, IX, X). Of these VI and X were renal cases; but IX is expressly stated by a reliable observer (the late Dr. W. L. Worcester) to have had normal kidneys as well as heart. In point of fact, however, Case IV had hallucinations and religious delusions ("spirit is here") probably derived therefrom, and Dr. Worcester found an isolated brain lesion correlatable with the hallucinosis; and in any event the emotional state of the patient is in grave doubt.

Accordingly if we take the unpleasant-delusion group to be constituted of Cases VI and X (transfers from the first group), XIII, XIV, and XIV to XXII, that is eleven cases, we come upon the striking fact that virtually all of them are renal cases.

Of course, as (with Canavan) I have been at some expense of time to prove, virtually ALL cases of psychosis (as autopsied) are in a microscopic sense abnormal as to kidneys.[7] But only about a third exhibit GROSS interstitial nephritis, arguing a certain severity of process. The above cases, it will be observed, fall into the GROSS class in respect to renal lesions.

Without laying too much stress on such results, it is worth while to say that, whereas most workers might be willing to surmise that metabolic or catabolic disorder must affect the sense of well-being, I must confess that the discovery of so much gross kidney disease in a group selected on other grounds filled me with a certain surprise.

The literature is not without suggestions as to the possible correlation of renal and mental disorder. Ziehen,[8] for example, remarks that nephritis brings about mental disease in two ways,—through vascular changes which very frequently accompany chronic nephritis and other uremic changes in the blood. Inasmuch as we know that creatin, creatinin and potassium salts irritate the animal cortex, Ziehen notes that psychopathic phenomena may occur in man as a result of slight uremic changes. According to Ziehen, most of these nephritic psychoses run the course of what he calls hallucinatory paranoia (it may be remembered that Ziehen counts among paranoias a number of acute diseases and even so-called Meynert's amentia). Chronic nephritis, as well as acute diabetes and Addison's disease are thought by Ziehen to produce certain chronic forms of mental defect which he terms autotoxic dementia, but he regards most of these cases as really cases of arteriosclerotic dementia.

It does not appear that Wernicke[9] has considered renal correlations systematically.

Kraepelin[10] mentions the epileptiform convulsions of uremia as well as delirious and comatose conditions, especially those in advanced pregnancy. These uremic conditions may be both acute and chronic. But Kraepelin has not been able to convince himself of the existence of a clearly defined uremic insanity unless the delirious condition just mentioned may be regarded as such

Binswanger[11] states that the mental disorders occurring in acute and chronic nephritis are either toxic psychoses on uremic bases, or due to arteriosclerosis. In the latter cases, he states that the disease pictures are as a rule characterized by grave disturbances of emotions, chiefly of a depressive

character. He adds that these are all too frequently the forerunners of arteriosclerotic brain degeneration.

A brief mention of renal disease in the general etiology of mental disease is made by Ballet.[12] Ballet states that Griesinger's opinion that renal disease had little importance in the etiology of mental disease and that no one would count the cerebral symptoms of Bright's disease as mental is no longer held. Ballet enumerates a number of works upon so-called folie brightique which tend to prove that acute or chronic Bright's disease gives rise either to melancholic disorder or alternately to maniacal and melancholic disorder. How the mental disease is produced is doubtful. Ballet holds that all the various psychopathic disorders resulting from Bright's disease are autotoxic. Renal disease like heart disease is only capable of awakening a latent predisposition or liberating a constitutional psychosis, unless it is merely effecting a species of intoxication.

It cannot be doubted that the relation of kidney disorder to mental disorder is worth intensive study, of which the present communication is merely a fragment. Progress will be of course impeded by the fact that upon microscopic examination, practically all cases of mental disease coming to autopsy show renal disease of one or other degree; in fact, it is perhaps possible to show a higher correlation of renal disease with mental disease than of brain disease to mental disease. Perhaps something can be obtained if we limit ourselves to a study of cases with pronounced somatic renal symptoms and signs, cases with the renal facies and the like.

As to the question of phthisis and mental disease, Ziehen remarks that the tuberculous are often observed to be optimistic but that other cases show a hypochondriacal depression with egocentric narrowing of interests. He speaks of a sort of rudimentary delusional disorder looking in the direction of jealousy in certain cases. Pronounced mental disorder occurs rarely in tuberculosis, according to Ziehen, and leads either to melancholia or to hallucinatory states of excitement, resembling the deliria of exhaustion or inanition. Acute miliary tuberculosis may produce the impression of a general paresis or of an amentia in Meynert's sense. The inanition delirium of tuberculosis resembles that of carcinosis and malaria.

Kraepelin regards tuberculosis as of very slight significance in the causation of insanity, despite the fact that slight changes in mood and in voluntary actions frequently accompany the course of the disease. Irritability, depression and sensitiveness, incomprehensible confidence and desire to undertake various tasks, pronounced selfishness, sexual excitement and jealousy are the traits of mental disorder in tuberculosis.

Kraepelin states that many cases of tuberculosis show traits of alcoholic disease and says that the occurrence of polyneuritic forms of alcoholic mental disorder is favored by the association of tuberculosis with alcoholism.

Wernicke does not systematically consider the topic.

Binswanger states that tuberculosis, aside from miliary tuberculosis or meningitis, produces no mental disorder except phenomena of the amentia of exhaustion.

Ballet states that there exists a peculiar mental state in the tuberculous. It is compounded as rule of sadness, of looking on the dark side and of profound egoism. This readily leads to mistrust and suspicion which may be pronounced enough to constitute a sort of persecutory delusional state or a state of melancholic depression (Clouston, Ball). More rarely there are phenomena of excitation explained in part by fever. In its slightest degree this phenomenon of excitation is characterized by a feeling of well-being, of euphoria, which even at the point of death may give the patient the illusion of a return to health, or there may be a more pronounced excitation with impulsive sexual and alcoholic tendencies. Autointoxication may lead to the usual train of confusional symptoms.

If we compare the accounts in the literature of the two conditions here in question, namely, nephritis and phthisis, we must be convinced, that aside from so-called autotoxic phenomena, renal disorder seems to be marked by a tendency to depressive emotions but that phthisis shows not only depressive emotion but also euphoric and hyperkinetic phenomena.

So far as these results thus hastily reviewed are concerned, they are consistent with the appearances in the present group of cases. Both the nephritic and phthisical groups need further intensive study.

As to the question of the spreading inwards or outwards of delusions from the standpoint of the patient, no analysis is here attempted. It is plain, however, that the theopaths, as James calls them, or victims of theomania, to use the French phrase, will be of importance in this analysis because of the equivocal character of the emotions felt in cases of religious delusion.

SUMMARY AND CONCLUSIONS

The paper deals with delusions of a personal (autopsychic) nature and is one of a series based upon certain statistics of Danvers State Hospital cases (previous work published on somatic, environmental (allopsychic) delusions and those characteristic of General Paresis). The previous work had suggested that somatic delusions are perhaps more of the nature of illusions in the sense that somatic bases for somatic false beliefs are as a rule found. On the other hand, delusions respecting the environment (allopsychic delusions) had appeared to be more related to essential disorder of personality than to actual environmental factors.

The fact that cases of paresis with delusions were found to have their lesions in the frontal lobe, whereas non-delusional cases showed no such marked lesions, is of interest in the light of the present paper because three cases of senile psychosis were found to have delusions of grandeur and, although they are demonstrably not parietic, they also show mild frontal lobe changes supported by microscopic study.

The Danvers autopsied series, containing 1000 unselected cases, was found to show 306 instances with little or no gross brain disease. Of these, 106 had autopsychic delusions and of these 106, 50 cases had delusions of no other sort. 15 of these 50 cases appeared to have been cases of General Paresis in which gross brain lesions were not observed at autopsy, and upon investigation 13 other cases were found to be, for various reasons, improperly classified. The residue of 22 cases was subject to analysis and readily divides itself into two groups of 11 cases each, or two groups of normal-looking brain cases having autopsychic delusions and these only are cases which may be termed the "pleasant" and "unpleasant" groups, in the sense that the delusions in the first group were either pleasant or not unpleasant, whereas the delusions in the second group were of clearly unpleasant character.

Three of the "pleasant" delusion group were the three cases of grandeur and delusions in the senium above mentioned. Three others were cases of "theomania" in the sense that their delusions concerned messages from God. It is not clear that these three religious cases should be regarded as belonging in the group of "pleasant" delusions on account of the sense of constraint felt by the patients.

The remainder of the "pleasant group," as the delusions were originally defined, turned out for the most part to show either doubtful delusions or delusions involving a sense of constraint rather than of pleasure.

An endeavor was made to learn the relations of pulmonary phthisis to the emotional tone of the delusions. The few available cases in this series seem consistent with the hypothesis of phthisical euphoria (IV, "happiest woman in the world," hearing God's voice, VII and possibly XI).

The problems of the "pleasant" delusion group, as superficially defined, turned out to be a. the problem of a group of senile psychoses with grandiose delusions and frontal lobe atrophy; b. the problem of felt passivity under divine influence; c. the problem of phthisical euphoria.

The group of "unpleasant" delusions in the normal-looking brain group should be diminished by one on account of its positive microscopy (encephalitis). One case (XIII) is a case of mixed emotions of religious type, showing phthisis pulmonalis together with abdominal tuberculosis and nephritis. One case (XV) is doubtful as to delusions; the remainder are subject to renal disease, as a rule associated with cardiac lesions.

Two cases which were transferred from the "pleasant" to the "unpleasant" group on account of constraint feelings, were also renal cases,—VII and IX. The only exception to the universality of renal lesions in this group is the case in which religious delusions were probably based upon hallucinations for which hallucinations an isolated brain lesion was found, very probably correlatable with the hallucinosis.

Virtually all of the eleven cases determined to belong in the "unpleasant" group are cases with severe renal disease as studied at autopsy.

Whether the unpleasant emotional tone in these cases of delusion formation is in any sense nephrogenic and whether particular types of renal disease have to do with the unpleasant emotion, must remain doubtful. A still more doubtful claim may be made concerning the relation of euphoria to phthisis. The renal correlation is much more striking as well as statistically better based. A further communication will attack the problem from the side of the kidneys in a larger series of cases.

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SIXTH ANNUAL MEETING OF THE AMERICAN PSYCHOPATHOLOGICAL ASSOCIATION

New York, N. Y., May 5, 1915

PROGRAM

ADDRESS BY DR. ALFRED REGINALD ALLEN, President, Philadelphia, Pa.

1. "The Necessity of Metaphysics," Dr. James J. Putnam, of Boston, Mass.
2. "Anger as a primary Emotion, and the Application of Freudian Mechanisms to its Phenomena," President G. Stanley Hall, of Worcester, Mass.
3. "The Theory of 'Settings' and the Psychoneuroses," Dr. Morton Prince, of Boston, Mass.
4. "The Mechanisms of Essential Epilepsy," Dr. L. Pierce Clark, of New York, N. Y.
5. "Material Illustrative of the 'Principle of Primary Identification,' " Dr. Trigant Burrow, of Baltimore, Md
6. "Psychoneuroses Among Primitive Tribes," Dr. Isador H. Coriat, of Boston, Mass.
7. "Data Concerning Delusions of Personality," Dr. E. E. Southard, of Boston, Mass.
8. "Dyslalia Viewed as a Centre-Asthenia." Dr. Walter B. Swift, of Boston, Mass.
9. "Constructive Delusions, " Dr. John T. MacCurdy and Dr. W. T. Treadway, of New York, N. Y.
10. "Narcissism," Dr. J. S. Van Teslaar, of Boston, Mass.
11. "The Origin of Supernatural Explanations," Dr. Tom A. Williams, of Washington, D. C.
12. "The Psychoanalytic Treatment of Hystero-Epilepsy, " L. E. Emerson, Ph. D., of Boston, Mass.

The meeting was called to order by the President, Dr. Alfred Reginald Allen, at 9:30 A. M., in Parlor E, Hotel McAlpin.

Dr. Allen delivered The Presidential Address.

Dr. James J. Putnam, of Boston, read a paper entitled, "The Necessity of Metaphysics." [1]

[1] Published in the June-July number, p. 88, of this Journal.

DISCUSSION

DR. MORTON PRINCE, Boston: I sympathize with Dr. Putnam in his interest in philosophical problems, my only conflict with his point of view being with what I conceive to be a mixing of problems. I suppose that if we want an explanation of the universe it must be in terms of philosophy or metaphysics. The only alternative is to accept it as a phenomenal universe, as it is. You will remember that when it was reported to Carlisle that Margaret Fuller said she "accepted the universe," he replied "Gad! I think she had better!". So we have got either to explain the universe in terms of philosophy or accept it as it is.

I have no objection to introducing philosophical problems if we do not confuse those problems with our psychological problems. They are entirely distinct. This distinction between philosophy and science the physicists and chemists clearly recognize. One of their problems is the ultimate nature of matter, but it is not a problem of practical physics and chemistry. These deal, let us say, with phenomenal atoms and molecules, with their attractions and repulsions, etc. In dealing with the problem of the ultimate nature of matter the chemist analyzes matter and finds that it can be reduced to atoms, and then analyzes the atoms and finds them composed of electrons flying about within the circumscribed space of an atom. Then he analyzes the electron and reduces it to negative electricity, and when asked what negative electricity is he says it is a form of the energy of the universe, and stops there and says—"I don't know," when asked to explain energy.

Here the problem of the ultimate nature of matter becomes a question of philosophy and metaphysics. It is a field of research by itself. The chemist never confuses that problem with the specific problems of his particular science. These deal with empirical atoms and molecules as he finds them. No chemist would undertake to give the chemical formula of the union of sulphuric acid and zinc by a formula which expressed the ultimate nature of atoms or negative electricity. If he did so he would confuse his problems. And so I think we confuse our problems when we attempt to explain empirical psychological phenomena in philosophical or ultimate terms. We must treat our psychological elements—ideas, wishes, emotions, etc,—as the chemist treats atoms and molecules. But, just as the latter may take up ultimate problems as a special field of investigation so may we do, if we like, but we must not treat them as psychological problems.

This confusion of problems is, I think, the fundamental error of Jung and others in treating of the libido when he and they attempt to explain specific phenomena as empirically observed. Jung undertakes to resolve libido into the energy of the universe. Of course this is possible. All forces can be ultimately so resolved, including the forces of mind and body. Emotions such as anger and fear are forces and each of these forces, with great probability, can be reduced in the ultimate analysis to a form of energy. But this is not to admit that we are justified in explaining specific concrete psychological phenomena, with which we are dealing, in philosophical terms. We must explain them in terms of the phenomena themselves. As a monist and pan-psychist, for example, I may believe that conscious processes can be reduced to, or be identified with the ultimate nature of matter, the thing-in-itself. And conversely atoms and electrons may be reduced to a force which may be identified with psychic force, but I would not attempt to explain psychological behaviour in terms of such a philosophical concept but only through phenomenal psychological forces, let us say, wishes. In other words, I would not undertake to introduce pan-psychism into the problem at all as an explanation of a particular phobia. I think, therefore, that when Jung and others attempt to explain phobias and other psychological phenomena through a philosophical concept of the libido as analyzed into an *elan vitale* or the energy of the universe, they not only confuse their problems but introduce such a mixing up of terms that the resulting explanation becomes little more than nonsense. The libido, whatever it may be, must be treated as a psychophysiological force just like any of the other emotions. Otherwise psychology ceases to be a science.

Now one word about conflicts. Undoubtedly conflicts play a most important part in such psychological disturbances as we have to deal with in the psycho-neuroses, but I cannot agree that psychological conflicts conform only to, or are synonymous with ethical conflicts. Undoubtedly there are a large number of conflicts between ideas and sentiments which we have all agreed to label as ethical, but there are also a large number of conflicts between sentiments which cannot be pigeon-holed as ethical. For example, the mother whose child is threatened with danger and who herself would incur danger in rescuing her child, undergoes a conflict between her fear instinct, on the one hand, and her love on the other, exciting also her anger emotion. The anger and love conflict with the fear, down and repress it. There you have a conflict but I think it could not be classed as an ethical conflict. It is a

general law, whenever one instinct antagonizes another instinct there is a conflict. It is a conflict which has its prototype in the lower organic processes. Thus Sherrington's spinal reflexes, that he has worked out so beautifully, involve conflicts between opposing organic impulses. In the scratch reflex, for instance, the impulse which excites the flexor muscles inhibits the excitation of the extensor muscles. I believe this principle underlies the higher processes and upon it is built up the whole of the psycho-physiological mechanisms.

DR. TOM A. WILLIAMS, Washington, D. C.: I want Dr. Putnam to reply to two objections to his position. One, the manifestations of functional capacities which are themselves dependent upon structural differences. I am not talking now of psychogenetic determinants, but alone of the trends of which Dr. Putnam has spoken. Is he not assuming the contrary to Darwin when he says that function precedes structure? Are not the potentials dependent upon the variation which has determined this function? I am speaking now in the broadest possible terms and not confining myself to the cerebrum. Do we not find it in the tadpole who is prepared for breathing not because he wants to breathe, but because he is going to have a new kind of breathing apparatus and the duck who takes to the water because he has the mechanism to swim?

Two, in regard to Hegel and the appeal to the ethical as being of a different type from the motive of biological satisfaction. Is not that difficulty only apparent, and is it not answered by Dr. Putnam's own appeal that these matters should be settled independently, and is not it the case that the average sexual man would settle it very differently from Dr. Putnam himself and most of us; and is not it true that, though the ethical determinants of behaviour are not auspicious for the average sexual satisfactions of man, yet are they not themselves forms of hedonistic satisfactions? For a man who would behave unethically would be miserable in doing so by the loss of his own self-respect. So that he already has a hedonistic determinant for his own conduct which is in harmony with the biological concepts of Aristotle.

DR. JAMES J. PUTNAM, Boston: I should be very sorry to be taken as wishing to put myself in the sort of adverse position which Dr. Prince and Dr. Williams believe me to assume. I accept, of course, the proposition that there are conflicts which are not ethical, and, as Dr. Williams says, the average man would naturally come to different conclusions from those of the trained man in ethical matters. I want to make a slight movement towards restoring a balance which it seemed to me had become tipped too far one way. Psychoanalysts, for example, actually deal with metaphysics and yet they do not really study out what this involves. If we were nothing but scientific men we could say, "very well, let metaphysics go." But we are not. We are dealing with individuals who are thrilling with desires, hopes and fears, the movements of which cannot be expressed in scientific formulae. Dr. Williams speaks of Darwin. It can be asserted with justice, however, that the genetic method of investigation which is exemplified by Darwin's study of evolution is an imperfect method for discovering the aims of human beings. I refer to the interesting book of Prince Kropotkin in which he studies mutual aid as a factor in evolution, mutual aid being something not adequately contemplated by Darwin, who considers conflict as the essential influence in evolution. Prof. Judd showed in a paper a few years ago the change which has taken place in the attitude of a good many students of economics through the introduction of human intelligence and desires as something quite distinct from the conflicts of interests, and similar arguments have been brought forward by students of evolution. Among others Prof. Cope, the distinguished Zoologist of Philadelphia and Prof. Hyatt of Boston, showed very clearly how the course of evolution becomes materially changed when desires and will become prominent as factors. I agree that, as a partial motive, structure does limit and determine function. There is no question about that. I merely want to say that logically function precedes structure, inasmuch as the wish and desire to do a thing precedes the means by which we secure for ourselves the power to do it. But of course all energies must work through structural media. In regard to hedonism, one must recognize that pleasure counts as a partial motive, but when it comes to taking it as the final motive it fails utterly. Our lives contain determinants which we cannot range under the category of pleasure. We act in certain ways because our structure and our functions and our wills are what they are, and not exclusively by our temporary wishes. Our "meanings," when thoroughly studied are found to coincide with the meaning of the universe as a whole. It is only through getting hold of the entire scheme that you have something that you can use as a criteria. The nearest approach to this is obtained through the study of the most broadly developed, public spirited men, and such men do not work in accordance with hedonistic principles. President G. Stanley Hall, of Worcester, Mass., read a paper entitled, "The Application of Freudian Mechanisms to Other Emotions."[*]

[*] Published in the June-July number, p. 81, of this Journal.

DISCUSSION

DR. JOHN T. MAC CURDY, New York City: I have been so interested in the paper by Dr. Hall that I have been distinctly delighted by it and with your permission I will refer to a point in Dr. Putnam's

paper directly pertinent to the issues raised by Dr. Hall. Dr. Putnam has spoken of the necessity for metaphysics by which I presume he means the necessity for formulation. Yesterday there was some antagonism in a discussion on formulation. We cannot avoid formulating. Our advance in knowledge is purely empiric unless it is directly dependent on formulation. We have not formulated enough. We have stuck too much to our empiric data, have not made the necessary deductions from it. What formulations there are have been based on therapeutic data and explain the productions of symptoms. No attention has been paid to the general psychoneurotic or psychotic Anlage. When this is done I am sure that it will be found that there are just such primordial reactions as President Hall has been talking about lying back of all the sexual impulses. Sexual reactions have in the course of development come to be the vehicle for more primitive ones. We know by observation that the infant demonstrates anger in a much greater degree, and long before he gives evidence of things sexual, in anything approaching the adult sense of that term. The temporary formulation of psychoanalysts who attempt to explain anger or temper by sadism are really ridiculous. President Hall rightly says that sadism must be explained by anger. That is one of the primitive emotions. Sex is merely a vehicle. The importance of this transference is that the sex emotions are peculiarly adapted to repression and when once unconscious, continue to operate all through the life of the individual. This is less likely to occur in the sudden reaction of anger, which is much more apt to be blown off at the time.

DR. SMITH ELY JELLIFFE, New York, N. Y: I cannot quote the line, but in Shaw's "Doctor's Dilemma," recently presented in New York, there is an exchange of words during which the heroine tells the surgeon that she is tempted to pass from loving him to hating him. He replied that one is surprised after all what an amazing little difference there is between the two different attitudes of mind. Dr. Jelliffe said he was quite in sympathy with what Dr. MacCurdy had been saying, with reference to the need for formulation: We all know how these formulations have grown and how they are utilized practically. For instance, we formulate an attitude towards space. We wish to handle space and say 3 ft. or 7 ft. in order to handle space relations. In other words, to handle space we utilize a formulation which we call a measure of space. In the same manner in order to handle time we make a hypothetical unit to be pragmatic. In handling the phenomena of electricity, we formulate other units. In my own mind there has grown up therefore the analogy that in order to handle psychological phenomena we have formulated the Oedipus by hypothesis. This hypothesis I would define as the unconscious biological directing of the energy of the child towards the parent of the opposite sex and away from that of the same sex. This is the unconscious basis of what in consciousness we call love and hate. The boy is unconsciously directed away from the parent of the same sex. He develops according to the Oedipus hypothesis the desire to get away from the father or the father image. All other men are patterned after the father image and if this strong biological direction fails to take place, his interest not being directed in an opposite direction, he fails to mate and thus fails in his reproductive function. The reproductive function cannot go on without this biological thrust towards the proper object. By Narcissism is meant the formulation that a new development is taking place in the infantile Oedipus fantasy. The child cannot hold on to the mother image. He passes it to others nearer his own age. He does it first through his own identification with the female. His bisexuality permits this. Similarly the infantile father protest must be supplanted by an evolved brotherly love. The competition with the father image must take a new form. It must be a mutual competition with mutual productivity. Any contact between man and man that does not ensue to the value of both in some degree, therefore, registers a failure to sublimate the unconscious gather hatred of the infantile stage of development. Sublimated hatred of the father image is brotherly love. Sublimated love of the mother image is taking one's place in the world as a father for the continuance of the race. In the unconscious the formula of direction against same sex and towards opposite sex, means therefore that in the unconscious love and hate are the same; one cannot give them these names however.

Thus I would enlarge the Oedipus formula and say that it is useful not only in understanding the neurotic, but it can be used to measure up all psychological situations.

DR. JAMES J. PUTNAM, Boston: I deeply appreciated and enjoyed what Dr. Hall said and I have no question whatever that we all who are so interested in psychological work profit by arguments of this sort being brought before our notice. I think it is an unfortunate thing that Adler, who was on that line and did such good work in it, coupled his statements with a sort of denunciation of Freud's views. It seems to me to have been entirely unnecessary. One of the remarkable stories of O. Henry, who was a keen observer of human nature, deals with a frontier army officer who exposed continually himself to danger, desiring to work out in an indirect way this feeling of conquering one person by another, only it was himself, his own cowardice, that he wished eventually to conquer. I would ask Dr. Hall if the notion of which Royce has made so much, namely, the social concept, is not one which perhaps would act as the common denominator in these cases. We cannot assert ourselves and get angry without virtually having reference to other persons, neither can we have sex feelings without such reference. It seems that the social instinct or imagination which is carried around by every individual and which determines his acts is as natural and as invariably present as the existence of a desire to live, not to

speak of the desire to conquer.

DR. MORTON PRINCE, Boston: I feel extremely thankful to Dr. Hall for his very interesting and satisfying presentation of the thesis which he has given us. I remember an old gentleman once saying to me, in speaking of another man with whom he had been conversing, "He is a very intelligent man. He thinks just as I do." So I think Dr. Hall is a very intelligent man; he thinks just as I do. I am entirely in accord with his views which he has so well expressed. What he has said is in principle the basis of the paper which I intended to present this morning but which, in view of the length of our programme, I have decided to withdraw.

The principle underlying the large number of concrete facts which he has given is that besides the sexual instinct there are a large number of other instincts—one of which is anger—which have a very important place and play important parts in personality. Some of these instincts play not only as important a part as the sexual instinct but even a more important part. And, as Dr. Hall has said, the Freudian mechanisms can be applied to them just as well and just as logically. If an analysis is fully carried out along the directions of these instincts we find, according to my observations, the same disturbances that we find from conflicts with the sexual instinct and effected by the same mechanisms. Amongst these instincts besides anger there is the parental instinct, containing, if we follow Mr. McDougall's terminology, tender feeling or love. At any rate love is an instinct entirely distinct from the sexual instinct. There are also the instinct of self-assertion and, fully as important as any, that of self-abasement. This last, according to my observations and interpretations plays a very important part in many cases of psycho-neurosis and leads through conflicts to the same disturbances of personality that one finds brought about by conflicts between the other instincts. That love may be something entirely separate and distinct from the sexual instinct is a view which is generally recognized and accepted by psychological writers but entirely ignored, as a rule, by Freudian writers. A criticism which I would make of the work of the Freudians is that while they recognize these instincts they do not give them their full value nor study them as completely and thoroughly—nor do they carry their studies to the final logical conclusion—as they do with the sexual instinct. So far as they may do so they subordinate these instinctive emotions entirely to the sexual instinct so that these latter simply make use of them. When the psycho-neuroses are completely studied we will find the same repression of the various instinctive dispositions and impulses to which I have referred in the one case as in the other, and of ideas organized with these disposition. We find the same conflicts and resulting disturbances. The sexual instinct has no hegemony. To my mind each occupies precisely the same position and may play the same part in personality.

When you bear in mind that psychologically it is a fact, as I believe, that sentiments are formed by the organization of emotional instincts with ideas, with the memories of experiences, as Shand has pointed out, and when you remember that it is through the force of emotional instincts thus organized that an idea, i e., a sentiment, acquires its driving force which tends to carry the idea to fulfilment, and when you bear in mind that sentiments thus formed are derived from antecedent experiences sometimes dating back to childhood and sometimes persisting through life, we can understand how conflicts arise between antagonistic sentiments and the part which the different instincts, through the force of their impulses, play in these conflicts.

Furthermore when we bear in mind that sentiments thus originating and organized are conserved in the subconscious forming what I call the "setting" which gives idea meaning, the meaning being the most important component of any idea, and when we bear in mind that this subconscious setting is an integral part of the total mechanism of thought—each sentiment in the setting striving to carry itself to completion, and for this purpose repressing every conflicting sentiment—I think we find a satisfactory explanation of the disturbances due to conflict in the psycho-neuroses. Such a mechanism gives full value to any one and all of the emotional instincts without giving primacy to any one.

DR. WALTER B. SWIFT, Boston: In regard to the origin of emotions: I understood Dr. Hall to say that they were not instinct. Of late I have been observing two young children develop certain emotions. The starting point of that development has seemed to be in the imitation of motions seen in others. It is plain to see that this is along the line of the James-Lange hypothesis. So that before these motions were seen there was no emotion in the child. If these motions were observed and imitated by the children then the emotions developed. I would, therefore, like to ask President Hall whether he would consider imitation of motion seen in another as the starting point of the development of emotion.

DR. TOM WILLIAMS, Washington, D. C.: The value of formulation we know. It has been well illustrated by Dr. Hall's paper that he has by definite concept followed out by investigation of this. The disadvantage of formulation is very well shown by over-formulation by the scholastics in the Middle Ages. I think Dr. Hall's wonderful contribution to our psychological researches should be kept in mind by those who have excessively formulated in a certain direction in order that some of us at least may apply to some of the other emotions what others have attempted concerning libido. Dr. Prince has long

appealed for other methods than those which have been applied so exclusively to the sexuality. In reference to the manifestation of the anger trend, for instance, it may be not only a definitely conscious manifestation, but it may perhaps produce a crisis even in dream-thought. I am speaking of a case. A young boy at boarding school who was a musical genius had been very much bullied. He suffered a great deal from this, but did not retaliate until one night in the dormitory with eight boys while asleep, he being badgered by neighbors, got up while asleep and attacked these larger boys and discomfited them. It was the subject of conversation in the dormitory, whether he was really asleep or not. The boy became so terrible in his anger on future occasions and so successful as a fighter that his bullying thereafter ceased, and his status in the school thereafter was different. Whether this really occurred in a dream state or was mere simulation I cannot say.

DR. A. A. BRILL, New York City: I must say that the mechanisms described so interestingly by Pres. Hall are found in our patients during analysis and I believe that almost all of them belong to the love and hate principles. This may not seem so on superficial examination, thus, I have on record nine cases of women who were suffering from various forms of psychoneurosis, one of whose symptoms was screaming. Every once in a while they had to scream. It was an obsessive screaming. Questioning elicited that the screaming always occurred when they were thinking of some terrible or painful thought. For instance, one woman went through fancies of killing her husband and when she came to the idea of shooting him, she began to scream. Here one might think that it was an ethical struggle which had nothing to do with sex, but if one considers that it was against her husband that her anger was directed, that she wished to kill him because he abused her and that there was another man in the case, it becomes quite clear that the anger had a sexual motive.

Concerning new formulations, I feel that there is nothing against promulgating new attitudes and theories, provided one has sufficient cause for doing so. Formulations based on insufficient data and hastily constructed are dangerous, to say the least. Prof. Freud is most careful in formulating new theories. He gathers his material for years before he puts it forth in the form of tentative theories and does not hesitate to modify them if occasion demands. Nor is it true that the Freudians ignore the work done by others. Freud and his followers give due credit to other observers, but as the Freudian mechanisms have opened up so many new fields for investigation, we naturally give most of our time to this work. That does not at all signify that we ignore everything else, as some believe. Freud himself continually urges that the psychoanalytic problems should be taken up by observers in other fields than medicine and I was, therefore, extremely pleased to hear Prof. Hall's formulations of anger. I do not believe, however, that his paper shows that we are overestimating the sexual impulse. Basically, all his mechanisms come under the heading of "Sex," as we understand it.

DR. L. E. EMERSON, Boston, Mass: I wish to express my delight in President Hall's paper. It seems to me what he has done has been to show the breadth of the Freudian conception of sex. The word sex as the Freudians use it, includes all personal relations and even personality; and it is apparently in question only as to whether one is going to draw a line at one place and say everything on this side is sex and the other side personality, or whether one is going to enlarge the concept of sex to include personality. That as I understand it, is what Dr. White has also said. It seems to me the value of the sex conception lies in the fact that while it can be expanded, and is illimitable, at the same time it focuses, it does come to a point. Personalities as talked of ordinarily have no point, they are too vague. On the other hand, a man who has a mind no bigger than a pinhole is too circumscribed to be capable of understanding any very broad generalization. If one can grasp a conception that does have a center, even though no circumference, he has got hold of a very valuable generalization.

DR. E. E. SOUTHARD, Boston: Dr. Jelliffe has just brought into ridicule what he terms "pinhole psychiatry;" but as I remember it, there is a technical method in psychology whereby things may be more clearly visible through a pin-hole!

The valuable thing about President Hall's communication is that the fundamental distinction is brought out between two groups of workers in psychopathology. I should be inclined to divide the people in this room into what might be termed emotional monists and emotional pluralists. The Freudian theory is in general a theory of emotional monism and therefore fundamentally must satisfy a great many of the Hegelian tenets. Hence, perhaps Dr. Putnam's adherence to both Hegel and Freud. Now as I understand it, what Dr. Prince wants is an emotional pluralism such as might well be founded upon the data in MacDougall's "Social Psychology" and in Shand's work on "The Foundations of Character." This view of emotional pluralism is one which I should myself be compelled to hold. We must remember, however, that the work of Cannon on various types of emotion may possibly show that different emotions which look vastly unlike (e. g. fear and rage) may be in some sense equivalents. Fear may be equivalent to rage much as different types of energy in the physical universe are equivalent to one another. The emotions may be interchangeable in some sense so that it might be possible that sex emotion and the emotion of fear are translatable. In this way there might be constructed a fundamental monism of emotion in the same sense that energetics is a science which unifies electricity, heat,

magnetism, etc. It would not seem to me, however, appropriate to identify all kinds of emotion with the sexual.

PRESIDENT HALL: It would take an encyclopedia and an omniscient mind. and many hours and days to exhaust such a topic as this. Dr. Southard has said some of the things I would have said. I supposed this society was primarily interested in pragmatic discussions. At any rate, I left the American Philosophical Society some years ago and entered this to get rid of metaphysics and arid abstractions. As to what Dr. Swift says, it seems to me imitation plays a great but is by no means the sole role. It is of course purely instinctive, and the social instinct comes in everywhere, so much so that discussion on almost any topic is liable to raise the question of the individual versus the social forces in the world. As to Dr. Jelliffe's opinion whether after all hate and love are at bottom the same, he perhaps bottoms on the recent discussions of what I might call the expanded theory of ambivalence, as represented by Weissfeld. But I do not interpret this to mean that there is any sense whatever that has any pragmatic value in the statement that love and hate are the same. If you assume this, one is dizzy and the world seems to spin around. Hegel showed a sense in which being and not being are the same but that is a most abstract and purely methodological statement. What in the world is more opposite than love and hate, from every practical and truly psychological point of view? We must not be credulous about the unconscious and ascribe to it absurdities, nor must we lose our orientation for surely up and down, right and left, light and dark, do differ. If the unconscious can be used to cause a darkness in which everything loses its identity and fuses into a general menstrum, as Hegel said all cows were black in the dark, it seems to me we can get nowhere. Ought we not to start by admitting that there are certain immense differences in the emotions, whether conscious or unconscious, and that the tendency to find a common background or identify them is a matter largely of speculative interest?

DR. MORTON PRINCE, Boston, read by title a paper entitled "The Theory of 'Settings' and the Psychoneuroses."

DR. L. PIERCE CLARK, New York, N. Y., read a paper entitled, "The Mechanism of Essential Epilepsy."[*]

[*] Reserved for publication.

DISCUSSION

DR. E. E. SOUTHARD, Boston: Idiopathic epilepsy as found in Massachusetts material and estimated from the appearances in the gross anatomy of the brain occurs in about one of every three cases. There are accordingly more idiopathic epilepsies than there are idiopathic or "functional" psychoses, if the data of gross anatomy form a reliable index.

It was a somewhat curious thing that in a series of cases investigated by Dr. Thom and myself, that the more frequent the attacks of epilepsy the less there seemed to be to show for them in the autopsied brains. In certain cases with daily attacks the brains were strictly normal in gross appearances. It was the frankly organic cases with large focal lesions that had the occasional attacks. These frankly organic cases rarely had high frequency attacks.

DR. TOM A. WILLIAMS, Washington, D. C.: Will Dr. Clark explain the eccentric convulsions such as when there is uraemia, on similar grounds? Also, if he will postulate in such cases as recover with metabolic treatment. I have published cases in which recurrent attacks of some years duration were removed by means which considered only the metebolesia. (See Journal of Neurology and Psychiatry, March, 1915.)

DR. JOHN T. MACCURDY, New York: I have held the opinion for some years that the study of epilepsy was going to be of greater psychiatric moment than that of any other condition. I feel that this promise has been very largely fulfilled by the work Dr. Clark has been doing for the last two years. We have found, I think, from that work that we can really shell out what we may term an epileptic reaction, which is really the most primitive of all psychiatric reaction. It corresponds to a flight from reality. It is a return to the subjective phase, which, in the psychoses, is no vague but a very real thing. In epilepsy we get it in pure culture as a lapse of consciousness, expressed either in completeness as in a grand mal attack or partially when consciousness is merely clouded. Sleep probably represents an analogous condition. We go to sleep to repair the body while psychologically we are seeking that flight from reality which we all long for. The convulsion may be a secondary affair, and a physiological sequel to the loss of consciousness, which is psychologically determined.

L. PIERCE CLARK: For the time being I am anxious to limit my remarks to the mechanism of ESSENTIAL epilepsy, and, not to convulsive disorders in general, however closely allied to idiopathic epilepsy. At some future time I hope to take up the epileptoid convulsions and show their relationship and variation from that of the mechanism of essential epilepsy. I may say, however, that I have some

data already at hand in which certain types of epileptic phenomena connected with infantile cerebral hemiplegia would show that the so-called epileptic constitution is much less marked in these cases, but is present, however, to a certain degree. As has been well known for a number of years and commented upon by such observers as Gowers, Jackson and Binswanger, the so-called hemiplegic epilepsies sooner or later develop the epileptic alteration in a character analogous to that seen in idiopathic epilepsy. I hope to show that the main roots of the so-called epileptic alteration in general necessarily lie in the primary make-up of such individuals, and that the seizure phenomena of epilepsy only intensify and make more marked the fundamental make-up when the disease has definitely fastened itself upon the individual. My next paper on this whole subject will attempt to show more conclusively that the epileptic seizures are but an unfoldment of that which has already been existent in the biological make-up of the individual epileptic.

DR. TRIGANT BURROW, Baltimore, Md., read a paper entitled "Material Illustrative of the 'principle of Primary Identification.'"[*]

[*] Reserved for publication.

DISCUSSION

DR. JAMES J. PUTNAM, Boston: I am very much interested in Dr. Burrow's paper and understand it as illustrating the argument brought forward by him last night. As I remember the situation I do not quite see why this idea is not essentially the same that has been endorsed by Freud and others. One's interest in one's self is certainly in part the basis of homosexuality, and this is intensified by the reflection from the mother.

DR. JOHN T. MAC CURDY, New York: When Dr. Burrow first brought up this subject last year it struck me as being the most original theory in psychoanalysis that had been formulated in this country and one of the most important of all the additions to our general psychoanalytic concepts. Personally, I found that it immediately solved certain problems which had been in my mind for some time. I had never been able to see how it came about that the alcoholic had a strong latent homosexuality. The ordinary interpretations of drinking as a fellatoristic substitute has always seemed unlikely, for, if this were so any liquid would serve the purpose, so why alcohol? Now it is manifest that the alcoholic is an individual who is taking a drug which dulls his sensibility. That is a way of retiring from reality, of getting away from objectivity, retiring from what Dr. Burrow calls the subjective phase. Now we understand why the patient in an acute alcoholic hallucinosis almost invariably hears voices making homosexual accusations. The unreality complex is translated into sexual terms and he is accused of unreal love. I have been struck in dream analysis by the almost constant coincidence in dreams of Mutterleib symbols in the same dream that on analysis proved to be homosexual in principle. I can quote one dream that demonstrates dramatically every point which Dr. Burrow makes in his thesis. This patient, a man who was being treated for homosexual tendencies which worried him a great deal, on one of the first days brought this dream. He was a hospital interne. Someone came to him and said a nurse had cut herself. He ran up to the surgical amphitheatre where preparations were made to fix her wound. He suddenly discovered that his was the cut and that it was on the ventral surface of the penis corresponding to the primitive subincision operation. He took up a needle, sewed it up and put on a bandage. At the end of the dream he wondered what was going to happen, whether the bandage would come off or not. Any psychoanalyst can imagine what the incision indicated, that it led directly to the idea of a vagina, also to the idea of castration which is combined with that. The bandage led to swaddling clothes. Here we have the whole situation rehearsed. The associations went to the mother. The mother changes into himself. At the same time he represents himself with a vagina and gives birth to a child, his own penis which he can fondle as his mother did him.

DR. SMITH ELY JELLIFFE, New York: It seems to me the phrase identification with the mother is very illuminating. I have no doubt that Dr. Burrow would say that the failure to develop away from this primary identification lies at the basis of what is called Narcissism. I have noted this identification with the mother, i. e., with the female, in many patients. They are, in ordinary life, after making a very hard fight with unconscious homosexual trends and are managing themselves with great difficulty. This shows particularly in the analysis of alcoholics especially of periodic types. Self-fertilization is a frequent symbol in the unconscious. In males, particularly, the identification with the mother is a frequent factor and often explains the value of the instinctively sought relief through narcosis and withdrawal from the conflict. Male hysterics also show it markedly. The aggression towards the father is a frequent female symbolization in hysteria as well.

DR. TRIGANT BURROW, Baltimore: It seems to me that the President's reference to this heterosexual instance need not necessarily be heterosexual in a psychological sense. It is important to recognize that though the object of the male in a particular case be a woman, yet psychologically this need not be a heterosexual adaptation. In the case I have cited the relation of the patient to his wife is psychologically

a homosexual one. We have seen in this case the presence of a profound neurosis and coexistent with it an apparently normal sexual life. This we know from the Freudian standpoint is impossible. The heterosexual adaptation is but apparent.

DR. TRIGANT BURROW, Baltimore: In regard to Dr Putnam's comment that my thesis contains what has been said already by Freud. Undoubtedly to a large extent it has. There is, though, some modification here which seems to me of importance, if only in the way of an extension of Freud's original conception. One gets a very clear idea from Brill's excellent paper on homosexuality of Freud's essential thesis. Here the idea of homosexuality is that of a revulsion from the mother. The child is assumed to adapt itself as the mother in order to get rid of the mother as object. This first hypothesis related only to the male child. To explain homosexuality in the female, either an analogous mechanism must be assumed, according to which the female child adopts homosexuality to escape the father image, and analysis does not bear out this explanation; or, assuming the same reaction in respect to the mother in the female as in the male, the result would entail not homosexuality but a heightened heterosexuality. I think the formulation I have here advanced offers us a distinct advantage in placing the causative factor in homosexuality in either sex upon an identical genetic basis.

AFTERNOON SESSION

The meeting was called to order by the President at 2:15 P. M.

Dr. E. E. Southard, Boston, read a paper entitled, "Data Concerning Delusions of Personality."[*]

[*] Published in this number of the Journal, p. 241.

DISCUSSION

DR. SMITH ELY JELLIFFE, New York: Dr. Southard has heretofore launched us upon very large subjects. I can well recall in one of his previous communications the fascinating correlations drawn between structural changes and the character of the psychological signs. In dementia praecox particularly, he has shown us how auditory symptoms group about temporal atrophies and optical signs with the occipital and so forth and so on. He now proposes to thrust us into a larger and much more intricate sphere of activity as to the representation in the cortex of other changes which as he has described are inframicroscopical or inframacroscopical. In other words, there must be some type of correlation between the projection in the cerebral structure of the organ itself which is cerebrally represented and certain mental signs. If I see what Dr. Southard has been thinking about, we are certainly engaged in a very fascinating topic. It is well known from the standpoint of topographical cerebral correlation that the brain is nothing but a series of body symbols, as it were. Adler has entered this field and approaches the problem by saying that the inferior organ, liver, kidney, or what not, is related to a similar defective cerebral representation of the organ, thus introducing into the nemological mechanism the task of compensating for the defective structure. Dr. Southard wishes to try to map out these defects in the cerebral structures and thus reason backwards to the somatic inferiority. I confess he lifts me into ideal regions. Such stimuli are enjoyable and provocative of development.

DR. TOM A. WILLIAMS, Washington, D. C: I conceive Dr. Southard's purpose somewhat differently from Dr. Jelliffe whose thought seems to be somewhat like that of Henry Head when he published his paper in reference to hallucinations, corresponding to various head zones in correspondence with different visceral areas and with special sense organs, eye, ear and so on. I have conceived Dr. Southard as being a direct chemical in line with Folius' pathology researches. If that is the case we have a great many clinical cases which might be underlined with his central thought.

PRESIDENT HALL: It is almost too good to be true if Dr. Southard has really made connections between delusions of personality and the great topic of character. It illustrates the old Hippocratic saw, "God-like is the man who is also a philosopher." Character might almost be called a name for all the mysteries of psychology, and from Mill's ethology and the old phrenologies of temperament that Wundt adopts with slight modifications, we have really made little progress. It seems to me very significant that Dr. Southard should interest himself, as his paper leads one to judge he does, in such problems as Shand's somewhat abstract work, and should seek correlations with legal characterology like that of Roscoe Pound. It would be of great interest to know whether Dr. Southard obtained his differentiations purely from pathological cases or whether, accepting Shand or Pound or both, using their distinctions as apperceptive organs, he unconsciously reads their distinctions into his cases. His paper, at any rate, is a genuine contribution as well as an encouragement to those who seek to correlate the normal with

the abnormal.

DR. JAMES J. PUTNAM, Boston: I only want to express my warm sympathy with Dr. Southard's scheme. This careful working out of correlations one would say is a good method of scientific research and must lead to something. I think Dr. Southard would rather avoid the suggestion of CAUSES for the results that he found, but the METHOD appears safe and profitable.

DR. JOHN T. MACCUSDY, New York: As another psychoanalyst it gives me pleasure to hear this paper. As a psychoanalyst, and one who has done most of his work with the delusions of the insane, I must say that I have felt all along that psychoanalysis fails utterly when it tries to account for the manifest content of a delusion. We can trace the psychological stages from the manifest content in varying delusions back to a more or less constant unconscious striving—the latent content. The tendency of this latent content to appear as delusions depends on a defect of adaptation, which must have a physical basis probably of a general nature. The delusions, in many cases, are symbols of the latent content. From a psycho-analytic standpoint, the problem presented in Dr. Southard's paper is "Why is a certain symbol chosen in one case and another in another individual?" It may well be that specific organic factors operate here. One could imagine that the mechanism is purely psychological. In a hepatic condition, for instance, the attention of the patient may be directed to that part of the body which is affected by the pathological process in the liver and that for this reason the ideas which appear refer to generations in that region. At least we may hope for definite and interesting results from elaboration of the method outlined by Dr. Southard's statistics.

DR. SOUTHARD: I am rather astonished and well pleased at the cordial reception of my little statistical work on delusions and upon the elaborate discussion. As to Dr. Hall's question whether my data were collected to prove the a priori contention concerning the correlation of unpleasantness with lesions below the diaphragm, I would say that I expressed a suspicion of this correlation in my paper on "How Far is the Environment Responsible for Delusions," (Journal of Abnormal Psychology, June-July, 1913). I was stimulated to finish my article by the appearance of Shand's book on "The Foundations of Character" and the articles on "Personality" by Prof. Roscoe Pound which have been appearing in the Harvard Law Review.

"Dyslalia Viewed as a Centre Asthenia" was the title of a paper read by Dr. Walter B. Swift, Boston.[1]

[1] Reserved for Publication.

NO DISCUSSION

DR. JOHN T. MACCUSDY, New York, read a joint paper (with DR. W. T. TREADWAY) entitled "Constructive Delusions." [2]

[2] Published in the August-September number, p. 153, of this Journal.

DISCUSSION.

DR. WILLIAM A. WHITE, Washington, D. C., spoke of his interest in the paper and his agreement with it. He suggested that it might be quite proper to use the term "archaic" in speaking of this type of delusions. He also commented on the recurrence of the excitement in the case of the last patient quoted which, he suggested, might represent a physical periodicity as the individual had a homosexual component in his make-up, so that it might be reasonable to suppose that this was fundamentally sex periodicity.

PRESIDENT HALL: Sex periodicity in males is very interesting. A student of mine many years ago kept his own record for some years and published it anonymously in my journal, as did another some ten years ago, and the twenty-eight day cycle seemed very marked in the first and somewhat so in the last of these papers. They are certainly interesting to the geneticist. We now often speak of dreams as protectors of sleep. I am inclined to think that a good many delusions are protectors of sanity in much the same way, and I am not at all sure that we cannot say that we shall ere long see that this is to a great extent true for the imagination. If this patient had a less vivid fancy perhaps his delusions would have been kept less fluid and his sanity would have been better protected. Is there not a relation between floridness of fancy which passes easily over to delusions (just as creative geniuses are allied to artists), but may there not be an inverse correlation between great liveliness and activity of fancy and liability to fixed delusions? At any rate, from the normal standpoint we are seeing more and more that man lives on a genetic scale. This might be illustrated by the many cases, some of them pretty well analyzed, of cat-phobias. The greatest enemies of mankind were once the felidae, and the theory now is that this type is made up of very definite elements, viz., sharp claws, stealthy tread, eyes that shine in the dark, power to leap far and suddenly, a uniquely developed voice, etc. Now the cat-phobiacs

generally focus on some one of these traits in consciousness, but analysis seems to show that the rest of them reinforce the one that experience happens to thrust forward into the center of the field of consciousness. In general it seems to me that it is a great educational advantage to keep open the experiences that connect us with the past of the race, and it may have a psychotherapeutic value which we do not now dream. Years ago a New York paper investigated, with the aid of many of its reporters, and found hundreds of people fishing off the wharves of New York on Sunday, very few of whom caught any fish, and many who did threw them back. They were reverting to the old piscatorial stage, feeling again the old thrill of a nibble on the hook, and went home refreshed, even if they had not had a bite, because they had been able to drop back into an ancient stratum of the soul which was sound, so that they came back to the hard reality of the next day refreshed. Play in general, too, we now regard as reversionary, and I cannot but believe that many delusions are precisely the same.

DR. TOM A. WILLIAMS, Washington, D. C.: Dr. Hall has cited the cat-phobia in illustration that the belief that Dr. MacCurdy developed may be one in which there may be philogenetic reasons for the phenomena. It seems to me that before we use such data we need analyses more complete than has been given for any of them. His citation brought to my mind a case I am working with now, a cat-phobia. The cat does not represent sharp eyes and claws. The cat is a definite symbol of definite sexual occurrences in childhood. I should like to ask whether it would be here desired to draw philogenetic conclusions. I think not without the further analysis which would be necessary. I have a very strong distrust of the efforts which Jung and Abrahams have made, followed by some of us, to draw analogy between the morphological changes and the psychological experiences of the race as reproductions in the life history of the individual.

DR. E. E. SOUTHARD: I should be inclined to feel that much of the disturbance in the constructive delusion group would be structurally founded upon normal or abnormal conditions in the parietal lobe. At any rate cases with hyperphantasia in my recent *Dementia Praecox* series (*American Journal of Insanity*, 1914-15) appear to be correlated with parietal lobe anomalies and atrophies. It is a curious thing that such subjects with hyperphantastic delusions are very often good institutional workers. Although a delusion of persecution by poison is an exceedingly simple delusion, it is in a sense far more harmful to the organism and may be often far more productive of motor results in a patient than an elaborate pseudo-scientific theory such as constructed by Dr. MacCurdy's patient. It is obvious that the degree of disease does not vary directly with the simplicity of the delusion.

It seems to me that Dr. MacCurdy's work has not only theoretical interest but also practical importance from the standpoint of prognosis.

DR. WALTER B. SWIFT, Boston: I often wonder if we are not a little inclined to go too far back for explanations. In football it is recognized that the men on the field have two sets of reflexes out of which they play under different circumstances. One is a set that they have learned in the lower schools; and the other is the reflex circle that they use after they have been trained differently in college. When these men get tired it is a psychological observation that they go back to those first learned reflex mechanisms. That is, when tired, they play the football of the secondary schools. Something similar occurs in stammering. When a case is trained to have a higher reflex vocalization, and they learn to vocalize spontaneously, it inhibits their stammering. But when they get tired they revert again. In the subject under discussion are we not reaching too far back for sources? Should we not go to infancy or early childhood (to the old reflex circle there) rather than to ones we suppose are inherited?

DR. TOM A. WILLIAMS, Washington, D. C.: My remarks do not apply to the contents of the delusions, of course, but to the cerebral capacities merely which were susceptible of the formation of such delusions.

DR. SMITH ELY JELLIFFE, New York: Dr. MacCurdy's paper fascinated me a great deal. There is so much material that one is in a maze. I am sorry, moreover, that he had to mutilate his conclusions by being forced by lack of time to condense them. It strikes me he gives us a very important contribution to the mechanism of the cure of some psychoses. That mechanism of cure, may be stated as follows: How can one take the split off libido which results from the analytic technique and apply it to a better constructive synthesis? It would seem that these constructive delusions really correspond to interpretative schemes whereby a certain amount of the split off libido becomes synthesized. In that sense these delusions are constructive and are, therefore, helpful to the patient. They represent partial curative processes.

DR. JOHN T. MACCURDY, New York: I would like to refer briefly, first, to the point made by Dr. White to the effect that these ideas were interesting in so far as they were archaic. That is true and it is one of the profoundest truths we have to offer. At the same time it is of psychological and not strictly speaking of psychiatric value. The purpose of my paper was essentially psychiatric, to point out that there is a prognostic value in such delusion as I have tried to outline. Now one can get archaic

delusions in patients very much deteriorated. The point of this paper is rather to show, as the discussion brought out, that it is the constructive tendency operating in the insane as it has historically in the race. The second point as to the cycle in his attacks, to follow the inference of Dr. White, I presume he meant to imply that there may have been some organic swing corresponding to the psychotic swing. That of course is quite possible. At the same time the analysis of this case showed that purely psychic factors had a great deal to do with it. His monthly attacks seemed to represent a break in the balance. He was always in unstable equilibrium and the factor that seemed to decide the issue finally between relative sanity and a markedly deteriorated state, was a purely psychological one. When his father died, when he was released from that bondage, the relief seemed just enough to decide the issue. So the organic factors here seem to be the general, underlying inability to adapt himself. One of the hardest situations to adapt himself to was his relations with his father. If he could not free himself he was going to be very insane. When that factor was removed he became relatively insane.

DR. TOM A. WILLIAMS, Washington, D. C., read a paper entitled, "The origin of Supernatural Explanations."[*]

[*] Published in this number of the Journal, p. 236.

DISCUSSION

DR. E. E. SOUTHARD, Boston: Are all these somatic explanations of metaphysics?

DR. WILLIAMS: Largely.

DR. SMITH ELY JELLIFFE, New York: I recall a note in one of Dr. Jones' papers in which he says "that in the future our reason will be used to explain things. Heretofore it has been used to explain them away."

DR. TOM A. WILLIAMS, Washington, D. C.: I am not prepared to make any predictions about a thousand years from now, that is in the air. I mention not the levels at all, nor do I speak of "decerebrate metaphysics." Nor do I speak of metaphysics at all unless one would imply that what I have called supernatural explanations needs must be metaphysical. I do not speak of cerebral functions per se. I was simply speaking of states of feelings. The source and origin I did not go into. I simply made an attempt to imply that such states of feeling were responsible for the discomfort and feeling of inadequacy of the patient, and as Dr. Jelliffe has well repeated that the victim attempts to rationalize this in supernatural fashion and that this may be not at all dependent upon the notion of the supernatural universe he has imbibed as a child. It is a construing of natural means for getting out of a difficulty.

Dr. L. E. Emerson, Boston, read a paper entitled "The Psycho-Analytic Treatment of Hystero-Epilepsy."[*]

[*] Reserved for publication.

DISCUSSION

DR. JOHN T. MACCURDY, New York: I have been very much interested in this paper by Dr. Emerson and the part that has interested me most in it has been the therapeutic side. I cannot feel, however, that it adds a great deal to our knowledge of epilepsy, that is, of idiopathic epilepsy. That, of course, is a tremendously difficult problem to tackle. If we are to regard it as a psychosis then we expect it to show other reactions, just as dementia praecox shows manic depressive symptoms. If we are to find out what the epileptic reaction is, we must study it in those who are typically epileptic and nothing else. Or else we may examine those with transitional states grading over into hysteria, for example, excluding from our formulations everything in them that is hysterical. This last case which Dr. Emerson brought forward seemed to me to represent what is essentially an hysterical reaction. The convulsive movements this man went through were symbolic. It is difficult to regard these movements in epilepsy as symbolic because in the true epileptic there is as typical unconsciousness as we know. How can anything going on in almost absolute unconsciousness represent something symbolic to the individual? This is possible however, when the condition grades off from the hysterical side into the epileptic. The fundamental epileptic phenomenon is the disturbance of consciousness, and that is what must be explained.

DR. TOM A. WILLIAMS, Washington, D. C.: I don't know that we can say that the fundamental differentiation of epilepsy is the unconsciousness. That is a psychological division. The paper did not give any differential why they were regarded as epileptics at all. There was no description of the convulsion, except in so far as this formed the hysterical form of convulsion, so I don't think we are in a position to discuss the paper without more clear data of these instances.

DR. WALTER B. SWIFT, Boston: I was interested in hearing about the case of stammering. That will be explained in my own paper and I have also run up against several who have done the same. I should like to ask Dr. Emerson if he considers stammering as an expression of an orgasm.

DR. L. E. EMERSON, Boston: Dr. MacCurdy well remarked that this adds nothing to the understanding of epilepsy. In a certain sense this is true. I do not feel that I could add anything to a deeper understanding of epilepsy. The whole development of psycho-analytic theory, up to a certain point, has been based on the actual recovery of patients, if you do not like the use of the word cure, from particular symptoms. Then this has been generalized. Now that has opened an enormous field for ratiocination. Therefore, I am not at all sure that these conceptions will really apply to essential epilepsies or to the real epilepsies. I do not know how far our conceptions which originate in the therapeutic situation will apply to the situation which appears to be absolutely beyond therapeutics. In regard to what Dr. White said of starting from the known and going through transitional stages to the unknown, you do get insight and it may be that the condition as described in this broad way by Clark and by Stekel and others may be true, but I am not perfectly sure. I am very grateful for Dr. Allen's approval of this way of putting things because perhaps it is a defence reaction on my own part that occasionally I feel it necessary to report things I have seen with my own eyes and really experienced, instead of following my natural tendency to go off into vague philosophizing.

REVIEWS

PSYCHOLOGY IN DAILY LIFE. By Carl Emil Seashore. 1914, XVIII plus 226 pp., N. Y., D. Appleton & Co.

This is the first volume of the "Conduct of Mind" series, the purpose of which, as stated by its editor, Professor Joseph Jastrow, in his introduction to the series, is "to provide readily intelligible surveys of selected aspects of the study of mind and its applications." The present work contains seven chapters, which were originally prepared as "semi-popular addresses." As a consequence, the book lacks somewhat in coherence, but, except in a few places, the emphasis is practical throughout. It is perhaps not surprising that the most subtle and modern part of the discussion, viz. the chapter on "Mental Law" should be the least practical in its bearing.

In the first chapter is discussed the practical importance of "Play," not only in offering the opportunity for sensory, central, and motor development in the child, but for releasing the broader life energies of the adult whose mind is confined by specializing work. It is shown that the fundamental motives of the play life are to be found in religion.

The next three chapters, on "Serviceable Memory," "Mental Efficiency," and "Mental Health," are full of sound practical advice. The first contains a clear and attractive presentation of the principles of remembering, so arranged as to exemplify the rules which it inculcates. The second emphasizes the importance of the wave form of attention in all mental work, the superiority of efferent to afferent response as an educational process, and the acquirement of mastery by a transfer of control from higher to lower mental levels. There is also good counsel with regard to the best time and manner in which to rest, although the author's deductions from the physiological "curve of sleep" appear somewhat hasty. "Mental Health" is defined in terms of our mental "members" in the classical way, and the "Ten Maxims of Wise Living," which are given, are selected from the history of moral philosophy rather than from current psychotherapeutic results.

The chapter on "Mental Law" is the most interesting one for the theoretical psychologist, and discusses in a general but illuminating manner, principles of perception and of perseveration which are of interest to the psychological psychiatrist. The chapter on "Law in Illusion" seems disproportionately long, but gives an interesting description and analysis of three different types of illusions: those based on "units of direction," the over-estimation of "cylinder height," and upon the "size-weight" error. In connection with the second, the results of original investigations in the author's laboratory are presented. It is shown that a knowledge of the complex but definite principles underlying illusions can be made practically serviceable, for example, in tests of mental normality.

The final chapter deals with a specific illustrative problem in "Mental Measurement," viz. the determination of a subject's fitness for a musical career. A detailed analysis of the problem is offered, and it is shown that the elemental questions involved can be answered by the methods of the psychological laboratory, but that these answers require expert interpretation before they can be made practically applicable.

The author's style is engaging and clear. LEONARD THOMPSON TROLAND.

AN OUTLINE OF PSYCHOBIOLOGY. By Knight Dunlap, Associate Professor of Psychology in the Johns Hopkins University. Baltimore, The Johns Hopkins Press, 1914. Pp. 121, octavo; illustrated.

This volume even though brief will be highly appreciated by very many students of normal and of abnormal psychology because it is the first book to afford them just what, in an elementary way, they need concerning the nervous system, the essential musculatures, and the epithelia, whose manifold activities are in some certain mode concomitant to the succession of compound mental events. Surely, and widely, those who a few years ago "came to scoff" at the ever-rising scientific stream of mind-protoplasm relationship will "remain to pray" to the rising and satisfying goddess of the new philosophy. The body with its unimagined intricacies and beauties of still unguessed adaptation and its marvels of Someone's ingenuity is surely now at length coming into its own. And when, after the years, it has come into its own in a reasonable measure, "the continuity of mind-and-energy" and "the dynamic-spiritualism of the Cosmos" when they are mentioned will no longer draw that quasi-withering smile of toleration to the face of the orthodox psychologist with which some of us are familiar.

This volume, happily devised by Professor Dunlap to meet this real need, at first in his own pupils and later in a wider public, will materially help this progress, for it has within it in fairly up-to-date and simple form much of the structure and function, always of surpassing interest when understood, of the human action-system. Seventy-seven excellently clear and well-chosen illustrations make the well-printed text still more informing. There is a good index; and short lists of books at the ends of the chapters.

The present reviewer notes only one omission of substantial importance from the neurologic part of the book, and that is the very recent, howbeit important, matter of the functional opposition between the sympathetic proper and the other, the cranio-sacral, portion of "the autonomic." The work lacks also, in this first edition, a statement and discussion of the important all-or-none principle which is now applicable to voluntary muscle, probably, and to the neurones. And it is to be hoped too that the author will take the bull by the horns and, in the next edition, show the nature of protoplasm in general in an homologous way, as the basis, through its uniquely complex kineticism, of the onward rush of the mental process. With this addition the essential nature of irritability too might be set forth in this already valuable (and inexpensive) treatise. GEORGE V. N. DEARBORN. Sargent Normal School.

PSYCHOLOGY, GENERAL AND APPLIED. Hugo Munsterberg New York and London: D. Appleton and Co., 1914; Pp. xiv X487 1.75.

In this volume, designed to serve the needs both of the general reader and of the college student, Professor Munsterberg has represented in most readable form the essentials of the entire range of his contributions to psychology. The well-known differentiation of the "two psychologies" is the core of the book; herewith is reintroduced the psychology of the soul, not merely as being on a level with, but ultimately even superordinate to, the descriptive psychology which had banished from so many systems all mention of the soul or even of the self. For we are shown how all description and explanation, whether of material objects or of conscious processes, is after all but construction in the service of purposes, to apprehend, understand, and realize which is the primary business, of life.

This exposition of purposive psychology, surely the most novel feature of the book, is what interests us most, and we discover with disappointment that though theoretically every conscious state is subject-matter for either type of psychology, i.e. may be either described in its causal relationships or immediately grasped as an act of will, still Professor Munsterberg fills five times as many pages with the usual descriptive psychology as with this newer departure. We willingly conceded the importance of tradition in textbook writing, but would urge upon Professor Munsterberg the impatience with which we await more extended treatment of this topic.

A second deviation for a book of this type,—if Professor Munsterberg may rightly be said ever to write books typical of anything but his own uniqueness,—is the inclusion of a section on social psychology. This too, we are inclined to regard as in nature of a promise, representing the germination of lines of thought which we are assured elsewhere[*] are later to receive more elaborate formulation.

[*] Munsterburg, H. "Grundzuge der Psychotechnik." Leipzig, 1914. Vorwort, S. VIII.

Thirdly, one of the main divisions of the book is devoted to applied psychology, the presentation here being essentially an abstract of the author's previous publications in the field of his acknowledged preeminence, psychotechnics.

Throughout the book discussion of general principles, whether of philosophy or biology, takes precedence over the presentation of concrete facts; the text contains no explicit references, though a

brief bibliography of works in English is appended. The consequent gain in readability is only one of the many factors which insure this volume a very wide reading. R. M. ELLIOTT. Harvard University.

THE JOURNAL OF ABNORMAL PSYCHOLOGY

THE SEX WORSHIP AND SYMBOLISM OF PRIMITIVE RACES

BY SANGER BROWN II., M. D.

Assistant Physician—Bloomington Hospital.

PSYCHIATRY, during recent years, has found it to its advantage to turn to a number of related sciences and allied branches of study for the explanation of a number of the peculiar symptoms of abnormal mental states. Of these related studies, none have been of greater value than those which throw light on the mental development of either the individual or the race. In primitive races we discover a number of inherent motives which are of interest from the standpoint of mental development. These motives are expressed in a very interesting symbolism. It is the duty of the psychiatrist to see to what extent these primitive motives operate subconsciously in abnormal mental conditions, and also to learn whether an insight into the symbolism of mental diseases may be gained, through comparison, by a study of the symbolism of primitive races. In the following communication one particular motive with its accompanying symbolism is dealt with. The application of these findings must be left with the psychiatrist in his clinical studies.

A great many of the institutions and usages of our present day civilization originated at a very early period in the history of the race. Many of these usages are carried on in modified form century after century, after they have lost the meaning which they originally possessed; it must be remembered, however, that in primitive races they were of importance, and they arose because they served a useful end. From the study of these remnants of former days, we are able to learn the trends of thought which activated and inspired the minds of primitive people. When we clearly understand these motives, we may then judge the extent of their influence on our present day thought and tendencies.

Now, in our present communication, we wish to deal with a motive which we find expressed very generally in primitive religion; this is the worship of sex. We not only find evidences of this worship in the records and monuments of antiquity, but our knowledge of the customs and practices of certain tribes, studied in comparatively modern times, indicates the presence of this same primitive religion. We feel that in sex worship we are dealing with an important motive in racial development, and our object at present is to give an account of its various phases.

Before we proceed, it is desirable to make reference to some of our sources of information. There are plenty of books on the history of Egypt, the antiquities of India or on the interpretation of Oriental customs, which make scarcely any reference to the deification of sex. We have always been told, for example, that Bacchus was the god of the harvest and that the Greek Pan was the god of nature. We have not been told that these same gods were representations of the male generative attribute, and that they were worshipped as such; yet, anyone who has access to the statuettes or engravings of these various deities of antiquity, whether they be of Egypt, of India or of China, cannot fail to see that they were intended to represent generative attributes. On account of the incompleteness of many books which describe primitive races, a number of references are given throughout these pages, and some Bibliographical references are added.

SIMPLE SEX WORSHIP

As will be presently shown, we have evidence from a number of sources to show that sex was at one time frankly and openly worshipped by the primitive races of mankind. This worship has been shown to be so general and so widespread, that it is to be regarded as part of the general evolution of the human mind; it seems to be indigenous with the race, rather than an isolated or exceptional circumstance.

The American Cyclopaedia, under Phallic worship, reads as follows "In early ages the sexual emblems were adored as most sacred objects, and in the several polytheistic systems the act or principle of which the phallus was the type was represented by a deity to whom it was consecrated: in Egypt by Khem, in India by Siva, in Assyria by Vul, in primitive Greece by Pan, and later by Priapus, in Italy by Mutinus or Priapus, among the Teutonic and Scandinavian nations by Fricco, and in Spain by Hortanes. Phallic monuments and sculptured emblems are found in all parts of the world."

Rawlinson, in his history of Ancient Egypt, gives us the following description of Khem: "A full Egyptian idea of Khem can scarcely be presented to the modern reader, on account of the grossness of

the forms under which it was exhibited. Some modern Egyptologists endeavor to excuse or palliate this grossness; but it seems scarcely possible that it should not have been accompanied by indelicacy of thought or that it should have failed to exercise a corrupting influence on life and morals. Khem, no doubt, represented to the initiated merely the generative power in nature, or that strange law by which living organisms, animal and vegetable, are enabled to reproduce their like. But who shall say in what exact light he presented himself to the vulgar, who had continually before their eyes the indecent figures under which the painters and sculptors portrayed him? As impure ideas and revolting practices clustered around the worship of Pan in Greece and later Rome, so it is more than probable that in the worship of Khem in Egypt were connected similar excesses. Besides his priapic or "Ithyphallic" form, Khem's character was marked by the assignment to him of the goat as his symbol, and by his ordinary title Ka-mutf, "The Bull of his Mother," i.e., of nature."

This paragraph clearly indicates that the sexual organs were worshipped under the form of Khem by the Egyptians. The writer, however, has fallen into a very common error in giving us to understand that this was a degraded form of worship; from numerous other sources it is readily shown that such is not the case.

The following lines, from "Ancient Sex Worship," substantiate the above remarks, and at the same time, they show the incompleteness of the writings of many antiquarians. In this book we read: "Phallic emblems abounded at Heliopolis and Syria and many other places, even in to modern times. The following unfolds marvelous proof to our point. A brother physician, writing to Dr. Inman, says: 'I was in Egypt last winter (1865-66), and there certainly are numerous figures of gods and kings on the walls of the temple at Thebes, depicted with the male genital erect. The great temple at Karnac is, in particular, full of such figures and the temple of Danclesa, likewise, although that is of much later date, and built merely in imitation of old Egyptian art.' " The writer further states that this shows how completely English Egyptologists have suppressed a portion of the facts in the histories which they have given to the world. With all our descriptions of the wonderful temple of Karnac, it is remarkable that all mention of its association with sex worship should be omitted by many writers.

A number of travellers in Africa, even in comparatively modern times, have observed evidences of sex worship among the primitive races of that continent. Captain Burton[1] speaks of this custom with the Dahome tribe. Small gods of clay are made in priapic attitudes before which the natives worship. The god is often made as if contemplating its sexual organs. Another traveler, a clergyman,[2] has described the same worship in this tribe. He has observed idols in priapic attitudes, rudely carved in wood, and others made of clay. On the lower Congo the same worship is described, where both male and female figures with disproportionate genital organs are used for purposes of worship. Phallic symbols and other offerings are made to these simple deities.

[1] Quoted by H. M. Westropp, *Primitive Symbolism*

[2] J. W. Wood. *The uncivilized Races*.

Definite examples of the sexual act having religious significance may be cited. Richard Payne Knight[3] quotes a passage from Captain Cook's voyages to one of the Southern Pacific Islands. The Missionaries of the expedition on this occasion assembled the members of the party for religious ceremonies in which the natives joined. The primitive natives observed the ceremony with great respect and then with due solemnity enacted their form of sacred worship. Quite to the astonishment of the white people, this ceremony consisted of the open performance of the sexual act by a young Indian man and woman. This was entirely a religious ceremony, and was fittingly respected by all the natives present.

[3] *The symbolical language of ancient art and mythology*.

Hargrave Jennings[4] describes the same custom in India. An Indian woman of designated caste and vocation is selected. Many incantations and strange rites are gone through. A circle, or "Vacant Enchanted Place" is rendered pure by certain rites and sprinkled with wine. Then secret charms are whispered three times in the woman's ear. The sexual act is then consummated, and the whole procedure before the altar is distinctly a form of sacrifice and worship.

[4] *The Roseicrucians*.

Hodder M. Westropp in "Primitive Symbolism" has indicated the countries in which sex worship has existed. He gives numerous instances in ancient Egypt, Assyria, Greece and Rome. In India, as well as in China and Japan, it forms the basis of early religions. This worship is described among the early races of Greece, Italy, Spain, Scandinavia, and among the Mexicans and Peruvians of America as well. In Borneo, Tasmania, and Australia phallic emblems have been found. Many other localities have been

mentioned by this writer and one seems fairly justified in concluding that sex worship is regularly found at one time in the development of primitive races. We shall now pass to another form of this same worship, namely, sacred prostitution.

SACRED PROSTITUTION

There is abundant evidence to show that there was a time in the centuries before Christ when prostitution was held as a most sacred vocation. We learn of this practice from many sources. It appears that temples in a number of ancient cities of the East, in Babylonia, Nineveh, Corinth and throughout India, were erected for the worship of certain deities. This worship consisted of the prostitution of women. The women were consecrated to the support of the temple. They were chosen in much the same way as the modern woman enters a sacred church order. The returns from their vocation went to the support of the deity and the temple. The children born of such a union were in no way held in disgrace, but on the contrary, they appeared to have formed a separate and rather superior class. We are told that this practice did not interfere with a woman's opportunities for subsequent marriage. In India the practice was very general at one time. The women were called the "Women of the Idol." Richard Payne Knight speaks of a thousand sacred prostitutes living in each of the temples at Eryx and Corinth.

A custom which shows even more clearly that prostitution was held as a sacred duty to women was that in Babylonia every woman, of high rank or low, must at one time in her life prostitute herself to any stranger who offered money. In "Ancient Sex Worship" we read: "There was a temple in Babylonia where every female had to perform once in her life a (to us) strange act of religion, namely, prostitution with a stranger. The name of it was Bit-Shagatha, or 'The Temple,' the 'Place of Union.' " Moreover we learn that once a woman entered the temple for such a sacred act she could not leave until it was performed.

The above accounts deal exclusively in the sacrifice made by women to the deity of sex. Men did not escape this sacrifice and it appears that some inflicted upon themselves an even worse one. Fraser[5] tells us of this worship which was introduced from Assyria into Rome about two hundred years before Christ. It was the worship of Cybele and Attis. These deities were attended by emasculated priests and the priests in oriental costume paraded Rome in religious ceremony.

[5] Adonis, Attis and Osiris.

On one occasion, namely, "the day of blood" in the Spring, the chief ceremony was held. This, among other things, consisted in fastening an effigy of the god to a pine tree, which was brought to the temple of the Goddess Cybele. A most spectacular dance about the effigy then occurred in which the priests slashed themselves with knives, the blood being offered as sacrifice. As the excitement increased the sexual nature of the ceremony became evident. To quote from Fraser; "For man after man, his veins throbbing with the music, his eyes fascinated by the sight of streaming blood, flung his garments from him, leaped forth with a shout, and seizing one of the swords which stood ready for the service, castrated himself on the spot. Then he ran through the city holding the bloody parts in his hands and threw them into one of the houses which he passed in his mad career."

We see that this act directly corresponds with the part played by the female. The female prostituted herself, and the male presented his generative powers to the deity. Both the sacred prostitutes and emasculated priests were held in religious veneration.

The above references are sufficient to show that a simple form of sex worship has been quite generally found. It becomes apparent as we proceed that the worship of sex not only plays a part, but a very prominent part, in the developing mind of man. In the frank and open form of this worship it is quite clear that we are dealing with a very simple type of mind. These primitive people exhibit many of the qualities of the child. They are quite without sex consciousness. Their motives are at once both simple and direct, and they are doubtless sincere. Much misunderstanding has arisen by judging such primitive people by the standards of our present day civilization. Sex worship, while it held sway was probably quite as seriously entertained as many other beliefs; it only became degraded during a decadent age, when civilization had advanced beyond such simple conceptions of a deity, but had not evolved a satisfactory substitute.

We shall now pass to a less frank and open deification of sex, namely, sexual symbolism.

SYMBOLISM

As civilization advanced, the deification of sex was no longer frank and open. It came to be carried on by means of symbolism. This symbolism was an effort on the part of its originators to express the worship of the generative attributes under disguise, often understood only by the priests or by those

initiated into the religious mysteries. The mysteries so frequently referred to in the religions of antiquity are often some expression of sex worship.

Sexual symbolism was very general at one time and remains of it are found in most of the countries where any form of sex worship has existed. Such remains have been found in Egypt, Greece, Italy, India, China, Japan, and indeed in most countries the early history of which is known to man.

One important kind of symbolism had to do with the FORM of the object deified. Thus, it appears that certain objects,—particularly upright objects,—stones, mounds, poles, trees, etc., were erected, or used as found in nature, as typifying the male generative organ. Likewise certain round or oval objects, discs, certain fruits and certain natural caves, were worshipped as representing the female generative organ. (The yoni of India.)

We also find that certain QUALITIES OF ANIMAL OR VEGETABLE nature were equally venerated, not because of their form, but because they stood for some quality desirable in the generation of mankind. Thus we find that some animals—the bull because of its strength and aggressive nature, the snake, perhaps because of its form or of its tenacity of life,—were male representatives of phallic significance. Likewise the fish, the dolphin, and a number of other aquatic creatures came to be female representatives. This may be shown over and over again by reference to the antique emblems, coins, and engravings of many nations.

Another later symbolism, which was adopted by certain philosophies, was more obscure but was none the less of distinct sexual significance. FIRE is made to represent the male principle, and WATER, and much connected with it, the female. Thus we have Venus, born of the Sea, and accompanied by numerous fish representations. Fire worship was secondary to the universally found sun worship. The sun is everywhere the male principle, standing for the generative power in nature. At one time the symbolism is broad, and refers to generative nature in general. At another time it refers solely to the human generative organs. Thus, the Greek God Hermes, the God of Fecundity in nature, is at times represented in unmistakable priapic attitudes.

Still another symbolism was often used in India. This was the addition of a number of members to the deity, possibly a number of arms or heads. This was in order to express a number of qualities. Thus the deity was both generator and destroyer, one face showing benevolence and kindness, the other violence and rage. In many of the deities both male and female principles were represented in one,—an Androgyne deity—which was an ideal frequently attempted. The idea that these grotesque deities were merely the expression of eccentricity or caprice on the part of their originator is not to be entertained. Richard Payne Knight has pointed out that they occur almost entirely on national coins and emblems, and so were the expression of an established belief.

We shall refer first to the simpler symbols, that is those in which an object was deified because of its form.

THE UPRIGHT

It is perhaps not remarkable that upright objects should be selected because of their form as the simplest expression of phallic ideas. The simple upright for purposes of sex worship is universally found. An upright conical stone is frequently mentioned. Many of the stone idols or pillars, the worship of which was forbidden by the Bible, come under this group. Likewise, the obelisk, found not only in Egypt, but in modified forms in many other countries as well, embodies the same phallic principle. The usual explanation of the obelisk is that it represented the rays of the sun striking the earth: when we speak of sun worship later, we shall see that this substantiates rather than refutes the phallic interpretation. The mounds of religious significance, found in many countries, were associated with sex worship. The Chinese pagodas are probably of phallic origin. Indeed, there is evidence to show that the spires of our Churches owe their existence to the uprights or obelisks outside the Temples of former ages. A large volume has been written by O'Brien to show that the Round Towers of Ireland (upright towers of pre-historic times) were erected as phallic emblems. Higgins, in the *Anacalipsis*, has amassed a great wealth of material with similar purport, and he shows that such "temples" as that of Stonehenge and others were also phallic. The stone idols of Mexico and Peru, the ancient pillar stones of Brittany, and in fact all similar upright objects, erected for religious purposes the world over, are placed in this same category. We shall presently give a number of references to show that the May-pole was associated with phallic worship and that it originated at a very remote period.

We shall now quote from some of the authors who have contributed to our knowledge of this form of symbolism, as thereby a clear idea of their meaning may be set forth. These interpretations are not generally advanced, and therefore we have added considerable corroborative evidence which we have been able to obtain from independent sources.

In an Essay on the Assyrian "Grove" and other Emblems, Mr. John Newton sums up the basis of this symbolism as follows: "As civilization advanced, the gross symbols of creative power were cast aside, and priestly ingenuity was taxed to the utmost in inventing a crowd of less obvious emblems, which should represent the ancient ideas in a decorous manner. The old belief was retained, but in a mysterious or sublimated form. As symbols of the male, or active element in creation, the sun, light, fire, a torch, the phallus or lingam, an erect serpent, a tall straight tree, especially the palm or fir or pine, were adapted. Equally useful for symbolism were a tall upright stone (menhir), a cone, a pyramid, a thumb or finger pointed straight, a mask, a rod, a trident, a narrow bottle or amphora, a bow, an arrow, a lance, a horse, a bull, a lion, and many other animals conspicuous for masculine power. As symbols of the female, the passive though fruitful element in creation, the crescent moon, the earth, darkness, water, and its emblem, a triangle with the apex downward, "the yoni"—the shallow vessel or cup for pouring fluid into (cetera), a ring or oval, a lozenge, any narrow cleft, either natural or artificial, an arch or doorway, were employed. In the same category of symbols came a boat or ship, a female date palm bearing fruit, a cow with her calf by her side, a fish, fruits having many seeds, such as the pomegranate, a shell, (concha), a cavern, a garden, a fountain, a bower, a rose, a fig, and other things of suggestive form, etc.

These two great classes of conventional symbols were often represented IN CONJUNCTION with each other, and thus symbolized in the highest degree the great source of life, ever originating, ever renewed "A similar emblem is the lingam standing in the centre of the yoni, the adoration of which is to this day characteristic of the leading dogma of Hindu religion. There is scarcely a temple in India which has not its lingam, and in numerous instances this symbol is the only form under which the god Siva is worshipped."

In "Ancient Sex Worship" we read, "As the male genital organs were held in early times to exemplify the actual male creative power, various natural objects were seized upon to express the theistic idea and at the same time point to those points of the human form. Hence, a similitude is recognized in a pillar, a heap of stones, a tree between two rocks, a club between two pine cones, a trident, a thyrsus tied around with two ribbons with the ends pendant, a thumb and two fingers. The caduceus again the conspicuous part of the sacred Triad Ashur is symbolized by a single stone placed upright,—the stump of a tree, a block, a tower, a spire, minaret, pole, pine, poplar or pine tree."

Hargrave Jennings, the author of several books on some aspects of religions of antiquity, among them one on phallicism deals freely with the phallic principles embodied in these religions. As do many other writers, he identifies fire worship with sex worship, and the following short paragraph shows his conception of their interrelationship, as well as the significance of the upright of antiquity. In the Rosicrucians he says: "Obelisks, spires, minarets, tall towers, upright stones, (menhirs), and architectural perpendiculars of every description, and, generally speaking, all erections conspicuous for height and slimness, were representations of the Sworded or of the Pyramidal Fire. They bespoke, wherever found and in whatever age, the idea of the First Principle or the male generative emblem."

We might readily cite passages from the writings of a number of other authors but the above paragraphs suffice to set forth the general principle of this symbolism. As stated above, such interpretations have not been generally advanced to explain such objects as sacred pillar stones, obelisks, minarets, etc. It is readily seen how fully these views are substantiated by observations from a number of independent sources.

In a book of Travel[6] in India we are able from an independent source to learn of the symbolism of that country. The traveller gives a description of the caves of Elephanta, near Bombay. These are enormous caves cut in the side of a mountain, for religious purposes to which pilgrimages are made and where the usual festivities are held. The worship of generative attributes is quite apparent. The numerous sculptured female figures, as remarked by the traveller, are all represented with greatly exaggerated breasts, a symbolism which is frequent throughout oriental countries for expressing reproductive attributes.

[6] Rousselet, India and its native princes.

In an inner chamber is placed the symbol which is held in particular veneration. Here is found an upright conical stone standing within a circular one. The stone is sprinkled with water during the festival season. The writer states that this stone, to the worshippers, represents the male generative organ, and the worship of it is not considered an impropriety. In this instance we feel that the symbolism is very definite, and doubtless the stone pillars in the other temples of India and elsewhere are of the same significance.

A clergyman in the Chinese Review of 1876, under the title "Phallic Worship in China," gives an account of the phallicism as he observed it at that time. He states that the male sexual organ is symbolized by a simple mound of earth and is so worshipped. Similarly, the female organ is represented

by a mound of different form and is worshipped as the former. The writer states that at times these mounds are built in conjunction. He states this worship is similar to that of Baal of Chaldea, etc., and that probably all have a common origin. It appears to be a fundamental part of the Chinese religion and the symbolism of the Chinese pagoda expresses the same idea. He says that Kheen or Shang-te, the Chinese deities of sex, are also worshipped in the form of serpents, of which the dragon of the Chinese is a modification. This furnishes a concrete instance in which the mound of earth is of phallic significance, and substantiates an interpretation of serpent worship to which we shall presently refer.

Hoddard M. Westropp has given us an excellent account of phallic worship and includes in his description the observations of a traveller in Japan at as late periods as 1864 and 1869.

A temple near the ancient capital of Japan was visited by a traveller. In this temple the main object of worship was a large upright, standing alone, and the resemblance to the male generative organ was so striking as to leave no doubt as to what it represented. This upright was worshipped especially by women, who left votive offerings, among them small phalli, elaborately wrought out of wood or other material. The traveller remarked that the worship was most earnest and sincere.

The same traveller observed that in some of the public roads of Japan are small hedged recesses where similar stone pillars are found. These large pillars unquestionably represent the male organ. The writer has observed priests in procession carrying similar huge phalli, painted in color as well. This procession called forth no particular comment and so was probably not unusual. It is stated that this is a part of the ancient "Shintoo" religion of Japan and China. There are frequent references to certain of the gods of the Ancients being represented in priapic attitudes, the phallus being the prominent and most important attribute. Thus Hermes, in Greece, was placed at cross-roads, with phallus prominent. This was comparable to the phallus on Japanese highways. In the festivals of Bacchus high phalli were carried, the male organ being represented about the size of the rest of the body. The Egyptians carried a gilt phallus, 150 cubits high, at the festivals of Osiris. In Syria, at the entrance of the temple at Hieropolis, was placed a human figure with a phallus 120 cubits high. A man mounted this upright twice a year and remained seven days, offering prayers, etc.

In Peru in the Temple of the Sun an upright pillar has been described covered with gold leaf, very similar to those existing elsewhere and to which has been ascribed similar significance.

A number of writers have expressed the belief that the May-pole is an emblem of ancient phallic worship. We know that May-day festivals are of the most remote antiquity. We are indebted to R. P. Knight for a description of what May-day was like about four centuries ago in England. The festival started the evening before. Men and women went out into the woods in search of a tree and brought it back to the village in the early morning. The night was spent in sexual excesses comparable to those of the Roman Bacchanalia. A procession was formed, garlands were added to the May-pole, which was set up in the village square. The Puritans referred to it as an idol, and they did not approve of the festivities. Until comparatively recent years there was a May-pole in one of the squares of London, and Samuel Pepys,[7] writing of his time, speaks of seeing May-poles in the front yards of the prominent citizens of Holland. A festival much the same as this was held in Ancient Rome and also in India. The May-pole properly pierces a disc and thus conforms with the lingam-yoni of India. We also know that the first of May was a favorite time for all nature worship with the ancients. For a number of interesting suggestions the reader is referred to R. P. Knight, *Worship of Priapus*, and Hargrave Jennings, *Indian Religions* (Page 66.)

[7] Pepys Diary.

Tree worship is frequently mentioned in the religions of antiquity. We are told that the mystic powers of the mistletoe comes from the fact that it grows on the oak, a once sacred tree. The pine of the North, the palm and the fig tree of the South, were sacred trees at one time. John Newton made a study of tree worship, especially the Ancient Grove Worship of Assyria. He shows that the object of veneration was a male date palm, which represented the Assyrian god Baal. Sex was worshipped under this deity, and it is shown that the tree of the Assyrian grove was a phallic symbol. Palm Sunday appears to be a relic of this worship. In France, until comparatively recent times, there was a festival, "La Fete des Pinnes," in which palms were carried in procession, and with the palms were carried phalli of bread which had been blessed by the priests.

Richard Payne Knight tells us that Pan was worshipped by the Shepherds under the form of the tall fir, and Bacchus "by sticking up the rude trunk of a tree." It is shown throughout these pages that sexual attributes were worshipped under both these deities. In reference to other symbols, the writer continues,[8] "The spires and pinnacles with which our churches are decorated come from these ancient symbols; and the weather cocks, with which they are surmounted though now only employed to show the direction of the wind, were originally emblems of the sun; for the cock is the natural herald of the day, and therefore sacred to the fountain of light. In the symbolical writings of the Chinese the sun

is still represented by a cock in the circle; and a modern Parsee would suffer death rather than be guilty of the crime of killing one. It appears on many ancient coins, with some symbol of the passive productive power on the reverse; and in other instances it is united with priapic and other emblems and devices, signifying other attributes combined."

[8] Symbolic language of ancient art and mythology.

Dr. Thomas Inman has made a study to show how this phallic symbolism found its way into ancient art, and even into some designs of modern times. Thus, many formal designs are studied in which the upright plays a part; likewise, the oval and the circle receive a similar explanation. The architectural ornaments spoken of as eggs and anchors, eggs and spear heads, the so-called honey-suckle ornament of antiquity, and the origin of some church windows and ornaments, are all studied by this writer, and his text is accompanied by illustrations. Hargrave Jennings has also traced the origin of the symbols of Heraldry, the emblems of Royalty and of some church orders with similar explanations.

We may add that the crux ansata of the Egyptians, the oval standing upon the upright, or letter Tau, may be shown to be a sex symbol, the union of the oval with the upright being of symbolic significance. The crux ansata is found in the hand of most of the Egyptian deities. It is found in the Assyrian temples and throughout the temples of India as well. Prehistoric monuments of Ireland have the same design. Priests are portrayed in adoration of the crux ansata before phallic monuments. This symbol, from which our modern cross is doubtless derived, originated with the religions of antiquity. Much additional evidence could readily be given to illustrate this prehistoric origin. The present Christian symbol affords another example of the adoption by a new religion of the symbols of the old.

Some reflection will show that the origin of many church customs and symbols, and indeed of a great number of obscure customs and usages, may quite properly be traced to the religions and practices of primitive races. Lafcadio Hearn has insisted upon this in the interpretation of the art and customs of the Japanese. He says,[9] "Art in Japan is so intimately associated with religion that any attempt to study it without extensive knowledge of the beliefs which it reflects were mere waste of time. By art I do not mean painting and sculpture but every kind of decoration, and most kinds of pictorial representation—the image of a boy's kite or a girl's battledore not less than the design upon a lacquered casquet or enameled vase,—the figure upon a workman's trowel not less than the pattern of the girdle of a princess,—the shape of the paper doll or wooden rattle bought for a baby, not less than the forms of those colossal Ni-O who guard the gateways of the Buddha's temples," etc.

[9] Japan, an attempt at Interpretation.

In the above pages, we have given an account of the views of a number of writers upon certain forms and symbols, and at the same time we have offered considerable evidence in substantiation from independent sources. These origins, found associated especially in art and religious usages, have not been generally understood. Yet when we reflect upon the fact that many religious customs are of great antiquity; that when once a certain form or custom becomes established, it is well nigh ineffaceable, although subject to great change or disguise throughout the centuries; when we reflect upon these conditions, and realize the fact that sex worship with its accompanying symbolism is found throughout primitive religions, we may then more readily appreciate the entire significance of the above interpretations.

It must, of course, be borne in mind that no one now gives these interpretations to spires, minarets, and to the various monumental symbols of which we have been speaking. We are here dealing exclusively with pre-historic origins, not with present day meanings. The antiquity of certain symbols is truly remarkable. The star and crescent, for example, a well known conventionalized symbol, is found on Assyrian cylinders, doubtless devised many centuries before Christ.

The full force and meaning of these various symbols may be very readily grasped by reference to a number of designs, ancient coins, bas-reliefs, monuments, etc., which have been reproduced in plates and drawings by C. W. King, Thomas Inman, R. P. Knight and others. To these we refer the reader.

(TO BE CONCLUDED)

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THE PSYCHOANALYTIC TREATMENT OF HYSTERO-EPILEPSY

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WHEN a new method of working in any field of endeavor is devised, or a new point of view is

discovered, it is natural to turn to other similar fields to see if the method will work there. This is what is done when one approaches the study of Epilepsy from the point of view of psychoanalysis.

It is not my purpose to undertake an exhaustive psychoanalytic study of Epilepsy. Neither is it my purpose to enter into a discussion of the problems of differential diagnosis. It has already been shown, in borderland cases, that one cannot tell the difference between epilepsy and hysteria, without a prolonged psychoanalysis, and even then one cannot be certain. This suggests that the whole thing is more or less a matter of definition. Into such questions I cannot enter. My aim is much more modest. The immediate purpose of my paper is to study some of the problems of therapy, from the psychoanalytic point of view, of that small class of patients on the borderline between hysteria and epilepsy, or patients with epileptiform attacks.

The first publication of studies of this general nature was made by Dr. James J. Putnam and Dr. George A. Waterman in the Boston Medical and Surgical Journal for May, 1905, under the title "Certain Aspects of the differential Diagnosis between Epilepsy and Hysteria." In this paper the authors say, "No one, so far as we are aware, has as yet studied with sufficient thoroughness the subconscious memories of epileptics, and for all we now can say, closer resemblances may be found between these and the subconscious states of the hysterics than we now imagine." p. 513.

In this paper, however, therapy is only hinted at.

A contribution to our insight as to the epileptic state of mind is made by Jung, under the title, "Analyse der Assoziationen eines Epileptikers," in his, "Diagnostische Assoziationsstudien. Beitrage zur experimentellen Psychopathologie." p. 175 (1906).

He found an extraordinary number of emotionally toned, egocentric relations. There were some signs to suggest that the emotional tone in the epileptic was unusually lasting.

The first thing published on epilepsy avowedly from the psychoanalytic view-point was by Maeder: "Sexualitat und Epilepsy." Jahrbuch BI HI, 1909.

Maeder goes into the subject rather exhaustively, after characteristic German fashion, but his conclusions are comparatively simple. He says, "The sexuality of the epileptic is characterized by the prominence of auto- and allo-erotism. It retains much of the infantile form, but has undergone, nevertheless, a certain development, which I designate as 'sexual polyvalence.' For some unknown reason the libido seems to have an abnormal intensity." p. 154.

This is an important contribution to our knowledge of the psychic state of epileptics but it is notable that not a word is said as to therapy.

Sadger published the same year, "Ein Fall von Pseudoepilepsia hysterica psychoanalytisch erklart." (Wiener klein. Rundschau, p. 212, 1909.) But neither does he have anything to say about therapy.

Dr. Wilhelm Stekel, however, treats the problem from the therapeutic point of view in, "Die psychische Behandlung der Epilepsie." (Zentralblatt fur psychoanalyse p. 220 No. 5-6, Vol. 1).

The essential kernel of Stekel's view is that the epileptic is a repressed criminal. The convulsion is a substitute for the criminal act. He announces categorically that pseudoepilepsy is curable by psychoanalytic procedures. Of three cases which he completely analysed, two were cured. His final conclusion is fourfold: (1) Epilepsy, more often than we have hitherto thought, is of psychogenic origin. (2) In all cases there is a strong tendency to criminality which is unbearable to consciousness. (3) The attack is a substitute for an offense, hence, eventually a sexual offense. (4) Pseudo-epilepsy is curable by psychoanalysis.

Spratling calls attention "to the value of an occasional convulsion in certain cases. In some patients the fit acts as a safety valve that unquestionably permits escape from insanity. . . In many cases the convulsion seems to come as the termination of an obscure (auto-toxic) cycle which varies in duration in different individuals and bears some relationship to the ascending period of the folie circulaire of the French. It seems that the specific cause of the fit in these cases is something that permeates the entire organism; something that comes and goes; that grows rapidly in intensity, exerting a pernicious influence on the patient by making him act out of harmony with his normal state, until the limit is reached and the mind loses its direction and control. The power of inhibition being finally destroyed, the nervous storm breaks with great force and violence." p. 361.

Although Spratling had in mind a toxic agent, one cannot but be struck with how completely his terms describe an emotional outburst.

In a paper read in Boston last winter, Dr. L. Pierce Clark advanced the view that the epileptic seizure was the symbolical expression of the desire of the patient to return to the *mutterleib*. The convulsive moments were such reflect and random acts as one sees in infants or infers in the embryo. Regard for social sanctions is lost. This, of course, suggests the first step in criminality. Clark found that favorable cases were amenable to psychic treatment and said that some cases had been very much helped by psychoanalysis. I am not certain whether he claims to have cured any particular case of pseudo-epilepsy or epileptiform attacks, by psychoanalysis. In presenting some of my own cases let me begin with one that certainly was not a complete success, but nevertheless was much helped by psychoanalysis.

This case is that of a young girl, aged 14, without known inherited tendency. Her first attacks had occurred about a year previous in the form of fainting spells. These were afterwards followed by convulsions. In convulsions the patient thrashed about, kicking her legs and clawing at her chest. These convulsive movements stopped after a while and were followed by a deep sleep, after which the patient awoke without any memory of what had happened.

It was found that during the convulsion the patient imagined she was being pursued by a black-faced figure with claw-like hands, of a peculiar shape like her father's.

Further investigation showed that her father got drunk and did chase her, sometimes kicking her out of the house. She would undress her father sometimes and put him to bed. Once when taking off his shoes he kicked her, as she was bending over him, in the lower part of the abdomen. This was just before the convulsions developed. The fainting spells occurred soon after she had first seen her father naked. The image of his nakedness so distressed her by continually coming before her mind that she made the most desperate efforts to repress it, finally partially succeeding. Speaking of her father she said, "Every time I think of him I feel like taking a fit. Oh! It makes me feel terrible."

Her father had kicked her in the chest, too, which perhaps partially accounts for the clawing.

In the light of this knowledge the convulsive movements become a little more comprehensible. They are futile attempts to run away. They are the partial movements of flight.

The cries that sometimes initiated and accompanied the convulsions at first, afterwards became sufficiently articulate to be understood as calls "Mama, Mama, Mama."

It was found that when her father would chase her about the house, in drunken fury, she would call for her mother in frantic fear. Here, apparently, is a meaning of the call preceding the convulsions.

Under a very short psychoanalytic treatment the patient showed marked improvement. Her attacks became much less violent and much farther apart. She became able to control them to a great extent. Finally she became so well that one might say she had practically recovered.

Apparently there is no hint here of a repressed criminal complex. But a little deeper analysis suggests it, however. The first attack, which was in the form of a faint, occurred under the following circumstances. The patient was at the funeral of the father of her best girl friend. As she looked at the dead body of her friend's father the thought flashed through her mind, "He was so good, and now he is dead, while my father who is so bad, still lives. I wish he were dead." Shortly after she fainted.

There were a number of reasons, seemingly adequate, for incomplete success in this case. In the first place, the patient had been in this country only a few years and spoke very broken English. She is a Russian Jew. Obviously this was a very great barrier to understanding. In the next place it was almost impossible to change conditions of home, although Social Service worked wonders in this case. The father continued to get drunk, and one of the last of her now infrequent attacks occurred on his return from jail. The patient was dreadfully afraid lest her father find out that the knowledge of his delinquency had been discovered through her.

Not the least of the reasons militating against complete success was the short time possible for psychoanalytic treatment. The patient was seen only three weeks. As the time needed for a psychoanalysis is variable depending on the particular patient, it is clear that this would be too short a time to enable a young girl, only recently here from Russia, to understand, or to overcome resistances. That the treatment was as nearly successful as it was is perhaps encouraging to the hope that suitable cases under favorable conditions might be cured.

The next case is one where the diagnosis lay between hysteria and epilepsy. The symptoms were as follows: The patient had attacks in which she became unconscious, gasped, and spittle ran from her mouth. She also bit her tongue. She becomes stiff, eyes stark, and is left tired and weak. These attacks were first noticed about five years ago. Since then she has had about five similar attacks, the last three coming within five months. The last two were within a day of each other and frightened her so she

came to the hospital. At the age of eight or nine she said that she had flashes of speechlessness, and a thought which she cannot define, as of a horse or a man. She never became unconscious or bit her tongue. After her first catamenial these flashes of speechlessness and thought came only at this time. At the age of two the patient said that she had fallen down stairs and hit her head. She said she was unconscious twenty-four hours.

As a result of a psychoanalysis the following facts were learned. The patient was a very sensitive child, exceedingly responsive to her environment. She was also stubborn and self-willed, at times. She was reserved and capable of great repression. When she was about three or four she remembers seeing in the Bible a picture of the Devil on a white horse. This used to make her shudder, but it also had a sort of irresistible fascination. Later, when she was seven or eight, it would come into her mind in school even and make her feel so badly she would lay her head on her arms. But she never told anybody what it was that troubled her and she would put it out of her mind. She thoroughly believed her mother when she told her that the Devil would come and get her if she did wrong.

At about the age of ten or eleven she began going with a girl much older than herself. She used to visit this girl and spend the night with her, and in turn have her at her own home. In this way they spent the night together quite frequently. Soon the girl wanted to masturbate her and although she repelled her advances at first she finally allowed it because she was told she would be regarded as queer if she didn't as other girls did it and liked it. She, however, never did get any pleasure out of the practice, and remained perfectly passive. She thought if her friend enjoyed it and it didn't hurt her she should let her have her pleasure. She never told of this.

The patient now began having what she called staring spells. These never lasted more than a second or so and they were never observed. She carefully concealed them. Just before the patient began to menstruate which was when she was about fourteen, she noticed that the day after she had been with the girl who masturbated her she had a terrific headache. Then she remembered that for a long time it had been so though she had never connected the headaches before with the masturbation. She stopped the practice immediately and never allowed it to be resumed.

After menstruation began the staring spells became grouped and came only during her periods. But they were more numerous. She would have a number in one day. They were not yet sufficiently observable to be noticed. At about this time she had a terrible fright. She was kneeling at her mother's side listening to a story when she thought she saw a woman's face looking at her over her mother's shoulder. She was speechless with terror. This was not noticed and she did not tell. Around this time too she had another fright. She was studying one evening at the dining-room table when she saw a face looking in at the window. She screamed, and kept on screaming, but finally was able to tell that she had seen someone looking in at the window. Her father took her out and showed that it couldn't be so because there were no tracks in the snow which was on the ground. She wouldn't or couldn't stop crying, however, and kept it up all night, she said. Just before menstruation she did some sleep-walking. She got up one night and went to her mother and said she had something to tell her. Her mother tried to get her to say what it was but could not, and saw that her daughter was asleep. She kept saying, "you know what it is." The mother did not dare to waken her and finally got her quietly back into bed. The next morning she remembered nothing of what had happened.

When the patient was about sixteen she married. Her husband did not want any children and practiced coitus interruptus, but she became pregnant nevertheless and had an abortion performed. Although c.i. continued to be practiced she became pregnant again and this time she had a daughter. Four more years of c. i. followed. During all this time the patient had the staring spells, but they were never noticed and she never told, not even her mother. Then, like a thunder bolt out of a clear sky, came a tragedy.

She was pregnant again, and visiting her mother, expecting her husband for over Sunday, when she received a letter saying he had left her and had gone off with another woman. When she read the letter she lost consciousness.

Then followed a terrible time. In hate of her husband and on account of fear lest she be unable to care for her baby she had another abortion performed. This time she nearly died through not having proper medical attendance afterwards, but she finally recovered and lived a life of feverish activity and hate.

During her marriage she had been entirely frigid with respect to the sexual act. A friend told her she had been missing an essential experience of marriage. About a year after her husband left her she met a man who thrilled her through and through, and thought, "this is what my friend meant." This man showed her some attention and she set out consciously to seduce him. She soon succeeded and though he was wildly in love with her and wanted to marry her, she steadfastly refused on the score of not loving him, but was his mistress for two or three years. During this time her staring spells seem to have

been at a minimum, but I cannot assert that they disappeared.

Then she met the man who became her second husband. She had refused to marry her lover because she did not "love" him. She now dropped him completely, and getting a divorce from her husband on the ground of desertion, married.

She was happy about a year and a half when her husband moved to a country cross-road near a "hotel" (bar-room). Here he began drinking badly, and consorting with prostitutes. For three years she fought her husband off, in fear of infection. During this time she had no intercourse. At this time began the attacks of unconsciousness. She was alone one night, while her husband was off carousing, when she had a terrible fright on seeing a man trying to get in at the window. This was probably hallucinatory as nothing came of it. But from this time forth she was subject to attacks, in which she lost consciousness, had convulsions, frothed at the mouth, and bit her tongue badly.

At the end of about three years, however, her patience broke, and she told her husband that if he did not stop she should leave him. This threat brought him to his senses apparently, and he completely reformed. But her love for him was dead. And though she now permitted marital relations to be resumed, she remained from this time on absolutely frigid. Her husband too, now suffered from premature ejaculation. Thus from the point of view both of "passion" and of "love" the patient was not satisfied. Her attacks increased in number and violence, coming now at any time, not being confined to the menstrual period as at first, and coming days as well as nights.

In this patient we have represented the points of view both of Stekel and of Clark. The patient showed conclusively her capacity for criminal action. She also illustrates the craving for a return to the mother. The morning of the day on which she had the first attack in which she bit her tongue, she passed through the town where her mother was living and thought, "Oh, if I could only go to my mother." But remembering she had promised her lawyer to live a year with her husband, she went on. Of the sexual character of her conflicts no further comment is necessary.

Here then we have the natural history of what? Hysteria? or Epilepsy? This question I shall not attempt to answer. But what has been the therapeutic result of psychoanalysis? This question I can answer.

In the six months during which the analysis has been in progress the patient has had no attacks in which she has had convulsions, frothed at the mouth, or bitten her tongue. She has had only three spells in which consciousness was lost and these were mild. The last one was described by the daughter. She said it was like a faint; that her mother was in it only a short time; that she had none of the symptoms she used to have; and was all right soon afterwards with no bad after-effects. She added that since her mother had been coming to the hospital she had improved so much they never thought of her now as being sick. The bad feelings have diminished so much in number and intensity as to be almost negligible. Family relations have so improved husband and wife are practically at one in their purposes. Social relations have also improved to such an extent that the patient has been able to prevent the wreck of the home of a friend, and in her church is an active worker on a number of committees. She is now doing her best to get her daughter started right in life. The patient regards herself as having practically recovered.

The next case I wish to present for your consideration is that of a young man twenty-six years old. He was brought into the accident-room of the hospital one night last Summer suffering from convulsions. He continued to have convulsions throughout the night, and as many as five interns were required to hold him quiet. These convulsions seemed to have enough purpose in them to warrant the diagnosis of hysteria, so the next morning he was referred to me.

"Last Wednesday night," he said, "I was having dinner with a customer at the Hotel Thorndike. I began to feel sick and went to the toilet and vomited. Then I went back and got my friend and started for a drug store in Park Square to get some quinine. But before I got very far I began to shiver and shake and I knew that it took quinine two or three hours to work so I started back to the hotel to get a room. No rooms were to be had, so I said 'get a taxi and take me to the hospital.' I lost the use of my legs on the steps and they had to carry me. In this attack I was more or less conscious all through it." What were you thinking of in the taxi, I asked. "I don't know. I felt as if I wanted to jump at something and grab something." Can you not remember what was in your mind, I continued. "Only what I've told you," he answered. Will you lie down and close your eyes and imagine yourself back in the taxi, I asked. Now tell me what you see. After a moment he said, "I see flames." What else do you see? "Nothing, only flames. I feel as if I wanted to jump into the fire." Did you see flames in the taxi, I asked. "Yes, that was what I wanted to jump at." At this moment the patient gave a start. What did you see then, I asked. "There is something in the flames, an object, I don't know what it is. It might be a thing or a person. I feel as if I wanted to grab the object." At this instant the patient gave a violent jump into the air and then sank back relaxed. What did you see, I asked. "This object. It seemed to be attracting me." Can't

you tell what it is, I said. "No. But it seems almost like a person. It seems as if I could see an arm." What else do you see? "The arms seem beckoning me." It is a person then? Is it a man or a woman? "I don't know. I can't make out." Look. "It is a woman. I can see now." Is it anybody you know? "No, I can't see any face." What do you see? "Just a woman, standing in the flames, with outstretched arms, as if imploring me to come. I feel a yearning, as if I must jump and grab her." The patient stiffened slightly and gave a sort of spring up from the couch and then sank back, breathing a little heavier. What did you see, I asked. "I thought she beckoned me to come." Can you see who it is now? "No The face is blank." Look again and see if you can't tell who it is. What do you see? "I can't tell. I see several faces come and go." Do you recognize them? "Yes. The first is my little girl's; then I see a former sweetheart of mine; then I see my wife's face."

Gradually the following story was elicited from the patient. His mother died when he was seven and his father married again in less than a year. The former sweetheart was his step-mother's half-sister who came to live at their house because the schools were better. He became infatuated with this girl and his step-mother did everything she could to encourage his feeling as she thought it would be a good match. The vision of his sweetheart in the flames was based on an actual occurrence. She was sitting in front of a fireplace once when a log of burning wood fell out and he jumped to pull her away and held her close in his arms for a moment.

Finally, however, he broke off absolutely all relations with the girl. The reason seems quite adequate. Why didn't you marry, I asked. He answered, "we quarrelled and I left her. I didn't like her morals. She went with other men and had connection with them. I saw her go into the woods one night with another fellow, and once at Salisbury Beach I saw her go into a hotel with a man and register as his wife."

About a year after this the patient began going with another girl more in an attempt to crowd the image of his former first love out of his mind than because he had fallen in love again. A year later they married. From the first his married life was not entirely happy. More or less unconsciously he began to regret lost opportunities. He was a travelling man and soon after marriage his route was enlarged necessitating his being away from home a month at a time. On these trips he used to get exceedingly lonesome especially as he steadily refused going with other travelling men and making a night of it as they often did. One of his routes took him to Virginia and he said that he had returned from New York on the way there just for the sake of spending a night with his wife. Once, in New York, he was unfaithful to his wife and on that occasion contracted gonorrhoea. This, however, was the only time he has ever had extra-marital sexual relations, he said.

Just before his attacks began, which was about four years ago, he was told by his wife's doctor that it would be impossible for her to have any more children as she was suffering from heart disease. To his mind this meant giving up coitus. Then, unconsciously, he began to dream of Anna, his first love. He regretted more than ever not taking advantage of his former opportunities, and unconsciously dallied with the thought of deserting his wife. Just at this time his attacks began.

As the analysis progressed his attacks diminished and shortly disappeared. Gradually the image of his wife took full possession of his mind and the image of Anna disappeared. Towards the end of the analysis as he was lying on the couch with his eyes shut, he saw Anna in the flames and felt the yearning but not so strongly as to lead to any impulsive movements. What do you think all this might mean, I asked. "I don't know," he answered, "it might mean I still cared for Anna and that if I let myself go it would break up my home." With his full realization of the meaning of this symbolization, it was assumed that he was cured.

Seven months later, in company with a colleague, I visited my former patient and he told me that he had not had a moment's illness since I last saw him. He told me that while occasionally the thought of Anna would come to his mind, it never disturbed him, and never distracted his attention from other things. He has prospered in his business, and I saw every evidence of a happy home.

This case merits consideration for a number of reasons. In the first place the attacks were cured by psychoanalysis. No one who saw the association of the symbolical imagery and the convulsive movements could fail to see that there was a causal connection between them. The subsidence in violence and frequency of the convulsive movements as the conscious grasp of the meaning of the mental symbolical imagery increased was also completely convincing of the therapeutic value of the analysis. The question of the permanence of the recovery is of course open, because seven months is far too short a time to carry complete conviction.

The comparison of this case with the one immediately preceding raises a very interesting question. Why is this patient apparently completely cured and the other one not? Several reasons may be noted. The patient is much younger. He had never been through anything like the same mental strains. His trouble was of short duration. But above all as he was successful in his business he was successful in his sublimation. Here is a sine qua non of a successful psychoanalysis: the capacity and the opportunity

for successful sublimation. If these are present the prognosis is good.

It is interesting also to compare this case in its results with the contentions of Clark and of Stekel. It is hard to see any signs of a definite criminal tendency. Inasmuch as the temptation to go back to his early love is a sign of a tendency towards regression and erotism generally the patient shows what Clark has spoken of as a desire to return to the mother-body. This case is not very important, however, to the views of either Clark or Stekel as the analysis is relatively superficial, and there is no knowing what a more thorough analysis might reveal. From the point of view of superficiality, however, the case is important as it emphasizes Taylor's view of the value of a modified analysis. The patient was seen only five times.

On the basis of these, and a number of other similar cases, I should like to suggest, from a descriptive point of view, that the epileptiform seizure is of the nature of an orgasm. An orgasm is a sudden, explosive, discharge of nervous energy, raised to the breaking point of nervous tension. I should like to generalize the idea of orgasm. Ordinarily, of course, it is confined to the sexual sphere. In the last case I reported it seems to me fairly clear that the explosive actions, convulsive-like impulses, were closely associated in the mind of the patient with sexual ideas. That they were substitutes for the normal relief of sexual tension, seems to me also clear. This idea is perhaps more convincing if I add the fact, as stated by the patient, that his last attack started when he saw an attractive girl sitting at a nearby table in the Thorndike Hotel, and who started him dreaming about Anna, because she looked so much like her.

The second case I reported seems also easily brought under this conception. Here we know more about the earliest childhood of the patient and we can easily imagine that there was an especial predisposition for the form the symptoms took. This, however, does not militate against the descriptive value of the above conception. That the epileptiform attacks did not take place until after actual sexual orgasms had been experienced, lends weight to the conception I am presenting here. The first case is not so clear. This is partly due to the fact that it was impossible to make anything like a complete analysis. But it shows nothing contradictory to the conception, and indeed has some slight value as added evidence in favor of the conception, in as much as the original trauma consisted of a kick in the genitals, by her father.

This conception does not contradict either Stekel's or Clark's ideas, but rather supplements them. The essence of the criminal act lies in its unrestrained aggressive character. From this point of view anything getting in the way of the libido discharge has to take the consequences. This also agrees with Clark, only his idea seems to me perhaps a little too passive to describe fully the dynamic quality of the attack.

Here, as in Hysteria, the therapeutic effect of an analysis depends on the possibility of sublimation. The three cases I have given in some detail may easily be arranged in order. The last case having the best chances for sublimation shows the best results.

ON THE GENESIS AND THE MEANING OF TICS

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THE problem of the genesis and meaning of the strange manifestations which we find in that peculiar disorder which goes by the accepted name of tics is indeed difficult of solution. The analytic and genetic standpoint only comparatively recently assumed in the domain of neurology and psychiatry is having an ever wider and wider application. The problems in neurology and psychiatry which still cry loudly for solution and rational explanation are indeed numerous. Some of these questions are so baffling that at times they seem almost beyond the ken of the human mind. Nevertheless, with persistence and the "Don't give up the ship" spirit keenly imbued into us, and with that irrepressible spirit of investigation and of research born of optimism and of curiosity, we may expect to see many of these problems which now seem to us so hopelessly unsolvable gradually rescued from the uncertain waters of speculation and theorization and brought to the more sound shores and land of the knowable and the known. If our theories be but tinctured with due admixture of that sound self-criticism that comes of prolonged and serious reflection and deliberation, and if the results of observation and investigation be brought forth in support of these theories, then we need have no hesitancy in permitting freedom in theorization and speculation. Let us also remember that unsound theories or standpoints do not come to stay, but, after surviving for a certain time, give way before that which is more sound, more tangible, more near the truth, which, to be sure, is always but approximately attained. If, therefore, the theory which I intend to set before you for consideration may seem on first

thought far-fetched and unsupported, I beg you to remember that in a field where but comparatively little is known with absolute certainty, it behooves us to take notice of all theories or conclusions which may be propounded, since, even though they may not contain the whole truth, they may, perhaps, contain certain germs of truth, which may contribute, in some measure, however slight, toward the ultimate solution of the problem under consideration.

With these brief prefatory remarks, I shall forthwith enter into the discussion of the genesis and meaning of the tics.

I may say at once that this is not merely a theoretical and purely academic proposition which has no practical bearings in the way of prognosis and treatment. On the other hand, a real understanding of the nature, origin, and significance of the tics is of decided value in giving us proper standpoints and orientation with respect to the prevention, prognosis and cure of the condition.

I need not enter into a description of the characteristics of tics in this place. I may merely mention that tics have two aspects—a psychic and a physical. It is, in other words, a psychoneurosis. The characteristic mental state is one of doubt, of indecision, of inadequacy, of restlessness, of tension, of discomfort and of dissatisfaction, which is more or less unappeasable and irrepressible and uncontrollable until it finds vent in a rather explosive series of motor expressions which, as it were, are the safety valve for the peculiar feeling of tension and discomfort which the individual has been experiencing and which is accompanied by a sense of relief, satisfaction and a relative degree of comfort and mental rest. The mental imperfection (Charcot) of the ticquer is a polymorphic psychic defect (Brissaud, Meige and Feindel) characterized by mental infantilism; for ticquers, like other psychoneurotics, are like big children. They have the mind of children, in respect to the emotional make-up.

The mental condition of ticquers is especially characterized by the imperfection or weakness of volition, by a certain degree of mental instability and lack of inhibitory control of the desires, tendencies, activities and motor expressions of the individual, this defect laying the groundwork for the impulsions and obsessions, as also for hysterical, so-called neurasthenic, hypochondriacal, depressive and so-called dementia praecox reactions. The tic movement is the symbol of the psychic defect or degeneration or instability.

The earlier investigators were responsible for the differentiation of the tics from such other conditions as Sydenham's chorea, Huntington's chorea, the spasms, the stereotypies, the habit movements, the myoclonias, and other allied conditions. It is due to their pioneer work that tics were recognized as a definite and distinct clinical entity. The process of disintegration of these various movements and their differentiation one from the other cannot be overvalued. Among those who have contributed most to this subject may be mentioned Magnan and his pupils, especially Saury and Legrain, Gilles de la Tourette, Letulle, Guinon Noir, Pitres, Cruchet, Grasset, Trousseau, Charcot, Brissaud Meige and Feindel. Although Trousseau recognized the ticquer was mentally abnormal, it was Charcot who first called definite attention to the psychic origin of the condition and to the fact that tic was indeed a mental disorder, a psychoneurosis, a psychomotor reaction. His lead was subsequently followed up by Brissaud, and by the latter's pupils Meige and Feindel, the latter two authors giving us a comprehensive discussion of the subject in their well-known classic. [1] More recently the Freudian school has attempted to dig down into the roots of the tree which ultimately sends forth its branches in the guise of tics.

[1] Tics and their treatment. English translation by S. A. K. Wilson. New York, 1907. This book contains an extended bibliography.

VIEWS OF THE FRENCH SCHOOL

The usual conception of tics, as laid down by Brissaud, Meige and Feindel,[1] may be stated as follows: Tic movements are physiological acts which were originally functional and purposeful in character, but which have become habits, apparently purposeless and meaningless. The motor reaction is the result of some external stimulus or idea (normal or abnormal) or both, which originally was necessary for the production of the tic movement, which latter eventually became habitual and automatic, and, owing to repetition, was executed, even in the absence of the external stimulus or idea, without apparent purpose or meaning. At first but little more than purposive habit movements, they finally became irrepressible acts which sought for expression, which were but little under the control of the will, which occurred in attacks varying in frequency, duration and severity, which decreased under distraction and generally ceased during sleep, which were increased in frequency and duration and severity by fatigue, emotional upset, mental unrest, conflict and strain, while the lack of inhibition and will power, the lack of self-control was the dominant mental state, leading to feelings of insufficiency, doubt, indecision and

incapacity, and making the ground work for the psychasthenic reactions in the form of morbid impulses and obsessions, and for the hysterical, so-called neurasthenic and other morbid psychic trends.

The inherent or acquired neuropathic and psychopathic state is the basic condition which prepares the subsoil.

From a consideration of the motor symptom we may say that it is but a pathological habit, which, however, is apt to lead to the tendency toward or generation of an increasing number of such pathological habits.

Characteristic of tics we may mention their being conscious before and after but not during their execution, their being disordered functional acts, their impetuous, irresistible demand for execution, the antecedent desire, and the subsequent satisfaction.

The etiology of tics, as laid down by Meige and Feindel, may be summed up by stating that they occur most frequently in young subjects, less frequently in savages and animals than in the civilized, there is a psychic predisposition based on heredity (of a similar or dissimilar neuropathy or psychopathy) upon which Charcot laid great stress, imitation (especially in the young) plays a role, as also brain fatigue (emotion, mental upset and worry) and indolence, with the frequent exciting cause of an external or internal stimulus or an idea, which is the explanation of the origin, source, situation and form of the tic or tics present in any particular case.

Scattered references to emotional shock acting as a possible exciting cause of tics, as at times of obsessions, can be found in the literature. Dupre[2] has made such reference. Meige and Feindel[3] themselves make the statement that "Fear may elicit a movement of defense, to persist as a tic after the exciting cause has vanished." They also state that "in ticquers the impulse to seek a sensation is common and also to repeat to excess a functional act."

[2] Soc. de Neur. de Paris, April 18, 1901, quoted by Meige and Feindel, page 54, of the English translation (reference 1).

[3] Loc. cit., p. 62.

Bresler[4] has called attention to the fact that the movements are in the nature of defensive and protective movements of expression and mimicry and originally in reaction to some external irritant or as the result of some idea, and he proposed the name "mimische Krampfneurose" for them. This is somewhat allied to Breuer and Freud's theory of hysteria.

[4] Quoted by Meige and Feindel, Loc. cit., p. 267.

The object of tic is some imaginary end, the influence of the will always being present in the beginning, although later it may be absent. Tics are of cortical origin, being coordinated and synergic, clonic or at times tonic[*] muscular movements, physiologically and not anatomically grouped, premeditated, purposive, of abnormal intensity, apparently causeless and inopportune.

[*] Cruchet objects to calling these tonic reactions tics.

Insufficiency of inhibition is the cause of the beginning and of the persistence of bad habits and of tics.

Tic is a sign of degeneration, in the biological and evolutionary sense, a degenerative neuropathic and psychopathic basis, as mentioned previously, being present, although often latent.

The *maladie des tics* is but the extreme form.

The onset is as a rule insidious, with a tendency to spread.

Spontaneous cures may occur, while Gilles de la Tourette's disease is but the extreme form of a condition in which antagonistic gestures are frequently adopted by the patient to adapt himself and to get to a state of rest.

This, as I see the situation, is as far as the French students of this subject (including Brissaud, Meige and Feindel, and even Janet) have permitted themselves to go. And, in my opinion, their observations and conclusions seem to be quite accurate.

VIEWS OF THE FREUDIAN SCHOOL

Recently the Freudian school has endeavored to penetrate more deeply to the nucleus of the problem

and to solve it. Freud has delimited what he calls obsessional or compulsion neurosis (Zwangsneurosis), which is classed under psychasthenia by the French and under neurasthenia by others. The Freudians regard this as a distinct neurosis, sometimes complicated by neurasthenic or hysterical symptoms. The characteristic symptom is a feeling of compulsion. The symptoms may be motor (obsessional acts, impulsions), sensory (obsessional hallucinations or sensations), ideational (obsessions), and affective (obsessive emotions, particularly doubt and fear). In this condition we find that there is an excessive psychical significance attached to certain thoughts. Obsessions are characterized by dissociations from the main personality. They thus exist in the unconsciousness. The original unconscious mental processes have brought about, by displacement, an excess of psychical significance to these thoughts. Ernest Jones[5] states that Freud found, by his work in psychoanalysis, that obsessions represented, symbolically, the return of self-reproaches of ancient, infantile and early childhood origin, which had been repressed and buried until the obsession made its appearance. "They always refer to active sexual performances or tendencies;" and, as Jones further explains, "there occurs early in life an exaggerated divorce between the instincts of hate and love, and the conflict and antagonism between the two dominate the most important reactions of the person. A fundamental state of doubt, an incapacity for decision, results from this paralyzing doubt. The patient oscillates between the two conditions of not being able to act (when he wants to), and of being obliged to act (when he doesn't want to). The symptom symbolizes the conflicting forces. These are not, as in hysteria, fused into a compromise-formation, but come to separate and alternating expression; one set of manifestations, therefore, symbolizes the repressed forces, another the repressing."

[5] See his article on "The Treatment of the Psychoneuroses," White and Jelliffe's *Modern Treatment of Nervous and Mental Diseases*, Vol I, pp. 408-409.

To put the matter plainly, the Freudians contend that obsessions are symbolical representations of the repressed sexual activities and tendencies of infantile and early childhood origin. It must be remembered that the Freudians employ the term sexual in a very broad sense, including under it the most indirect and distant physical, mental and moral reverberations. conscious or "unconscious," of the relations between the sexes. The sexual impulse is here conceived of as having incestuous, bisexual and polymorphous perverse sexual tendencies. The word sexual is not only used as synonymous with love, but practically all emotional surgings, all feelings, all affectivity, all sense-cravings and bodily heavings are classed by certain members of the Freudian school as sexual. This latter interpretation and extension of the connotation generally accorded by us to the term sexual we surely have no right to give it.

Clark, of New York City, is the author who has carried out the Freudian idea to its ultimate conclusion. I refer to his series of three papers[6] in the *Medical Record*, and call particular attention to his last (third) paper in which he has fully elaborated his theory of the meaning of tics.[*]

[6] His three papers, which appeared in the *Medical Record*, New York, in the issues of February 7 and 8, and March 8 1914, are entitled: (1) "Some Observations upon the Etiology of Mental Torticollis," (2) "A Further Study upon Mental Torticollis as a Psychoneurosis," and (3) "Remarks upon Mental Infantilism in the Tic Neurosis." A fourth paper by Clark on tics appeared in the *Medical Record* of January 30, 1915.

[*] J. Sadger has also come to similar conclusions.

Clark's conception of the meaning of tic movements and of the mental state characteristic of ticquers must be here given. Although not denying the basic neurotic constitution present in ticquers, Clark sums up by giving the following definite and fully developed theory:

"The ticquer has a strong sexual attachment; this is so strong that the love instinct ineffectually sublimates the hate instinct and in the warring conflict doubt and physical and psychic inadequacy arise. The situation continues and generates mental, and physical infantilism, which in turn make for increased feelings of tension. Motor and psychic restlessness succeed. The motor expression manifests itself most often in habit movements of disguised sexual significance (autoerogenous pleasures) a form of physical stereotypy, in its broadest psychophysical meaning. The mental state often *pari passu* takes up obsessive thinking and various physical acts and thoughts are formed as defense mechanisms, born of conscious guilt. The motor habits are usually inhibited or displaced in part, and the tic remains as a motor symbol, usually in itself non-sexual, as a fragment of the former complete habit movement. The mechanism of the completely evolved tic is either a conversion (hysteric) or substitution (obsessive) mechanism or both."

By these who have studied Freudism this will, in a way, be understood. For these who have not it may be more difficult of understanding without somewhat further elaboration or explanation. In this connection I must again mention that the Freudians include tics under their obsessive (obsessional) neuroses. The theory of the mental mechanisms and evolution of these states is given in the attached

quotation, which is taken verbatim from Clark's paper.

"The affect of the painful idea does not become transformed into physical symptoms, as in the conversion mechanism of hysteria, but affixes itself to other ideas not in themselves unbearable, thus producing by this false relationship a substitutive symptom or obsession.

". . . In all such obsessive neurotics the transformed reproaches which have escaped repressions are always connected with some pleasurable accomplished sexual act of childhood but may be almost entirely lost. The obsessive acts really represent the conflict between impulses of opposite instincts, love and hate, which are usually of equal value. The warring conflict engendered makes for a curiosity to discover the meaning of life forces (sexual largely) and the desire to know the end thereof. The nuclear-complex of all this is a precociousness of emotional life and an intensive fixation on one or the other parent or brother or sister. The intensive love fixation waxes the stronger as the unconscious hate requires increased barriers against its breaking through into the main or everyday personality. As a result of these conflicts the will is partially weakened, there is an incapacity for resolution, first in the realm of love alone; then later succeeds a diffusion or displacement of the mechanism all over the field of activity. A series of secondary defense mechanisms are now brought in and these may enable the obsessive person to get square in a limited way (as religious practices enable many to do). Some special adaptation is required sooner or later, and the individual, having used up all the helps, then falls back upon the different forms of obsessive acts and thinking. Thus the obsessive neurosis is generated."

Clark then proceeds to explain:

"If one is not permitted to draw deductions from a few data as to the further genesis of the tic disorders, we may still hold out a tentative hypothesis, pieced together from many sources that a certain type of nervous make-up is inherited. In such the emotional life is precocious much beyond the intellectual faculties. The ticquer in infancy has the emotional feelings of love and hate of an adult. Their very precociousness aids the parental fixation and adhesion, and makes it the more difficult for the libido to detach itself at the proper age. One should bear in mind that the parental fixation in itself does not directly produce the mishaps of adult life but this small fault in infancy generates wider and wider maladaptations as development progresses. It is these latter glaring faults and trends that make for the character defects, and these really break down the final effort at adaptations and adjustments producing the tic or obsessive disorder. But the essential nucleus of the defect is lack of balance, precocious parental fixation, and continued attachment to the parent-stem, that makes the adult defect possible. The very infantile precociousness of the emotions argues for the hereditary transmission of destructive temperamental qualities. Here, as elsewhere in tracing hereditariness in so-called functional nervousities, one should take as the unit character for study the mental traits or trends and exclude definite disease entities applied to ancestral disorders. I believe it is not too suppositious to think that many of these variant individuals are really atavistic in makeup and have continued from one generation to another special defective traits of emotional makeup which are fortunately denied the average individual."

The writer cannot understand how the theory which he has taken the trouble to so fully present in the above quotations can be maintained. Jones and Clark both assert that the tics or habit spasms are probably of the same nature as the obsessions in general. Moreover, Jones agrees that "familiar examples of compulsion in a slight degree are the obsessive impulses to touch every other rail of an iron fence as one walks past, to step on the cracks between the flagstones of the pavement, or not to step on them, and so on." A little reflection will show us the impossibility and illogicality of viewing all these conditions as being fundamentally of sexual origin. Let us follow the argument. If tics are of sexual derivation, as the Freudians here openly maintain, then it must follow that those familiar examples of compulsion, such as the obsessive impulse to touch every other post, etc., are likewise of sexual origin. This conclusion is forced upon us, since, even according to Jones, the only difference between the marked tics and the lesser manifestations is one of degree.[*] Now, these slighter impulsive tendencies to which we have here referred are very frequent in all children and by no means infrequent in grown-ups. They are habitual movements, which may be of transient duration only or may, by repeated performance, develop into more or less fixed habits. If, then, these habits are of sexual significance, it must follow that all other habits, especially if associated with a certain degree of consciousness or awareness, are in like manner symbolical of the past infantile and early childhood sexual activities and tendencies. This conclusion is, as is seen, inevitable, if we believe in the Freudian theory of the pathogenesis of the tics. However, since this leads us to a *reductio ad absurdum*, we must, of course, reject the explanation which has been offered by the Freudian school.

[*] The accompanying mental state characteristic of ticquers is absent in habits. We can stop doing the latter when our attention is directed to them; not so in tics Meige and Feindel have discussed these and other differences.

Perhaps I should also mention the fact that all of these symptoms or tendencies which one finds in ticquers occur in other individuals who do not present tics; and, furthermore, that all normal individuals possess these qualities or tendencies in varying degrees of intensity and in varying combinations, and that this applies to adults as well as to children, although, of course, they are seen most characteristically in children. I may further add that the difference between the mental infantilism which we find present in the tic psychoneurosis and that which we observe in other (normal and abnormal) conditions is one of degree rather than of kind. Therefore, the most we can say of the mental condition in ticquers is that there is an exaggeration of the mental infantilism or a fixation at or tendency toward regression to this type of thinking or of reaction. And this leads us to the further conclusion—and it is this point which I desire to bring out in this connection—namely, that since the difference between the mental infantilism in all of these conditions is relative, being one of degree and of proportionate relationship or at any rate of genesis, evolution and meaning, it naturally follows that what is in the conclusions of Clark, as mentioned above, asserted to be an absolute and basic principle or truth applicable to the tics, must consequently be true, but in different degree, of all the other conditions of a similar or allied nature. Surely the motive source is fundamentally the same in all of these conditions.

Furthermore, tics occur in animals, especially in horses; and the whole picture, physical and mental, of tics in horses resembles that which we find in human beings, particularly idiots and imbeciles, with tics. And the ultimate, fundamental meaning and motive source of tics in man is and must be the same as that of tics in horses.

To put Clark's idea in a nut-shell, it may be said that he believes that the primary purpose of tics is not that of a protective, defense mechanism against unpleasant situations in life but that of obtaining really pleasurable gratifications to the psyche, these autopleasurable acts being based on inherent defects and having a sexual significance in the sense in which sexuality is conceived by Freud. The protective, defense mechanism is, according to this view, but secondary to the primary and <p 340 > fundamental purpose of obtaining the autopleasurable gratifications to the psyche.

Although approving of the analytic and genetic tendency displayed by Freud, Clark and the Freudian school in general, it is regrettable to me that the analytic tendency and reconstructive efforts of the Freudians in the field of neurology and psychopathology have been seriously marred by their insistence on forcing all observed physical and psychical phenomena and reactions into line with their fixed sexual theories and their special psychology, which is basically wrong in many fundamental and important standpoints.

The writer will agree with the Freudians that there must be a cause for the appearance of these tics. This cause existed in the past. It has in the course of time been forgotten, but still exists somewhere in the subconsciousness or memory. This forgetting has been brought about by a process of dissociation from the original exciting cause. But the writer will not agree that this dissociation has been, of necessity, brought about by psychic repression on the part of the individual, that by psychoanalysis the condition can be traced back to the sexual activities or tendencies of infantile or early childhood origin, or that the condition may be cured when the original cause is made known to the patient through psychoanalysis, without the training of the will so necessary in this condition.

Thus the analytic tendency of the Freudian school is to be highly commended. But this analysis should not be limited to sexual analysis, but should include a consideration of all of man's instincts. Nor should the analysis be limited to present-life psychic factors alone, but should be viewed from a psychobiological standpoint. In this way only will all antecedent causative factors—physical and mental—be included in our analytic observation and speculation.

To fully discuss or to prove the error of Clark in his conclusions would necessarily lead me into a general discussion of Freudism, which I cannot do in this place, since the ramifications are too numerous and the problems involved would lead to lengthy and tiresome discussion, pro and con. I must, however, mention the exclusively sexual standpoint assumed by the Freudian school in their interpretations of physical and psychical activities, their classifying of all activities characterized by a certain rhythmicity and periodicity, and accompanied by a certain degree of satisfaction—in other words of all autopleasurable activities—as sexual (in the Freudian sense), and the neglect of comparative and behavioristic psychology with proper consideration for man's phylogeny and ontogeny or of his true genetic history, from the racial and world history and not alone from the individualistic psychological standpoint. As a matter of fact the conception of sexuality assumed by Freud and his followers has undergone many changes and is by no means definite and clean cut in its outlines. A criticism of the conception of sexuality cannot be entered upon here. I may merely state that what is an absolute and fixed law for the tics, what is the fundamental and basic explanation or theory of the genesis and meaning of the tics must apply also to all habit movements wherever and whenever they occur, and, in like manner, to all habit formations of whatever nature. And since our habits are but the

prolongations of our instincts, the latter also would be included within the purview of the same generalization. In other words, if all tics have a sexual meaning, then all instincts, which means the vital energy of man, has the same meaning. This question I have discussed in another place[7] and cannot enter upon here.

[7] A Critical Review of the Conception of Sexuality Assumed by the Freudian School. Medical Record, March 27, 1915.

Without further elaboration or discussion I am content to give the Freudian conception to you as I have outlined it above and to let it stand for what it is worth.

I may say that in the physical aspect of tics we have a specific somatic manifestation which, if explained, should, in a way, be the gateway toward the understanding of the many somatic symptoms which we find in the psychoneuroses and psychoses.

THE EVOLUTIONARY, PHYLOGENETIC STANDPOINT

A year or more before Clark's paper appeared, I had arrived at certain general conclusions regarding the subject of tics.

G. Stanley Hall has arrived at similar conclusions in his inspiring Synthetic Genetic Study of Fear[8] and I wish here to acknowledge my indebtedness to his paper for making my own ideas clearer to me, for having given me broader standpoints and for clearly presenting a theory which shall form the basis of the remainder of this paper.

[8] In the American Journal of Psychology, Vol. XXV, in the July issue et seq.

Let us first take up the tic movements and see whether we can arrive at a rational explanation for their appearance.

The different varieties of tic movements embrace the entire field or range of systematic, physiologically coordinated voluntary muscular activities.

The main types of tics may be enumerated at this point: facial tics, which are the most frequent and which may be tonic or clonic, are tics of mimicry and express emotions; tics of the ear or auditory tics; nictitation and vision tics, particularly of the eyelids; tics of sniffing; tics of sucking; tics of licking; tics of biting and of mastication, and mental trismus; tics of nodding, tossing, affirmation, negation, salutation and mental torticollis; trunk, arm and shoulder tics; snatching tics; the professional or occupational spasms, which are really a special atypical form of tics; walking and leaping tics; tics of spitting, swallowing, vomiting, eructation and wind sucking (aerophagia); tics of snoring, sniffing, blowing, whistling, coughing, sobbing, hiccoughing; tics of speech, including all sorts of sounds, stammering (in some cases), habit expressions, echolalia and echopraxia.

It is thus seen that we have here physiological and biological acts of different manifestations and purposes.

The tic movements have a certain significance at the time of their performance. The physiological functions are definite.

The Magnan school insisted that tics are not morbid entities but episodic syndromes of mental degeneration. Charcot referred to tic as a sort of hereditary aberration, which, I may add, is surely true when we view it from the phylogenetic standpoint, as representing a resurrection of what was at one time a normal tendency or reaction. Noir has called attention to the fact that the movements found in the tics correspond to the infant's spontaneous muscular play, which means the muscular play of all mankind.

These authors were directing their efforts in the right direction. To appreciate this we need but remember that the mechanisms or the potentialities for the movements are inherited and have a phylogenetic significance. At a lower psychic level, far back in our phylogenetic racial history, all of these movements, perhaps then in a rudimentary form, had a single, original meaning. This meaning was self-preservation, and it was because of its value as a means of adaptation or reaction to the environment, with the consequent maintenance of self-preservation; that the movements or the mechanisms of the movements were selected for survival and for hereditary transmission as inherent, unconscious, organic mechanisms, processes or engrams. The original, phylogenetic significance attained at a low cultural or psychic level, relatively unconscious, may or may not later be consciously associated or dominate its subsequent functioning. But its primary, biological significance, its real

raison d'etre is to be found in the phylogenetic, racial history of man. The present life history with its varied experiences do but act as stimuli or as exciting factors to bring once more into activity functions which have been preserved in the organic structure of the nervous system.

In our return to phylogenetic, ontogenetic, rudimentary, unconscious, organic reactions, to atavistic, prehistoric, performed, embryonic, immature methods of response, the vestigial remnants, revivals of long ago, which have been submerged but which now reappear due to our reversionary tendencies—uprooted by dissociation, disintegration or regression, with its lapse or descent to low cultural or psychic levels—these old components which reappear or rather fall apart and appear as independent activities, are exaggerated, inflated, caricatured or excessively performed. In our devolutionary tendency toward ancestral methods of reaction, the individual, resolved, so to speak, into his proximate elements, permits or is compelled by biological determinism to permit these split off tendencies to break forth once more, albeit in exaggerated fashion, as if let loose from the leash of control by the higher nervous centres, and reanimified, intensified, and magnified, our infantile, archaic, instinctive, inherited, hidden, phylogenetic tendencies or activities held sway.

It seems to me that it is well worth while to quote at some length from G. Stanley Hall, that great exponent of genetic psychology and all that it stands for. His very stimulating and inspiring paper on fear, to which I have already referred, is freely quoted in the following paragraphs.

According to geneticism, Stanley Hall tells us, all responses to shock are vestiges of once useful reactions. In fact, the shock neuroses and shock psychoses, if analyzable psychogenetically, "would be found to be reversions to, and also perhaps more often than we suspect, magnifications of acts and psychic states that were at one time the fittest of which our forebears were capable.[9] However, all the pathological phenomena of today are not mere revivals of the acts and states of primitive man and his ancestors, but "they are often, on the other hand, grotesque variants and intensifications of phylogenetic originals that were more sane and simple if also more generic. Shock symptoms may thus be symbols of long past racial experiences which when we have learned to interpret them more fully will tell us much of the early history of our phylum." [10] It is the outbreaks of emotion which "mark the incursions of the race into the narrow life of the individual." [11]

[9] Loc. cit., pp. 178-179.

[10] Loc. cit., p. 179.

[11] Loc. cit., p. 183.

Furthermore, "the central nervous system differs from all others in that it is par excellence the organ of registration and of physiological memory. It is there that the traces of ancestral experience are stored so that almost nothing that was ever essential in the development of the phylum is ever entirely lost. Hence suggestive as are many physical traits of our racial history, the intangible psychophysical traits must be assumed to be both far more numerous and more indelible.

"While these faint tendencies often crop out in a behavioristic way, by far the most of them need some stimulus of individual experiences to awaken them, and still more exist only in the slight facilitization of impulses or permeability of nervous centres, lability of molecular or neural tensions, or as preferential re-enforcements, in one rather than in another direction or manner." [12]

[12] Loc. cit., p. 351-352.

It is obvious that motor expressions of shock or motor methods of adaptation or reaction are much older and far more prominent than psychic. But although a changed environment made the old types of defense obsolete, they still persist, "in a sthenic if somewhat now inco-ordinated way, and when they are called into action now they evoke a faint phosphorescence of the old primordial feeling." [13]

[13] Loc. cit., p. 197.

In brief it should be said that no matter how refined and how highly cultured we are, we still fear and react to emotions "in the same terms of the same old gross organs and functions as do the brutes." [14]

[14] Loc. cit., p. 197.

REGRESSION

As I have stated in a previous paper, [15] the pathogenesis of tics and allied conditions can best be appreciated by viewing the subject from an evolutionary standpoint. In our reactions and adaptations to

the varying experiences with which we meet we respond by one or more of several methods of motor reaction. These motor expressions are of increasing complexity as we ascend the scale of evolution and development. One of the simplest kinds of adaptation is by simple, reflex muscular action, the response being anatomical and not physiological in its extent. Then come our simple physiological reactions. A more complex reaction is by those physiologically co-ordinated motor reactions or movements which go to comprise our pantomimic movements. This is seen most characteristically in our facial expressions, gestures, mimicry and dancing. Still higher up in the scale we find our conduct and feelings as exemplified in our speech. And finally, highest of all, we must place our conduct as shown in written or printed language. This is a brief outline of our evolutionary and developmental ascent and of the increasing complexity and refinement of our social conduct.

[15] Tics. Interstate Medical Journal, January and February, 1915.

In our motor adaptations we respond in one or more of these ways. When for some reason or another one outlet is denied us, we find avenues of expression through one or more of the other paths. Now, the manner and degree of our response is dependent on our stage in evolution and development, on the development of our senses, on our instincts, feelings and emotions, on our intellect and experiences. Unable to find expression by means of writing or speech, we instinctively fall back upon and seek expression by a less refined method, one earlier acquired and thus lower in the scale of evolution. This has a more or less general application throughout the scale of human (individual and social) conduct. It is an application of the universal law of adaptation to existing conditions in the best manner possible under the circumstances. We may thus lay down in a general sort of way a conception which I like to call the theory of psychophysical progression, fixation and regression along evolutionary and developmental lines. In the case of tics the regressive or devolutionary aspect comes in for special consideration. We may react mainly physically, or mainly psychically. But as a rule we react by both physical and psychic means, the manner and degree of our conduct being determined, as above mentioned, by our stage in evolution and development.

How does all this preliminary and general discussion apply to the problem of the tics? The relation seems to me to be most intimate and most important. The tics are methods of response or reaction to certain external irritations or ideas, this response being the manner of adaptation. The response may be mainly motor or mainly psychic, most frequently psychomotor. When the source of irritation and the cause for action is known, our conduct is more specific and is apt to be less diffuse, less inadequate, less indefinite. In our reactive adaptations, which, as explained above, are greatly dependent upon our psychophysical make-up or constitution, we protect ourselves consciously or more or less unconsciously against disagreeable, inimicable, unpleasant or irritating environmental factors, physical or psychical, by bringing into activity certain psychical or physical or psychophysical reactions or processes. The special defense reactions brought into the foreground are those which follow the line of least resistance, due to hereditary or environmental construction, or are those which were most intensely stimulated or irritated and the most biologically useful and adaptive at the particular moment or under the special circumstances. The young child's reactions are preponderately motor, or at any rate psychomotor and not purely psychic. When there are sources of irritation or bodily or mental discomfort, there is a more or less general bodily reaction, psychophysical in nature. When the irritation is definite and clearly recognized by the child, the local motor response is also apt to be definite. When, on the other hand, the irritation is but vaguely perceived and not clearly appreciated or localized, we find that the child may show a general diffuse reaction, or even, in some cases, a reaction limited to certain regions as determined by the reaction taking place along the line of least resistance. This is plainly seen in the conduct of the physically sick child. Every pediatrician will find ample proof in support of this statement in his observations of the defensive reactions of the ill child.

When this irritation along a certain nerve path is oft repeated or quite constant, we have a consequent repetition of the defensive reaction, whatever it may be. This performance may be so frequently repeated that the idea of irritation or mental conflict or the anticipation or the expectation of a repetition of same may be quite sufficient in itself to arouse this reaction. It may become so habitual that, even though no such idea be in the mind, there may be a repetition of the movement whenever the individual is nervously excited or upset, whenever there is any mental stress, strain or discomfort. And we may go even further and say that as a result of some unusual mental struggle, some excessive mental strain, defense or adaptation is brought about by regression or resort to a tic, this being conditioned by the fact that for the particular individual under discussion this is the easiest, most convenient or most immediate form of reactive response. The discharge is, as is seen, along the line of least resistance. This line of least resistance is determined by the organic nervous constitution and by certain life-experiences or habit-formation factors. In some cases the movement, once initiated, may be continued long after the disappearance or cessation of the external irritation, because of the sense of relief or satisfaction or pleasure[*] which is obtained by the performance of the tic. In many instances the habit has become rather fixed, and, as a relief from the struggle to do or not to do the movement,

and because of fatigue in the effort to inhibit or control the movement, the individual adopts the path of least resistance, best for immediate relief from mental struggle; and as a psychobiological effort at self-preservation and self-gratification, as immediately as possible and at any cost to be paid in the future, he gives vent, as it were, to the movement.

[*] This is not, of course, of a sexual nature the Freudian school notwithstanding.

The psychic symptoms may come on at a later date than the motor symptoms or simultaneously, although, of course, the early life history, in childhood and puberty, for example, if we are dealing with an adult, may show, at least in a certain proportion of cases, that the individual was of a psychopathic type, perhaps somewhat shut-in or asocial. If the appearance of the physical symptoms be simultaneous with that of the physical symptoms, we can understand at once how, like the motor symptoms, they may be repeated time and again. In many instances, at least, the psychic symptoms arise later, being added to the motor symptoms. These later psychic symptoms may be a direct reaction to the source of irritation, or may be occasioned by the dissatisfaction at being unable to control the movement in question.

The degree of reaction, its duration and severity, depend upon the hereditary and developmental make-up of the individual and the severity, frequency and duration of the irritation, physical or psychical. The psychic element is particularly apt to vary. The more neuropathic and psychopathic the make-up the greater is the reaction.

Where mental enfeeblement or mental disorder exist, the severity and chronicity are apt to be still greater.

There is thus a fixation, or rather a regression or reversion, oft repeated, to a type of reaction of a very infantile, primitive sort, farther down in the scale of evolution and development.

This picture may be further complicated by so-called neurasthenic, psychasthenic, hysterical or other reactions. Naturally one would expect to find these conditions, especially the more aggravated forms, in individuals of a neuropathic and psychopathic family strain, and who themselves are neuropathic or psychopathic or both.

It may be mentioned here, as is clearly appreciated from what has been said before, that there is an interrelationship between the tics on the one hand and the symptoms which we discover in the psychoneuroses, psychoses and the mentally unstable on the other.

In all of these conditions we find a cortical origin for the disturbance, there is a lack of will power, of inhibition and of control of the lower centres, there is a nervous and mental instability with a tendency toward regression or dissociation, and the assumption of more or less independent, almost automatic activity, this activity being characterized by its almost (relatively) infantile, primitive, archaic makeup.

Were I to take up any one of the tics as an illustration, this general idea could be applied very nicely. But I shall not present any illustrative cases in this paper. I shall leave it to the reader, however, to explain the genesis and evolution of, for example, facial tics (which are so common) from this standpoint.

In passing I may say that the tic movements may have a special, individual, psychological significance. But this is by no means necessarily so. Frequently, I am inclined to believe usually, these movements result rather merely because there has been effected a psychobiological reaction, following the theory of psychophysical-progression, fixation and regression with involvement of the nervous paths most seriously affected or most easily disturbed.

In the case of the tics, therefore, it is as if the various tic movements are being used in reaction to or in adaptation to sources of internal or external, physical or mental irritation, for the protection, defense or self-preservation of this or that particular part of the nervous system—as if the movements which we find in the tics and which are the expressions of certain engrams, neurograms, mnemes or organic memories, are existing in and for themselves, except that, in the tics, they are reacting with and for the psychophysical organism, the organic make-up or personality.

The individual, as a biological unit, is reacting to the particular situation which presents itself by the tic mechanism.

By granting the phylogenetic, racial significance we also give the basic, psychophysical meaning of tics in all ticquers.

EXCITING FACTORS

How is it that these activities may come into play again? What brings them to the surface once more?

There are many factors which come in for consideration in this connection. In the first place the basic cause is the instinctive, organic, psychophysical make-up of the individual. Whether and which functions re-exist as of old and respond as means of adaptation and self-preservation, depends on the stability and the weaknesses or defects of the nervous mechanism or system with its various parts, systems, functions or inherent psychophysical dispositions on the one hand, and the life-experiences and the immediate inciting factor on the other hand.

A neuropathic or psychopathic or neuropsychopathic constitution with its usual causes (germinal, intrauterine or extrauterine, usually of a toxic, infectious or disturbed metabolic nature, and including particularly alcohol, syphilis and nutritional disorders) may form the ground work. This predisposition may be congenital—that is, present from the date of birth, although not necessarily germinal in origin, or it may be acquired at some period in life from physical or psychic causes. In this connection the infantile and early childhood history are very important. Consequently the diseases, training, example, education and opportunities in childhood and infancy are of very great significance, the parental training and example and the home conditions having a most intimate relationship to the development of many of these tics. Imitation and mimicry here play a decided role. Spoiled children, too quickly satisfied or over repressed, are apt to develop tics. External somatic irritations may be the starting point in some (not in all) cases. At other times an idea (normal or abnormal) may incite the tic movements. Auto and hetero-suggestion, hypochondriacal ideas, hysterical symptoms and obsessions may, particularly in adults, initiate tics. Obsessions are especially apt to produce habits or tics, if they produce any motor reaction. Tics may develop into obsessions and vice versa; or both may co-exist simultaneously and be unrelated. The original ideas which led to the movements vanish while the movements survive. In the insane various sorts of delusions may be the groundwork on which a tic may later develop. Habit movements, which represent purposive physiological acts which have become automatic and not inhibited (hence showing weak will power) and which seek strongly for expression, which the individual struggles against and endeavors consciously to inhibit and overcome after the tendency is fairly well developed, may eventually become impulsive and irresistible with the ultimate evolution of the psychic state which is characteristic of ticquers. Automatic habits and mannerisms or stereotyped acts are of course not tics but the latter are but caricatures of the former with an added characteristic mental state. Tics, as mentioned earlier in this paper, are thus pathological habits.

Tics may also be but the symbol for a vague feeling of tension, irritation or stimulation, which seeks relief or expression by the performance of the tic.

Emotional stress and strain, fright, fear, excitement and mental shock can arouse a tic. Mental conflict and unrest has not received that degree of attention which it surely deserves. Clark and the Freudian school have definitely called our attention to this aspect. Bresler refers to tic as a motor reaction to original mental shock, so that it is in fact a psychic defense reaction of expression. Dupre has stated that emotional shock may act as a possible exciting cause of tics, as at times of obsessions. Meige and Feindel have asserted that fear may excite a movement of defense, and although the exciting cause has vanished, this movement may continue to persist as a tic. They also mention that in ticquers we frequently find the impulse to seek a sensation and to repeat to excess a functional act.

That there is a weakness of will power in the ticquer, with a lack of control or inhibition over the lower neurones normally regulated by the higher co-ordinating centres, so that certain automatic activities become dissociated and exist more or less independently, is generally acknowledged.

In fact it must be said that tics are reactions of the organism, of the organic make-up, the psychophysical personality, as a response to irritation, excitation or stimulation, sensory, nervous or psychic! It is a means of relief of tension, of organic reaction or adaptation, not necessarily conscious but frequently unconscious and automatic, as in fear. Starting in this way it may persist. In the tic we see a method by which the individual or organic personality has met a certain difficult or undesirable or disturbing situation. It is thus a constitutional, biological defense reaction, psychophysical in nature, with a reversionary tendency (when viewed from the evolutionary standpoint), and hence is indicative of degeneration, this term being used in the racial, biological, phylogenetic and ontogenetic sense.

There is not such a far cry from the simplest tic to Gilles de la Tourette's disease or *maladie des tics* with its more pronounced signs of psychophysical deterioration and dissociation. The tendency is a degenerative one— a prolapse to ancestral methods of reaction, a dissociation or disintegration of the personality, a lack of control over more elementary activities. We should therefore appreciate the need of early recognition and treatment of tics and fixed habit movements, especially since there is a tendency to spread, for the tics to multiply, and for mental symptoms and reactions of a hysterical and

psychasthenic nature to appear, if they do not already exist or have not existed before the onset of the tic.

In brief, then, tics represent the emotional reactions and feelings of the individual—the loves and the hates, the likes and the dislikes, the wishes and the fears, the cravings and the dissatisfactions, the bodily and mental tension, unrest, excitement, discomfort and disequilibrium. In other words the ticquer feels and speaks and acts by the tic. He lives by, in and for his tic. He is attempting to meet certain situations of a disturbing nature and to obtain equilibrium and equipoise by compensating for his feelings of inefficiency and unrest by the tics. It is an organic, constitutional, psychophysical, biological means of adaptation.

PROGRESSIVE EVOLUTION OF THE CONDITION

We now come to the progressive evolution of the motor manifestations and to the mental aspect of this condition.

Concerning the mental state characteristic of the ticquer it is generally agreed that there is a polymorphic psychic defect or disorder which shows itself particularly in a precocious or hyperemotional condition, in a lack of will power and of inhibitory control, leading to a state and feeling of doubt, indecision, incapacity, insufficiency and unreality, of inferiority and self-depreciation, with a tendency towards morbid self-absorption, egocentricity, self-observation, auto- and hetero-suggestion, with the consequent development in many instances of so-called neurasthenic, psychasthenic, hysteric and various psychotic reactions. I am not prepared to say definitely how frequently the mental state, in lessened degree, precedes the outbreak of the tic movements. This may be present in a certain proportion of cases, but is by no means always present and it is even questionable whether the predispositional mental condition is the ground work in the majority of patients.

Tics, it is true, are especially apt to develop in individuals with a neuropathic or psychopathic history or heredity. In other cases this history is not obtainable, the individual having been apparently perfectly normal up to the time of the outcropping of the tic. In these cases shock is apt to bring on the outbreaks and so one may say that the instability had been latent and that a severe shock was sufficient to bring it to the surface. We must remember, in all these cases, that the mental state which we see in the ticquer is but an exaggeration of that which appears in many children, and is similar to that which appears also in other psychoneurotic states, and in fact the germs of this condition may occur transiently in any of us. This psychic condition may frequently but does not always precede the appearance of the tic movement. But it is only after the appearance of the motor manifestations of tic that the mental state becomes prominent or develops where it was not noticeable if not absent before.

Be that as it may, or even granting that in most patients the characteristic mental state or the neuropathic or psychopathic make-up exists in some measure to an abnormal extent, we do know that once the tic movements have made their appearance and begin to spread, so that the individual is thrown into the struggle to perform or not to perform the movement, the development of the psychic state which we find so patent in the more pronounced forms of tic, thereafter more or less rapidly occurs, no matter what the mental condition of the ticquer may have been previously. I am also not prepared to discuss here at any length the phylogenetic or ontogenetic significance and the biological genesis and meaning of the various mental trends of the ticquer, but I may say that they too have been acquired in the course of evolution, for certain very definite reasons which need not concern us here, although it can be appreciated that the biological motive of self-preservation played a most important role in their genesis and fixation.

APPLICATION OF ADLER'S THEORY OF THE NEUROTIC TO TICS

The progressive spreading of the tic movement which so commonly occurs, as well as the evolution of the mental aspect which develops subsequent to the appearance of the tic movement, may be very nicely understood if we adopt, for our present purposes the recent theories of Alfred Adler,[16] of Vienna, concerning the makeup and development of the neurotic. This we may do without committing ourselves, at this moment, one way or the other, with regard to the correctness or incorrectness of Adler's views as applied in toto to the neurotic.

[16] Ueber den Nervosen Charakter, 1912. See also Adler's Studie uber Minderwertigkeit von Organen, 1907.

One should note that Meige and Feindel were, in a way, on the threshold of this theory when they

said that tic, like the other psychoneuroses, is due to some congenital anomaly, an arrest or defect in the development of cortical or subcortical association paths—unrecognized teratological malformations.

In a very few words Adler's theory may be given as follows: Adler assumes that there is definite somatic inferiority (based on anatomical and physiological changes) as the basis or foundation for the neurotic soil. The neurotic consciously comes to realize the unconscious, organic, somatic inferiority, and the endeavor to effect a psychic compensation or to make up for these organic deficiencies by certain definite mechanisms, frequently results in an overreaction or over-compensation. He thus overdoes himself in efforts to make up for his inferiority, and in these endeavors he necessarily makes use of unusual means and devices. It is this effort which is the great motive force which dominates the life activities of the individual and which compels him to seek as his ultimate object or final goal a state which is best described as one of complete masculinity, of full manhood, of self-maximization, of the will to live, to become powerful and to seek supremacy or "the will to power" (Nietzsche). In following this goal he goes to extremes and employs peculiar methods and devices, most of which have for their object the concealment of his defects, and it is these overcompensatory efforts and these peculiar devices resorted to, which go to form the peculiarities or traits of the neurotic. According to Adler's theory, the conscious efforts of the individual for psychic compensation or overcompensation (for the unconscious, organic deficiencies) leads to a resulting feeling of insufficiency, of incompleteness, of inferiority, of unreality, of anxiety, of inability to face reality. Thus the mental symptoms or characteristic mental state, being but the conscious recognition of the unconscious inferiority, become especially pronounced when there is a failure of compensation, or, in other words, when the individual is unable to meet with or adapt to the situation which at the moment presents itself. In these forced efforts at defense and compensation there is a resort or regression to older, infantile, child-like, archaic types of reaction, of a physical or mental nature, which are thus the protective defense mechanisms or symbols. The struggle of the neurotic consists particularly in the conscious appreciation of his goal and of his deficiencies of makeup and in the attempt to reach his goal of full manhood and self-maximization in spite of his handicapping deficiencies.

Without discussing the exact status of this theory in the case of the psychoneuroses and their related conditions in general, we may, as mentioned previously, very conveniently use this theory in the elucidation and understanding of the further development of the tic condition.

Let us first consider the spreading of the tic movements. We know how in the ticquer one tic movement may disappear only to give way to another, or one after the other an increased number of tic movements and also of definite compensatory movements not of a tic nature but of the nature of antagonistic gestures and stratagems may make their appearance. The latter may in certain instances become habit movements and eventually real tic movements. One movement after the other may be resorted to, some perfectly consciously, others more or less unconsciously, as reactions of the personality, of the organic makeup or psychophysical constitution. These movements are adopted by the patient, frequently more or less unconsciously, in order to attain a state of equilibrium and rest, and in order to hide and make up for the defect (the tic movements) of which he is aware. In these efforts he overdoes himself and instead of hiding the movement he exaggerates it and even resorts to further movements in his struggles to compensate, to adapt, to conceal, and to flee from a state of mental disarrangement to a state of psychophysical equilibrium.

Now, most of our gross reactions are of a psychophysical nature, so that we find that when the old types of defense or of activity are called forth (as they are in the tics, as explained earlier in this paper, from the evolutionary and phylogenetic standpoint), the resulting actions, now reanimified, appear in exaggerated form, and also tend to "evoke a faint phosphorescence of the old primordial feeling." This probably results in the outcropping of the various psychic trends which appear in the ticquer and which increase in degree and in number. The most common of the resurrected psychic trends is the general tendency to dissociation or disruption of the personality with the reanimification, in varying degrees, of certain mental deficiencies and inferior types of reaction which are indicative of the relative failure of the patient to measure up to and efficiently deal with and adapt to the struggles of life as he must face and meet them. And so, many undesirable and inferior kinds of mental trends come forth and hold sway. The basis of their appearance is the lack of will power and of control over these various trends which were previously more or less completely held under control but which are now impulsively forcing their way to the surface and being unravelled. These trends are characterized by their relative immaturity, their infantile-like and archaic type. And so we have the states of indecision, of doubt, of uncertainty, of inferiority, of depression, of unrest, of self-depreciation, of self-observation, of auto and heterosuggestion, of egocentricity, of self-criticism, of inhibition of the expression of the personality along the broader, social lines of effort. The groundwork for added states (hysteric, psychasthenic, and others) is here very fertile.

The law of psychic ambivalence and ambitendency, as so nicely developed by Bleuler,[17] here shows itself in marked degree. There is both the positive and the negative tendency toward the performance

and execution of these activities and reactions which are necessary for the living of a life of a high or low degree of efficiency, so that the ticquer is obsessed by the problem of "to do or not to do." This added factor leads to an exaggeration of all the unfavorable psychic tendencies which have made their appearance, and the intrapsychic struggle goes on with increased vigor.

[17] *The Theory of Schizophrenic Negativism*. Translated by William A. White. Nervous and Mental Disease. Monograph Series, No. II.

The entire mental picture which we find in the most extreme forms of tic could be beautifully elaborated along these general lines. For example, the ticquer becomes asocial, seclusive and shuns society because of the consciousness of the condition and the exaggerated sensitiveness. This represents compensatory, defensive methods of concealment. Absentmindedness and the inability to concentrate the attention are conditioned by the great degree of attention devoted to the tic. The mental dissociation or disintegration leads to an inflating of the emotional aspect of the patient's mental life with a resulting increased nervous irritability and reaction and a heightened degree of susceptibility to emotional disequilibrium and fatiguability of the mental faculties. The lack of self-assertion, of confidence in himself, and the feeling of inferiority and insufficiency are natural consequences of the general picture. The inhibition of even, unhampered self-expression is always observed.

In tics, it must be noted, there is regression to more inefficient and inferior methods of response and adaptation, the types of activity being of a somatic and psychic nature. Following the regression and owing to constant repetition and habit formation there is a gradual fixation to certain methods of response which become the lines of least resistance and this is followed by progression and development of the general picture to other tics and psychic symptoms.

In general we note that the psychophysical reaction which we come upon in the tics leads to the unearthing of various psychophysical types of reaction, this unearthing consisting of disintegration or regression or dissociation, the repressed, hidden, unconscious, phylo and ontogenetic, archaic and relatively infantile-like activities, tendencies and possibilities coming to the fore and unfolding themselves.

It is here seen that this broad genetic standpoint is one of the greatest contributions to psychopathology and is of infinite aid to us in the understanding of the problems which confront us in the domain of psychopathology and psychiatry.

Comparative and animal psychology and the study of the reactions of children, of primitive races, and of the mentally disordered give us a splendid opportunity for studying it and unravelling the meaning of the many somatic and psychic manifestations which are exhibited to us in the psychoneuroses and psychoses and in tracing out the racial history of man. Is it not plain that an understanding of the genesis and meaning of tics opens the gateway to the elucidation of the origin and significance of the psychoneuroses and functional psychoses—of reaction types of various kinds?

REVIEWS

THE INDIVIDUAL DELINQUENT. By William Healy, A. B., M. D. (Little, Brown & Co., Boston, 1915.)

It is a rare and pleasant experience to meet a book on such a general topic as delinquency, which has not as its *raison d'être* the exploitation of some over-worked hypothesis. The Director of the Psychopathic Institute of the Juvenile Court in Chicago has, however, not only avoided this danger but has given psychologists, jurists, and penologists such a report of his five years work as not one of them can afford to overlook. As the title of the work implies, the material is drawn from the individual study of the delinquent. He presents the results of the unbiased investigation of the discoverable factors in the production of criminality in 1000 recidivists, who were mostly, though far from exclusively, adolescents—the period when factors, both internal and external, are most easily determined and modified.

A careful perusal of the introductory chapter on methods reveals both the thoroughness and open-mindedness of the author. He demonstrates that no satisfaction was gained by the finding of any special mental or physical abnormality, unless a more direct relation could be shown with the crime committed than is established by mere coincidence. It is particularly satisfying to note the precautions taken in the application of set tests, how careful Dr. Healy and his assistants have been to determine the completeness of cooperation on the part of the subject and to weigh this factor in evaluating the results. One soon reaches the conclusion that the author's own series of tests are much more likely to

lead to reliable diagnosis than the series of Binet, which demands so much of the rather specialized capacity of abstract formulation. Healy's tests, on the other hand, deal fairly with the primitive, untaught mind and that which has an unequal and deceptive development of language ability. In connection with these tests, it is interesting to note, by the way, that he finds irregularity in results (or cooperation) to be so often associated with epilepsy and depletion from sex over-indulgence that it may be taken as a suggestive diagnostic feature.

The value for the reader in discovering the eclectic view-point and critical conservatism of an investigator lies in the confidence which these qualities beget in the reliability of results. One can read most of "The Individual Delinquent" to learn facts without the distraction of critical uncertainty. With this in mind, therefore, a few of his conclusions, picked mostly at random, may be quoted. An important factor in the production of delinquency he finds to lie in the premature appearance of adult sex development—a precocity which he regards as dangerous because it seems to be correlated with a stimulation of sex instinct before adult inhibitions appear. In girls (not in boys) he finds a distinct tendency to general physical over-development as compared with the norm of the same age. In this connection it is striking to find how many of his cases, which seem to exhibit ingrained criminal tendencies, are delinquents only during the period of adolescent instability. The various statistics are naturally also of extreme interest, particularly since they are the result of examination of 1,000 cases, chosen for this purpose only when there were sufficient data secured to make the individual study relatively complete, and since they are so at variance with the publications of others who have approached criminal statistics to prove a theory rather than to learn facts. He finds alcoholism in one or both parents in 311 cases. He cannot determine any direct inheritance of criminal tendencies as such, but regards them as indirectly of great importance as there were 61% who showed distinct defects in the family antecedents. He thinks that stigmata of degeneration are probably better correlated with mental defect and also with nutritional or environmental conditions than with criminalism as such. Followers of Lombroso will be disappointed to read that he found only 83 epileptics, or possible epileptics, among his 1,000 cases. A full two-thirds of the cases presented no symptoms of mental abnormality while only one tenth were definitely feeble-minded. These are but scattered data; no digest, which might be taken as substitute for the book itself, would be advisable.

It is to be expected, of course, that psychologists (and particularly those interested in dynamic psychology) will find mixed pleasure in reading this work. The section on "Mental Conflicts" must appeal to all with its practical demonstration of what can be done by psychological analysis to abolish anti-social tendencies in many puzzling cases. There will undoubtedly be disappointment in his failure to make general psychological formulations, but, as the critics would differ amongst themselves as to what these formulations should be, Dr. Healy's silence is here probably a wise conservatism. At the same time there is certainly exhibited a tendency to be rather too individual and give too few generalizations. This is evidenced by his failure to regard as a factor in one case what has been admitted as such in a slightly more obvious instance. To cite one example: On page 192, he speaks of the inheritance of hypersexual tendencies; on page 166, we find: ". . . immodest behavior and use of obscene language on the part of a parent, which we have so frequently found to be one of the main causes of a girl going wrong . . ." Somewhat similar results are thus ascribed once to heredity and again to environment. At this stage of our knowledge it would, of course, be foolish to eliminate any specific inheritance as a factor, but it is surprising that in the former case he does not consider environment as a factor, although he elsewhere gives striking evidence of unconscious influence proceeding from one individual to another via sex initiation.

It is possible that this lack of a broad psychological view point— this example chosen is far from isolated—is connected with a specific, and most definitely serious, defect in the book. The treatment of the psychoses is distinctly unsatisfactory. Apparently the author has had to rely on the literature for his preparatory experience and has been fortunate only in some cases, if we may judge by his references. The most satisfactory group he describes is that of the traumatic psychoses and there he follows Meyer's admirable study. On the other hand, in introducing the Dementia praecox group, he makes no specific mention of any one of the cardinal symptoms of disassociation or shallowness of affect, scattering of thought, and delusions or hallucinations. His nearest approach is when he says: "Variations in the way of excitement, with dullness and paranoidal excitement are seen during the course of the disease." This is followed by the description of a case which he says contains the symptoms typical of the psychosis but in which no pathognomic abnormality is mentioned except negativism— a vague term whose meaning varies with the observer.

Not unnaturally with such unfamiliarity, the psychosis is a "dispensation of Providence." There is no evidence that to him psychiatry is as much a problem of every day life as it is of institutional care of the insane. We can, therefore, find such a statement as this:

"The mental findings and the conduct determined the fact of aberration and that is all that should be necessary for immediate court purposes. Further business of diagnosis should be left to a psychopathic

hospital."

It is true that responsibility may and should be evaded when the psychosis is full-blown; but how about the innumerable cases of incipient psychotic disturbance which grade over into the "mental conflicts?"

In harmony with this diffidence is the repeated hope for aid from the *Abderhalden*. or some similar reaction. For instance:

"The newer methods of diagnosis of *Dementia praecox* we look forward to for help in one place where discrimination is important."

But surely a psychologist cannot hope to predict conduct by physical findings! If *Dementia praecox* postulated criminality, the situation might be different, but, as it stands, the reaction would only be of value in the doubtful cases— cases which are so many of them non-institutional.

With this vague conception of the psychoses it is not surprising to find that diagnosis used *faute de mieux*. For instance, in describing Case 169, of "pathological lying," he says:

"We could not in any way find evidence of mental peculiarity but we did question his story because of intrinsic improbability." Rather conflicting statements! Later on, he explains, the case was diagnosed as one of "epileptic psychosis" because the subject developed convulsions, although there is no evidence, or even claim, presented that the lying was an equivalent, or in any way correlated with the epilepsy except as a coincidence!

Such faults in a book of this sort are serious but only in so far as the work is theoretical. The main object of the book is to present facts in an unbiased way and for the first time we have them in anything like completeness. The importance of Dr. Healy's labors cannot, then, be overestimated. His publication will be eagerly welcomed by the army of workers who see a few cases at various stages of delinquency and who long to know authoritatively what the types are, how they develop, what the outlook is, and how that may be modified by appropriate treatment. We owe him much. JOHN T. MACCURITY.

HUMAN MOTIVES. By James Jackson Putnam, M. D. Professor Emeritus, Diseases of the Nervous System, Harvard University. Boston. Little, Brown & Co., 1915; 12mo. Price \$1.

According to the publishers' announcement this is a study in the psychology and philosophy of human conduct, based largely on the author's use of the Freudian psychoanalytic method of mental diagnosis. The editorial introduction by Dr. Bruce consists in a brief outline of the subconscious mind. The author's preface, aside from anticipating the main features of the book, makes the announcement that the latter is based very largely on the personal experience of the last two years. The author gives one the impression that this period represents to him one in which he has to his own satisfaction mastered the relationship between psychoanalysis on the one hand and our current conception of moral philosophy, ethics and religion on the other. During this period he has "studied motives at close range."

The work consists of six chapters and of these the first two deal with the philosophic method of viewing man, while the others are devoted to psychoanalysis. In the last chapter the author makes suggestions as to the possibility of synthesizing the two methods.

Human motives are either constructive or adaptive. The former are associated with conscious reasoning and will, the latter with emotional repressions. The former represent aspirations and are much higher than they seem, since every man has an ideal—"getting out the best that is in himself." He is a "lover of the best" and will die for and live for mere ideas and abstractions like patriotism. He is assumed to be free because he voluntarily creates, and is as free as anything in the Universe; and he is free because he can choose. But where there is freedom there must be clashing and compromise and repression. Among repressed subjects are prejudices and superstitions, which, while irrational, unconsciously affect our conscious motives.

Man has feelings of humanity and brotherhood but has also the feeling of separate individuality which comes from the egoism of the young child. The instincts also come into play in the conflict between duty to others and love of self. No one, however good, can escape this conflict.

The old teaching as exemplified in philosophy and religion is based on a study of man at his best, man in the abstract. This is incomplete because it cannot promote such feelings as sympathy and understanding among men. Something has always been needed to supplement it and this is found in psychoanalysis in which conditions are reversed.

Religion the author regards as an existence which is in harmony with that of the "universe-

personality." If we have the attributes we give to the Deity as reason, love (disinterested) and will, we should seek this harmony. The "world of sense" is antagonistic to this conception, in that it leads us to reject all other than sense knowledge. Our notions of love, honor, power, justice cannot spring from the sense-world. We must look beyond the latter—a mere illusion—to find the true, immutable. Mind cannot be evolved from life but must pre-exist. God and man must be conceived in the same way—both represent a totality of expressions of world will, both create and persist in their creations. Man must be regarded as creating his thoughts and acts, even his own body. Every portion of the universe is responsible for every other portion. Man, though ever changing, represents a "self consciously unified person" and therefore feels responsible for all he has ever done or ever will do. Freud himself, as the author states, never cared to generalize on the subject of psychoanalysis.

The book proceeds with a general outline of psychoanalysis which need not be reproduced here. The subject of sexual repression, so far from being exaggerated by Freud, is completely borne out by centuries of teaching by the Church that all sexual matters must be repressed, because they proceed solely from the flesh, the material world. As we have seen, however, the author with others—both Freudians and non-Freudians—makes the libido a form of creative energy, which attitude lifts it above the purely material plane. Complete suppression of anything which will not down is regarded as unwise hygiene of the soul, and the results of psychoanalysis, both as to cause and cure of neurotic disturbances, amply sustain this view. A man's unbidden thoughts are part of him and must be acknowledged.

Psychoanalysis cannot be employed upon a number of subjects at once. It lies between physician and patient, teacher and pupil. The unconscious but active motive must be brought under the conscious will. The fantastic world of childhood must be re-created. The teacher, dealing with childhood has an advantage over the physician who applies his analysis to adults.

The child should be encouraged to show all that is in him, and at the same time must learn to regard himself less as an individual and more as a social unit. He should do things which divert him from himself.

In psychoanalysis an act is nothing, a tendency everything. The latter must be changed. In analysis of one's self one must avoid all tendency to self depreciation, since all must make mistakes. One should also distrust in himself whatever savors of emotional excess.

There is no radical difference between the neurotic and sound subject in respect to the presence of unreasonable fears, compulsions and obsessions. Stress of circumstances causes even the normal man to show objectionable traits. Mental disease-phenomena, like physical, indicate natural reactions, or "attempts at repair" such as are found in the organic and even inorganic worlds.

Treatment by psychoanalysis represents an education—the removal of inhibitions which are fixations or arrests.

The fifth chapter is in a way a resume of what the author had previously said. He also seeks to reduce his teachings to a tabulation. The rationalisation or adaptation of life progresses in proportion as the individual is mature, but here maturity is by no means equivalent to age. The process also is active in the immature child.

A subject is usually quite unaware of his fixations and explains the results of his internal conflicts by false reasoning. Rationalisation in this connection becomes a bad habit.

All motives are creative. The act is not the result of the immediate motive but of all those which preceded it. The final act throws no light on the original motives.

In speaking of certain adults as children who never grew up, we are referring to a much larger class than is commonly understood. All who attain mature years with fixations are to be regarded as children. All individualists belong here unless their individualism is merely a stepping stone to altruism. Indeed, we see in all men a desire to place themselves on a pinnacle. This craving seeks expression in a thousand acts. Even if outgrown it may assert itself in times of stress. It is of benefit at times when individuals espouse just but unpopular causes. What we ordinarily call courage involves self assertion but a higher courage is involved in refraining from certain things.

All individuals also have occasional cravings to get away from responsibility and back to rest and pleasure. We long to get back to a theoretical state of childhood, as the infant longs to return to his mother's body.

For a number of reasons this not a work to be criticized. The author does not mean to be dogmatic. His dicta, while they may have the ipse dixit flavor, are not meant to be axioms. The creative energy of the mind can formulate these dicta and they must clash with the convictions of others. It is easy to

deride the method as a method, but we must judge it by its results. In Emerson's hands it became a profound stimulus to thought to people of quite dissimilar mental makeup. In like manner the author's work will prove of the highest suggestive value to the reader, and especially the materialistic reader. But aside from the general character of the book we must not forget that it has a very definite object, to wit, to elevate psychoanalysis to the highest planes of philosophical speculation and to remove the prejudices of those who profess to go to the other extreme and see in it only the slime of the pit. The author's attempt to bring it in unison with the eternal verities is deserving of the highest commendation and illustrates his deep faith in the nobility of this new resource for understanding the spiritual side of man. L. PIERCE CLARK, M. D.

EDUCATIONAL PSYCHOLOGY: VOL. I, THE ORIGINAL NATURE OF MAN VOL. II, THE PSYCHOLOGY OF LEARNING. By Edward L. Thorndike. Published by Teachers College, Columbia University, New York, 1913.

In the first three chapters of Vol. I Professor Thorndike introduces what he calls the 'original tendencies' of man. These are the simpler and what have often been called the 'instinctive', or 'innate' forms of behaviour. And they are here taken as innate, in contradistinction to learned; as the inherited dispositions on which the character of the adult is built. In Chapters IV to X, inclusive, these original tendencies are enumerated and described. This is a valuable, although somewhat unordered, inventory of the more elementary human activities. A wholesome step is taken in replacing the terms 'pleasure' and 'pain' (subjective categories supposed from time immemorial to account for many sorts of reaction and to be the basis of the learning process) by the more objective terms 'satisfiers' and 'annoyers'. The author inclines away from the common idea that very young individuals exhibit random or diffuse activities

A curiously baffling and admirably sceptical chapter on the Emotions (XI) is followed by a largely destructive chapter on Consciousness, Learning, and Remembering, in which Prof. Thorndike is in point of literary style almost at his worst; and in some cases incoherent (e.g. p. 185, middle). The chapters on the Anatomy and Physiology, on the Source, on the Order and Dates of Appearance and Disappearance, and on the Value and Use of Original Tendencies seem to the reviewer inconclusive and uninspired. There are shrewd and interesting remarks here and there, particularly those of a destructive intent, which the older reader will appreciate; while on the whole he will wonder whether the author has, in these last four chapters, any other than the whimsical aim of producing bedlam in the minds of his younger readers.

Vol. II is a long treatise of 452 pages on the faculty of Learning. The author would probably reject the suggestion that he is dealing with his subject in the spirit of the faculty psychology. Learning, he would say, is an empirical fact, which he is simply describing. So also, however, the 'faculties' are empirical phenomena—attention, memory, and all the rest. The question is, do Prof. Thorndike and others like minded analyze the phenomena in a way that reveals their mechanism, or in the unfruitful manner of the faculty psychology? Is, for instance, the mind an aggregate of the following "functions that have been, or might be, studied:—Ability to spell cat, ability to spell, knowledge that Rt 289 equals 17, ability to read English, knowledge of telegraphy,. . . ability to give the opposites of good, up, day, and night, . . . fear and avoidance of snakes, misery at being scorned," etc., etc. (p. 59)? To the reviewer it appears that these 'functions' are cross-sections of the mental life which reveal NOTHING of the mind's real mechanism. This way, surely, lie the maximum of pedantry and the minimum of scientific insight. The volume as a whole may be recommended to those who wish to ascertain to what extent academic psychology of to-day is still dominated by the spirit of faculty psychology. E. B. HOLT.

SLEEP AND SLEEPLESSNESS. By H. Addington Bruce. Little, Brown & Co. Boston, 1915. Pp. vii, 219.

This book constitutes the third volume of the "Mind and Health" Series. In it the author has given an admirable and clear summary of the recent psycho-pathological work on sleep and sleeplessness. He begins by a discussion of the nature of sleep and considering the difficulties involved in making such a discussion clear to the average reader, the author has done remarkably well in summarizing the technical work along this line. He then passes to the problem of dreams and the part played by the unconscious mechanism involved in dreaming, laying particular and justifiable stress upon the point, that when problems are solved or adjusted in dreams, they have always been previously solved by a kind of unconscious incubation during the waking moments. The chapters on the disorders of sleep and the causes of sleeplessness are brief but comprehensive, while in the discussion of sleeplessness important stress is laid on the mental elements involved in every case of insomnia. A strong plea is made for the psycho-therapeutic rather than the pharmacologica, treatment of the disorders of sleep.

On the whole the book is clearly written and can be recommended to those who wish a brief and at the same time comprehensive account of the modern theories of sleep and its disorders. ISADOR H. CORIAT.

A CORRECTION.

To the Editor of the Journal of Abnormal Psychology.

I wish to call your attention to the fact that the quotation attributed to me on p. 135 in the June-July issue of your Journal is a misrepresentation of what I actually said. Due to an oversight on the part of the publishers of the A. M. A. Journal, the stenographer's notes of the A. M. A. meeting were not submitted to the members of the Section for examination and correction. The Editor of the A. M. A. Journal regretted this fact and the discussion of my paper "The Conception of Homosexuality," from which this quotation was taken, was published in corrected form in the Transactions of the Section of Nervous and Mental Diseases (1913) of the A. M. A. A. BRILL

BOOKS RECEIVED

PATHOLOGICAL LYING, ACCUSATION AND SWINDLING. By William Healy and Mary Tenney Healy. Pp. 278 Plus x and Indexes. Little, Brown & Co., 1915.

THE CRIMINAL IMBECILE. By Henry Herbert Goddard. Pp. 154 Plus vii & Index. The MacMillan Co., 1915. \$1.50.

CHARACTER AND TEMPERAMENT. By Joseph Jastrow. Pp. 596 Plus xviii. D. Appleton & Co., 1915. \$2.50 net.

A SURGEON'S PHILOSOPHY. By Robert T. Morris, M. D. Pp. 575 Doubleday, Page & Co. \$2.00 net.

BACKWARD CHILDREN. By Arthur Holmes. Pp. 247. Bobbs, Merrill. \$1.00 net.

A MECHANISTIC VIEW OF WAR AND PEACE. By George W. Crile. Pp. 105 Plus xii. The MacMillan Co. \$1.25.

THE JOURNAL OF ABNORMAL PSYCHOLOGY

SCIENTIFIC METHOD IN THE INTERPRETATION OF DREAMS[*]

WITH A THEORY TO EXPLAIN THE DREAM-PROCESS AS APPERCEPTIVE TRIAL-AND-ERROR.

[*] A paper read at Columbia University, April 19, 1915, at a Joint Meeting of the New York Branch of the American Psychological Association and the New York Academy of Sciences, Section of Anthropology and Psychology.

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LYDIARD H. HORTON

HISTORICALLY speaking, dreams have always been credited with meanings; but, in a given case, the psychologist must ask, how far does the accredited meaning represent the mere fancy of the interpreted and how far does it mirror actual conditions in the dreamer's mind. To seek aught beyond these is but idle divination. For of all dreams it is true, in the words of Ralph Waldo Emerson, "that the reason for them is always latent in the individual." "Things are significant enough, Heaven knows;" he exclaims, "but the seer of the sign,—where is he?"[1]

Not till the last year of the nineteenth century, did an answer come; it was Sigmund Freud's work, "The Interpretation of Dreams," which said, in effect, "Here am I, in Vienna."[2]

THE FREUDIAN PRETENSIONS

"In the following pages," he begins, "I shall prove that there exists a psychological technique by which

dreams may be interpreted and that upon the application of this method every dream will show itself to be a senseful psychological structure which may be introduced into an assignable place in the psychic activities of the waking state."

The sweeping character of this pretension has not been justified. The demonstration has succeeded only with that large class of dreams in which there happens to be a trend of infantile reminiscence and of disguised sexual phantasy. It fails to reveal the inner nature of other kinds of dreams or the modus operandi of dreaming as a process of thinking. And while it is asserted by the publishers of the English[3] edition that the main contentions of his book have never been refuted, the fact is that his thesis has not been accepted by the representatives of scientific psychology, as a solution of the problem.

The exponents of Freudian interpretations today are medical men associated with the practice of so-called "Psychoanalysis;" which means that they are more concerned to apply Freud's ideas for the treatment of nervous ailments than to cultivate pure psychology. An examination of the methods they exemplify in individual practice and in the large literature of the psycho-analytic movement shows sufficient reason, in my view, why the psycho-analytic theory of dreams should still be greeted with skepticism. Psycho-analysts tell us that repugnance for the subject-matter has delayed acceptance of their essentially sexual interpretations. But there is also a resistance based on sound logical criticism. Judged by this standard, Freud's theory appears dangerously inaccurate and needs revision.

THE TWO SCHOOLS OF PSYCHO-ANALYSIS

Dr. C. G. Jung, formerly a pupil and literal follower of Freud, is attempting to reform psycho-analytic doctrine from within the fold.[4] Incidentally, he tells us that there is nothing essentially novel about the technique of investigating the dream in Psycho-analysis. It copies the methods of historical and literary criticism and consists in collecting all the data possible about each item of the dream. These are then called the dream material. What seems to me novel and characteristic is the psycho-analytic method of working up this material into an interpretation by a process of inference. Freud and Jung are today no longer in agreement as to the details of this process.[6] Speaking of the interpretations of these authorities, on the basis of extended investigations of dreams on my own part, I must say that their methods do not seem to be as rigorous, as is required today in the investigation of literary and historical problems, nor capable of bearing comparison with experimental psychology.

It must be acknowledged, however, that Freud has infinitely refined the guesses of earlier generations of thinkers as to the relationship of sleep-fancies to the waking life. He has conferred startling precision upon the general proposition of Goethe "that these whimsical pictures, inasmuch as they originate from us, may well have an analogy with our whole life and fate." And he has certainly vindicated in practice that dictum of Emerson: "A skilful man reads dreams for his self-knowledge." [1] But he has formulated no open-sesame, as psycho-analysts proclaim.

When it comes to the use of symbols, the Viennese professor parts company with the Concord philosopher. The latter, as we know, decried the mystical conception of fixed symbolism in any domain. But Freud, although theoretically agreed, falls victim in practice to the fascinations of the dream-book cipher method which he has condemned. The adjective Freudian is now justly a by-word, among psychopathologists, for a stereotyped habit of reducing each item of a dream to some cryptic allusion or roundabout reference to the primitive demands of the infantile and sexual life. Freud's fertility in such interpretations has led one of our best-known experimental psychologists to say, in mingled admiration and impatience: "His utterances are those of a poet, not of a scientist."

JUNG'S COURAGEOUS RECANTATION

As spokesman of the Zurich group of psycho-analysts, Dr. Jung has lately protested against these arbitrary translations, which he calls Freud's "reductive method." [6] In formulating a more scientific method of his own, which he calls the "constructive method," Jung reveals a change of views so extensive as to suggest, on several points, almost a conversion to the ideas that Dr. Morton Prince expressed in 1910, as to the insecurity of the psycho-analytic ideas of symbolism. [7] At that time, Jung valiantly defended the Freudian preference for stereotyped meanings as against the Principian idea of highly variable meanings. [8] Now, in going to the other extreme from Freud's cipher-like method, Jung has succumbed to the attractions of that other popular method, equally decried by his former master: the symbolical method of Joseph and Daniel. [9] But at least he has bravely called in question views which he once espoused with exaggerated positiveness.

Jung's principal amendment to the Freudian dream-analysis consists in subjecting the literal implications of the established Freudian symbols, such as snakes and staircases, to a further, more allegorical mode of treatment in which the sexual meaning is greatly altered. The evidence, which Freudians continually find in dreams, for a pre-occupation concerning infantile and sexual needs[10] is explained away, as merely incidental reviewing of past experiences, in the attempt to solve problems of the future by analogy with the past. In other ways also Jung alters his views, notably by following Prince in explaining the dream on a broad biological foundation, viewing it as part and parcel of the individual's life-struggle. Yet it is difficult to see wherein the so-called constructive method really applies, to the concrete dream, those biological conceptions of which it makes ostentation. The practical consideration of telling the patient what is good for him, and of keeping sexuality in the background seems to dominate the technique.[6] The interpretations are no more accurate than before. There is not much to choose between the reductive and the constructive method from the standpoint of the application of logic.

THE SUPPOSED LANGUAGE OF DREAMS

These reductions and constructions of the psychoanalytic schools appear to be rather favorite ways of guessing than rival scientific methods. Unquestionably, they must achieve a gratifying number of hits under the easygoing conditions of the psycho-analytic seance. This is obviously satisfactory to medical practice; but the danger to psychological theory lies in the temptation to overvalue the particular technique that seems to bring about such successes. For instance, Freud and Jung, finding it convenient to assume that the dreamer is attempting to express his latent thoughts by the use of metaphors and figures of speech, have unfortunately come to regard the behavior of the Unconscious Mind as if it were employing a secret archaic code or language of dreams. According to Freud, its symbols have very concrete meanings; Jung, more liberal, says they are only very general. But both authors seem to abuse the language-analogy as a guidance in dream interpretation. That is why psycho-analytic method today suggests not only the free play of poetic invention, but the license of mystical speculation.

If there is any present point in Emerson's remark that "Mysticism consists in the mistake of an accidental and occasional symbol for an universal one," then, in speaking to the psycho-analyst, the psychologist should echo Emerson further, and say: "Let us have a little algebra instead of this trite rhetoric— universal signs instead of these village symbols—and we shall both be gainers." [11]

The reason we shall need a little algebra, as it were, is that many psycho-analysts have fallen into confused ways of regarding their signs and significations.

Consider, for example, the reputed signs of the birth-phantasy, as listed by Freud:[12]

"A large number of dreams, often full of fear, which are concerned with passing through narrow spaces or with staying in the water, are based upon fancies about the embryonic life, about the sojourn in the mother's womb and about the act of birth." . . . Again, "There are dreams about landscapes and localities in which the emphasis is laid upon the assurance, 'I have been there before.' In this case the locality is always the genital organ of the mother; it can be asserted with such certainty of no other locality that one has 'been there before.' "

(What we should infer from the waking illusion of familiarity, which, Emerson said "almost every person confesses"—on this basis—is too absurd to contemplate.)

Statements like these, though far from syllogistic in form, are virtually general propositions or laws to the effect that all dreams having the designated earmarks or manifest content, possess additionally and necessarily certain specified qualities in the latent content—in this case, the meaning of birth-phantasy. [13]

Freud and Jung have stood sponsors for many such seemingly far-fetched interpretations. How do they come to be so sure of their ground?

EXAMINATION OF THE LANGUAGE-ANALOGY[14]

Let A represent the idea in the latent content and C the corresponding "symbol" in the manifest content. Suppose that in a number of cases a correlation is observed between A, the antecedent latent idea, and C, its consequent or sequential manifestation in the dream-consciousness. Thereafter, the

observer comes to interpret the re-appearance of C in a dream narrative as a sign of the presence of the affiliated idea A, in the latent content. And, as Thomas Hobbes phrased the matter in 1651, the oftener they have been observed in like connection, the less uncertain is the sign.[15] Now this is precisely the way we come to recognize the verbal signs of our mother-tongue. And our confidence that a given speech C' is significant of a meaning A', in the speaker's intent, is arrived at by relying upon, if not consciously formulating, just such a causal connection. Where an existing language is concerned, this is a perfectly legitimate tooling of thought. But in applying such inferences to a supposititious language of dreams, psycho-analysts are begging the question, as well as running into other kinds of fallacy as to the powers of the Unconscious.

The meanings and significations of dream-items are not so simply made out as in language. For one cannot readily make sure that the relationship or affiliation between A and C has been observed in its purity; there is an uncertainty coming from the possible interposition of a variable factor, which may have vitiated the observation, as Alfred Sidgwick points out in his "Application of Logic." [10] So let us well consider the basis of any inference of meaning in dreams, and how far the language-analogy applies.

THE SOURCES OF MEANING

Fundamentally, every dream, yours or mine, consists of certain more or less clearly remembered images or ideas; and these are secondarily derived from some mental disposition previously or coetaneously acting in the background, as it were: i. e., persisting through its residual subliminal nervous dispositions. This anterior phenomenon is properly called the primary idea or image; the other, which appears (supraliminally) in the dream is called the secondary image or idea. The dream is thus made up of collocations and combinations of secondary images, to which is usually added a filling-in of fancy which may be called tertiary ideas: required, to find the primary ideas and so, the relation of one idea to another—which is the measure of "meaning."

Each secondary or tertiary image, in the absence of any immediate stimulus to account for it, may usually be traced back into a primary train of thought left unfinished during the day. This is the conception of the perseveration of the unadjusted, stated in 1891 by Delage, in giving his theory of dreams.[17] Its history runs back to Thomas Hobbes; and it has been amplified lately by Professor Woodworth, to whom I am indebted for unusually clean-cut illustrations of the applicability of the theory to dream-life. The principle is a most important contribution to the study of meaning in dreams.

More specifically, Prince, through his text-book on "The Unconscious," is the exponent of the idea that the elements of meaning reside in the primary ideas and must be sought there by highly specific investigations in the given case: "the meaning is in the fringe of thought." The meaning of a supraliminal image must be discovered in its relation to the subliminal ideas clustering around it. This implies studying by association-tests what James called the psychic overtones, and what Prince has, in his teaching, called the unconscious settings-of-ideas, which determine meaning.[18] Care must be taken to find the real determinants, and to set aside spurious dream material—which is not always facilitated by the psycho-analytic methods.

In order to show that one should not assume meanings by rule of thumb, without investigations of this kind, Prince has demonstrated a case in which typical phallic symbols, in a phobia of bells and towers, had acquired their emotional meanings, not through sexual analogies, as Freudians would suppose, but through actual contiguity-experience with church bells and belfry, quite apart from sexual matters.[18] Similarly, snakes, sticks, circles do not necessarily carry the sexual meanings assumed by psycho-analysts, who are over-influenced by the language-analogy.

DECISIVE VALUE OF CONTEXT AND APPERCEPTION MASS

To Freudians such statements seem paradoxical, to say the least; but the simple fact is that never is it correct to assume, as they do, a transcendental connection between a symbol C and a signification A, as if the Unconscious Mind disposed of ready-made symbols of its own. Barring words used in their proper sense, and similar borrowings from waking habit, the so-called symbols in dreams are essentially impromptu fabrications, in which the association is not a direct causal connection between A and C, but a mediate association involving a third element, which psycho-analysts usually leave out of account.

An element of this kind, overlooked in the formulation of a supposedly simple connection between cause A and effect C, is labeled Hidden Z, by Alfred Sedgwick. The Hidden Z in this case is what James calls the topic-of-thought, Ebbinghaus the set-of-the-mind, and others apperception-mass. In rhetoric it

is familiar as context. It has an important place in thought and speech. For example, when I utter the phrase—*Pas de lieu Rhone que nous*—the idea obtained is different according to whether your language apperception-mass is set for French or for English. It may have happened that while I was uttering the French nonsense phrase you were hearing it as the English saying. Similarly, the traveler in Egypt may correctly apperceive the meaning of architectural forms of temples as phallic; whereas it would be manifestly out of context to do so in connection with churchly edifices of the Gothic type, which do not represent the generative powers of nature, as do the former.

Conversely, the Freudian disciple may apperceive, in error, a sexual meaning in a dream, when the dreamer's mind contained no reference to this topic. Hence, the interpreter must make sure that his own apperception-mass is attuned to that of the dreamer in the given case. That is, one must be free from apperceptive bias. One must reject all hastily formed causal laws to the effect that C is the sign of A in every case. Otherwise absurd conclusions must result, as in Freud's theory of the birth-phantasies. For the same "symbol" may proceed from entirely different significations according to the set-of-the-mind or apperception-mass. The following analogy of Ebbinghaus puts the matter clearly: "When a train enters a large station there are many paths over which it might pass; but its actual path depends on the position which was given to the switches immediately before the train's arrival." [19] That is why one needs to detect, experimentally, the dream material that really represents the set-of-the-mind, and thence the significant relations called MEANING.

In this connection, I published a year ago the dream of a child of six, containing seemingly typical phallic symbols. [20] Not one of them could be correlated with a sexual context; but every one was concretely shown to have reached its position in the dream through the influence of an entirely different set-of-the-mind. It is, therefore, not safe to assume stereotyped meanings in dreams.

METAPHYSICAL CONCEPTIONS IN PSYCHO-ANALYSIS

There are three reasons why psycho-analysts do not more often encounter this variable element, this Hidden Z. First, such dreams as they elect to deal with, are mostly sexual. Second, they do not apply the methods of individual differences which have been made so familiar and so useful by Professor Cattell in this country. [*] Thirdly, their type of culture leads them to study the dream extensively rather than intensively and all the while in apparent disregard of those conceptions of physiological psychology which we now associate with the work of Wundt, of Ladd and of Woodworth, and with the psychopathology of Prince.

[*] The writer's present psychophysiological theory of dreams was first broached in public, at a series of meetings on the subject of Individual Differences, held in honor of Professor Cattell, at Columbia University, in the Department of Psychology, in April, 1914.

To be sure, Jung's recent utterances before the Psycho-Medical Society of London, demonstrate his dissatisfaction with the Freudian conception of the dream; but he is still far from those studies of specific mental and nervous dispositions to which psychology has slowly come, and for which we now have a tool in the shape of Prince's conception of the neurogram. In psycho-analytic work a more vague use of "dream material" is preferred and it is only by good luck that the real settings-of-ideas come into account. Jung, no less than Freud, has forgotten that philosophy has become mechanistic since Descartes' [21] famous year of 1637, and Jung would throw us back to the early seventeenth century, with his energetic conception of the Libido, or the Ur-libido, now called *Horme* and sometimes merely *elan vital*. And this, fifty years after Herbert Spencer's tremendous emphasis on specific studies in reflex-action! [22]

Fontenelle, the wittiest of Cartesians, writing in 1686, gives us a classic tableau of this sort of speculative temper. [23] He pictures worthies like Pythagoras, Heraclitus; Empedocles, as being invited to witness Lulli's opera "Phaeton," at the Paris Odeon. In characteristic fashion, each in turn tries to explain the spectacular aerial flight of the actor in the title-role, from the floor of the stage to the ceiling. One says, that Phaeton is able to fly by the potency of certain numbers of which he is composed; another, that a secret virtue carries him aloft; still another, that Phaeton travels through the air because he abhors to leave a vacuum in the upper corner of the stage; and so on, with a hundred and one speculations which, as Fontenelle remarks, should have ruined the reputation of antiquity. Finally, he pictures Descartes coming along and saying: "This actor is able to rise from the floor because he hangs by a cord, at the other end of which is a counterpoise, heavier than he, which is descending." This is mechanistic . . . If Freud and Jung had been of the party, can it be doubted that the one would have ascribed Phaeton's aviation to a wish-fulfilment of the flying-dream type, derived from a reminiscence of erotic motion-pleasure [24] in childhood, or that Jung, for his part, would have said Phaeton was levitated by the energetic force of a sublimation of the Ur-Libido, alias *elan vital*, alias

Horme!

* * *

VARIETIES OF DREAM INTERPRETATIONS

Let me illustrate these points of criticism of the psychoanalytic methods, by the analysis of a sample dream; speaking first as the dreamer giving the simple narrative; next as Freud applying the reductive method; then as Jung employing the constructive method; and finally explaining the dream, as I would myself prefer, by the use of what I may call the reconstitutive method. The dream itself, for reasons, that will be obvious, I call the "Scratch-Reflex Dream."

"I was looking down upon a microscope from the right side of the lens-tube, and could see, laid upon the stage, a glass slide. Under the cover-glass, in place of an ordinary specimen, there was supposed to be a new reflex,—one of those discovered by my friend the neurologist, Dr. X., whose scrawly handwriting I recognized on the label. I was anxiously trying to decipher what he had written, and was having the same trouble with it that I had experienced in real life with the record of some of his dreams, which I had interpreted successfully. The handwriting on the label, as I gazed, appeared less and less like script and more like disconnected, scratchy lines or hachures, owing to the formation of lacunae in the inky traces. It became scratchier and scratchier as I wakened. On coming to my senses . . ."

"That is enough," we hear Dr. Freud saying, "It is obvious what kind of reflex-action you have in mind! The word 'slide' is of a punning nature, and in conjunction with the easy moveability of the microscope-barrel suggests a meaning akin to that of dreams of skating and sliding, which are usually sexual. From the standpoint of symbolics, the geometric forms and relative positions of cover-glass and microscope suggest allusions to the generative powers of nature—like the phallicism of the ancient Egyptian religion, whose sacred emblems of sexual objects still confront the explorer and the tourist. Here, the 'stage' of the microscope refers obviously to the theatre, so often the scene of exhibitionistic activities. Your dream represents the male and the female principles in such a manner that it must mean a survival of infantile curiosity related to the mystery of parenthood. Sir, this proves your Libido to have been fixated at the 'voyeur' level." [25]

"Not so fast," says Dr. Jung, while the dreamer remains nonplussed at the foregoing example of the reductive method. "It is not good for the health to overvalue the past, as my colleague does. Nous avons change tout cela, in Zurich. Your curiosity, according to the constructive method, is a demand for satisfaction in new and better ways than those of infancy. I will prove this to be so, by an investigation of the dream material. This Dr. X., what of him and his handwriting?"

The dreamer then explains that Dr. X. had consented to have his dreams analyzed, and that the outcome had been the uncovering of his secret intention to be married; the dreamer also states that Dr. X. had written some very original papers on periosteal reflexes.

"Ah," says Dr. Jung, as it were, making quotations from his own writings, (as indicated in italics) "one has only to hear this dream material in order to understand at once that the dream is not so much the fulfilment of infantile desires as it is the expression of biological duties hitherto neglected because of . . . infantilism. ([6]) To be sure these are sexual objects that you are looking at in the dream, as Freud would have it. But your interest in them is not so primitive as it would seem. For do you not, symbolically speaking, 'look down upon' them in your fancy. And moreover, since you are looking at these emblems of parental union 'from the right side,' does it not therefore mean that you are contemplating something legitimate; namely, marriage on your own account— not exhibitionism on the part of others. One infers you wish to put away childish sex-curiosity and fulfil your destiny as a parent. In this case symbolical value, not concrete value must be attached to the sexual phantasy."

At this point, the dreamer makes free to admit that he is a bachelor, and that he would not be averse to marriage if he could manage to take a wife and at the same time keep up his research work.

"Precisely," Dr. Jung might say, rapidly turning these clues to account, "your interest in future advancement is clearly reflected in your anxiety to decipher the handwriting of Dr. X., with whom you have identified yourself. You desire to emulate his scientific achievements; his published work on reflexes excites your ambition. The handwriting on the label, which perplexes you, is an allusion not only to his authorship but to the difficulties in the way of your own contribution to the science of dream interpretation. By imitating Dr. X's triumph you wish to make your marriage possible. Your Horme or elan vital is pushing you to evolve new and higher forms of the Libido. You are sublimating!" [26]

THE RECONSTITUTIVE METHOD

"No, gentlemen," the dreamer replies at last, "your reductions and your constructions are too easy-going, too conjectural, too much dominated by prepossessions and the 'will to interpret.' The alleged sources or determinants for this dream may or may not have played the parts you assign to them; the mystery of the matter must remain inscrutable. But what your methods, so plausible in effect, certainly do show is how easy it may be to confabulate an explanation that goes no deeper than a phrenological reading of cranial bumps or than a seance in the cabinet of a palmist. Let us turn away from all this and consider what really happened, as by the grace of luck I can bear witness. Permit me to reconstitute the dream as an actual event, by the employment of certain clues which I was about to give when the ready-made symbolism of Dr. Freud was interposed."

OUTLINE OF THE RECONSTITUTION

Inasmuch as the dream is one of my own, I may be permitted to testify that it was unmistakably connected with a scratching sensation at my ear, as I distinctly perceived on awaking. This stimulation proceeded obviously from a mouse, which I had time to observe in close proximity, as it remained perched on the bedclothes, until my own startled movements put it to flight. Tracing the stimulation from this external source, I shall try to maintain the following interpretation:—

First, that the dream is an associative reaction to the sensation of scratching, in the form of evocations of imagery related in experience to this sensory element; and that the dream-process was a part of the perception, or recognition or apperception of the stimulus.

Second, that this reaction—let us name it apperception of the stimulus— took place slowly and imperfectly, owing to the state of sleep, so that the reaction was, to begin with, only remotely relevant to the stimulus, but improved in relevancy with successive evocations, until the mental representation closely approximated the character of the stimulus.

Third, that in and among the secondary images[27] so evoked, incidental processes of thought, tertiary compoundings of these images, were immediately set up; the selection and re-arrangement of these secondary and tertiary features, constituting the revelation of a significant state of mind which had preceded the dream.

Specifically, in addition to the mental response to the external stimulus, there was a phantasy representing an imaginary wish-fulfilment: namely the desire to forsake the study of histology, with the eye-straining search through the microscope, in favor of the study of reflex-action or reflexology.

My contention is that this blended response[28] to a physical and to a psychic cue arose very naturally and simply out of a single context, prepared by events of the night before; and I would show that by comparing the phantasy with this context, it is possible to reconstitute the dream in a way that amounts to a refutation of the two other interpretations, which I have essayed in accordance with the methods of Freud and of Jung, respectively.

THE REAL CONTEXT OF THE DREAM

Our constant consideration should be for the fact, emphasized by William James, that there is "no recall without a cue." [29] Here we have a scratching sensation provoked by a mouse as the immediate and demonstrated cue. The images that followed in serial response, proved upon investigation to have been wholly derived from a certain conversation with Dr. X., the night before. The subject had been reflex-action and especially the scratch-reflex of the guinea-pig[30] as investigated by Sherrington; we had discussed also the attempts of other authors to explain the higher mental functions in terms of reflex-action. ([31]) My own preference for such studies as applied to the explanation of dreams had been touched upon. This preference had in turn been contrasted with the fact that I was at the time of the dream called upon to spend much time studying histological specimens through the microscope. Incidentally, I told him that this was bad for my eyes, and likewise, I had complained that his dreams were not written out clearly enough to suit my purpose to study them carefully. Such interest had been aroused in the subject of reflexology, that Dr. X. and I had stayed up late that night discussing it.

A study of the dream in the light of these facts will show how perfectly the dreaming mind appears to have "taken advantage of" them—in reality following cues along the lines of least resistance.

THE DREAM AS A RESPONSE TO A CUE

The Scratch-Reflex dream is then to be reconstituted first of all as a memory-reaction determined by factors of recency, frequency and intensity in the dreamer's experience. The operation of these factors determines the evocation of a specific context or apperception-mass, namely the conversation in question, whose affinity with the external stimulus (scratching) is now made evident. The course of events can be followed so concretely as to permit the logical exclusion of other supposed determinants; confining the explanation as stated. The principle of the parsimony of causes is here applied. I contend that the dream is neither an infantile nor a sexual wish-fulfilment, all plausible analogies to the contrary notwithstanding. Should anyone wish to urge the more remote interpretations which I first manufactured, then the burden of proof rests with him. And no proof is conclusive that rests on mere precedent or on mere reasoning by analogy. The only psychological proof of an interpretation is fundamentally the ability of the interpreter to reconstitute the dream beyond peradventure. This I propose to accomplish more in detail, showing the dream to be a reaction to specific cues, through a process of trial-and-error, and to a limited degree, of trial and success.

TRIAL PERCEPTS

Consider the sequence of events: the dream pictures are all related, at least individually, to the conversation in question: microscope, slide, reflex and "scratchiness" are all so many pictures jig-sawed out from this very context or apperception-mass. The scratching sensation, we must suppose, evoked these pictures serially, in the order stated. If these images were what the psychologist calls "trial percepts," we would expect from them just what we do find, namely, an increasing degree of correspondence (relevancy) between the stimulus-idea and the images, as they appear.[33] Precisely so, the images of microscope, slide, reflex and scratchy handwriting, as they successively come into focus, conform more and more to the nature of the stimulus, until the approximation ends in the idea of an all-absorbing interest in "scratchy" marks. This visual image hardly reaches precision before it becomes translated and transposed to the tactile field of my ear; smoothly, as if it were one magic lantern view dissolving into another. In fine, the presentation of each image in the dream amounts to a groping effort of the dreamer's nervous system to find a proper experiential EQUIVALENT for the arriving stimulus. It is a trial-and-error method of perceiving or apperceiving a stimulus by marshalling associated ideas; in this case they are serially evoked; (what might be called "oniric echelon"); in other cases the trial apperceptions are blended smoothly (oniric fusion) or heaped together in rough-and-tumble fashion, a kind of confusion (conveniently called "oniric entassement") which testifies sufficiently to the failures of the Unconscious to dispose smoothly of arriving excitations, and so emphasizes; the theory of trial-and-error, as applied to dreams.

APPERCEPTIVE DELAY IN TRIAL-AND-ERROR PROCESS

The delay in arriving at the correct apperception of the stimulus may be referred to as "finding-time" or simply as apperceptive delay. It represents time occupied with the reproduction of erroneous apperceptive images—apperceptive errors. Meanwhile the stimulus-idea, that mental element most closely connected with the original stimulus, is operating somewhere in the brain, determining the evocation of the secondary images that appear in the dream.[33] This wire-pulling is done in the dark; the primary stimulus-idea is not itself imaged, at first; neither is the context or apperception-mass which meets it half-way, that is, becomes conjoined with the stimulus-idea. Indeed, the images that come into the dream are only emerging peaks of a submerged island of memory. What shall emerge is determined by the interplay of stimulus-idea and apperception-mass, below the level of consciousness. (A and Z are working together.)

The particular "island of memory" in this case, was an impression of the talk with Dr. X., about histology, reflexology and dream interpretation; it remained subliminal, evidently, except so far as portions of it were raised above the threshold by the reproductive energy of the stimulus of scratching. Necessarily, a process of imageless thought had taken place, whereby the conversation was brought into play as a sub-excited apperception-mass or setting-of-ideas for the stimulus-idea. Furthermore, another process of imageless thought must have taken place whereby the secondary images being raised into consciousness attained to their arrangement as a wish-phantasy, without that preliminary tuning-up which the principal cue (scratching) called forth, on its own account. This remains to be explained.

THE INCIDENTAL WISH-FULFILMENT

The dream, viewed as a mere wish-fulfilment, is plainly a successful allegory. While the action of the principal cue or immediate stimulus had served to evoke the apperception-mass or context out of which this wish-phantasy was constructed, at the same moment, there was an ulterior influence at work, dictating a process of re-arrangement of the secondary images, so as to give expression to my preference for reflexology as against histology. Besides, the ground appears to have already been so well prepared that we can readily explain the absence of evident signs of trial-and-error. For in dreaming that I look away from the microscope and turn with intensive interest to the reflex, I was still only giving effect to a preference which had already attached the emotions of liking and dislike, to these two objects of thought, respectively. The creative fancy in this instance, what Hobbes[34] called the FICTION of the mind, has a very simple task to work upon: achieving the imaginary satisfaction of unadjusted feelings regarding the mental conflict between histology and reflexology. The MICROSCOPE is accordingly reproduced naively with an "endeavor fromward" attached to it, and likewise the REFLEX, with an "endeavor toward" it.[*] Thus is the expression completed of a wish which had been partially outspoken in the conversation with Dr. X.

[*] Hobbes, "Leviathan," Cap. VI: "These small beginnings of motion, within the body of man, before they appear in walking, speaking, striking, and other visible actions, are commonly called ENDEAVOUR. This endeavour, when it is toward something which causes it, is called APPETITE, or DESIRE; . . . And when the endeavour is fromward something, it is generally called AVERSTON. These words appetite and aversion, we have from the Latins, and they both of them signify the motions, one of approaching, the other of retiring. So do also the Greek words for the same, which are Horme and Aphorme."

In this connection, I beg leave to suggest that these Greek terms are more usefully applied to dreams and to the passions in general, in their uncomplicated primitive sense, rather than in the new way that Dr. C. G. Jung is suggesting for Horme, as a companion word for Libido or for elan vital. For several years, I have found it useful to employ the coined adjectives hormetic and aphormetic to characterize the tendencies fromward or toward, as exhibited in the association of ideas. For example, in the Scratch Reflex dream, there is shown an aphormetic tendency regarding the microscope and a hormetic tendency regarding the reflex.

While the external physical stimulus (scratching) must be thought of as being represented dynamically somewhere in the arrival platforms of the brain, it is necessary to think of the internal psychic stimulus (or wish) as existing in the form of facilitations, or ready-made connections of ideas and motives, as it were awaiting, in a state of mobilization, the proper signal to discharge into consciousness. The expression of the wish thus became accessory to the apperception of the principal cue. The accessory wish-cue wrought its effect coetaneously, during the apperceptive delay.

Granted the correctness of this explanation, does it not clearly conform to the statement of Emerson that "dreams are the maturation often of opinions not consciously carried out to statements, but whereof we already possessed the elements."[*]

[*] Emerson, R. W., "Lectures and Biographical Sketches," Vol. X, Complete Works, p. 8; Houghton, Mifflin & Company, 1904.

THE PERSEVERATION OF THE UNADJUSTED

In the foregoing words of Emerson, there is brought to bear on dreams an energetic conception of mind-action similar to that which Hobbes had developed in his Leviathan in 1651. The latter, by analogy with conceptions of mechanical inertia new in his time, had compared the persevering effect of nervous stimuli to the continued agitation of waves of the sea after a storm: "When a body is once in motion, it moveth, unless something else hinder it, eternally; and whatsoever hindreth it, cannot in an instant, but in time, quite extinguish it; and as we see in water, though the wind cease, the waves give not over rolling for a long time after: so also it happeneth in that motion, which is made in the internal parts of man, then, when he sees, dreams, et cetera." (Cap. II)

The Delage-Woodworth conception that dreams are due to persevering effects of unadjusted mental elements is not, therefore, entirely novel; but is itself a maturing of opinions which have been more or less loosely entertained by writers on dreams since Hobbes first formulated the modern doctrine of the association of ideas,—not to go back any further. The fertility of the conception of the "perseveration of the unadjusted" has been emphasized in my mind by illustrations obtained by an extended study of the dreams of normal people, and notably, by the agreement of my conclusions with those of Professor Woodworth and of Dr. Morton Prince. And I am led to believe that a development of this conception

should harmonize with accepted principles of psychology, normal and abnormal, as formulated in Ladd and Woodworth's text-book, and in Prince's "The Unconscious."

Greater precision must be conferred upon this conception by showing specifically in what ways, and by what associative mechanisms, the persevering and unadjusted stimuli evoke the dream-images. Granting that unadjusted stimuli persist in their effects upon dream life, or in other terms, that primary stimulus-ideas may evoke secondary dream-images, and so on unto the third and fourth "generations;" then, in what manner does the process go on or come to an end? The answer to this question is an eminently practical one, to which Psycho-analysis has already brought the complication of its own still immature formulation of Ab-reaction and of Catharsis.[35] The matter still requires further study. In particular, it is necessary to formulate, through specific examples, a conception which shall be the pendant or complement of the theory of the perseveration of the unadjusted, and which I will call the "resolution of the unadjusted."

Already, I have taken the preliminary steps in this direction by adopting the physiological conception of trial percepts and applying it to dream interpretation. As a result, I have come to regard the successive evocations of imagery in the dream and even their reciprocal adaptations under the influence of creative fancy, as being trial apperceptions or attempted responses to one or more cues, either sensory or psychic.

RESOLUTION OF THE UNADJUSTED

The operation of any cue, waking or sleeping, implies the endeavor of the organism to provide a channel of escapement for the nervous excitation emanating from the stimulus. The best channels, of course, are furnished by those neurograms, or vestiges of previous experience, originally constellated with the stimulus-idea. Indeed, as in the Scratch-Reflex dream, we find that the stimulus does immediately tend to pass into such channels. But the same example shows that it takes time for the excitation to raise into consciousness the image most closely related to, or agglutinated with, the stimulus; this being, no doubt, due to the passive inertia in the corresponding neurogram. Meantime, during the apperceptive delay, the energy spills over into less appropriate neurograms, albeit they are more quickly mobilized, with the result of evoking bizarre imagery; what I have called trial apperceptions.[36] Sometimes, too, this is adequate to meet the situation; for the resolution of the unadjusted is complete so soon as the stimulus is drained off, re-distributed and dynamically absorbed, as in the case of mechanical "lost motion." A useful and intelligent solution is by no means requisite: mere rambling often suffices.

Yet in sleep the process of trial-and-error may often result in highly constructive resolutions, as in what the French call *reve utile*. This is especially true in case the unadjusted cues are highly persistent psychic stimuli. Here, the excitation rises instead of seeming to wear down and can be followed in its working up, through trial-and-error, to the elaboration of a more or less logical response to the demands of the mental situation;—after which, the excitation appears to trouble the sleeper no further. Unfortunately, time does not permit my giving the examples I would like of the varieties of resolutions in dreams—with their every degree of relevancy and irrelevancy, of a *propos* and *bizarrerie*. Instead, I will briefly dwell on a suggestive example of mental adjustment to specific cues, in the waking state.

A Japanese poetess is asked to combine into one word-picture the ideas of a triangle, of a square and of a circle. After a short pause, taken up (as we may believe) by what Ernst Mach calls the conflict of ideas, and which I think of as imageless trials and errors, the poetess evolves the following phantasy: "Detaching one corner of the mosquito netting, lo, I behold the moon." This resolution left nothing to be desired.

All resolutions of problems, of riddles, of charades, and, according to my experience, most dreams if not all, represent a trial-and-error method of working out a reconciliation among unadjusted mental tendencies, the goal of which is illustrated by the case of the Japanese poetess. Dreams, however, usually exhibit only the preliminary efforts. Those are hidden in this example, which stands midway between the severe reasoning of Euclid and the free-play of a dreamer's response to the reproductive tendencies playing upon his memory.

As to the theory of the resolution of the unadjusted, I must resist the temptation to dwell on its many attractive phases, in bringing this discussion to a close. One of its neglected aspects, however, may be indicated within the present context, by remarking upon the feeling of incompleteness that would at this stage, be left in the mind of the hearer, if I should make an end, abruptly, like a phonograph stopped in the middle of a tune. My discourse would inevitably be left at loose ends, owing to the persistency of a number of questions which have been raised, agitated, but not fully set at rest. These would continue to act as so many persisting and unadjusted stimulus-ideas. These are embodied in the

feeling we now have, that a summary should be made of what has gone before concerning the Scratch-Reflex dream and the various methods of interpreting it. Thus, our "unfinished feeling" represents in itself an obscure demand for a resolution of the unadjusted; it corresponds to that inner compulsion which operates upon the imperfect consciousness of the dreamer, or upon the mentality of any person seeking the solution of a problem or "perplex," either asleep, or awake—as I trust you all still remain. The present demand for the resolution of the unadjusted must be met without going deeper into the theory of the matter.[37]

THE RECONSTITUTION SUMMARIZED

Accordingly, I will now point out the fact that the analysis of the Scratch-Reflex dream has been carried to the stage where the dream stands reconstituted as follows:—

It is an attempt of the nervous mechanism to resolve a specific sensory stimulus-idea (A) by the discharge of nervous energy into a previously prepared or "facilitated" set-of-the-mind or context (Hidden Z). This, in the premises, happened to possess associative affinity for the stimulus, and was therefore, by the same token, chosen, i. e., brought into play, as a spillway for the stimulus. The secondary images (C) in the dream, evoked by the derivation of excitement through the channels of the given context (conversation with Dr. X.) are explained as forming—in the order of their appearance— a chain of apperceptive pictures, or trial-and-error series, whose links or steps approximate gradually to the characteristic features of the primary stimulus-idea (scratching sensation). But while regarding this immediate influence as the principal cue to memory (calling it A), we must admit an ulterior influence or motive-power, itself in the nature of an accessory cue, namely a wish (B), revived along with the memory of the conversation. This wish (to substitute reflexology for histology) contributes a special configuration or phantastic, wishful arrangement to the group of successive trial apperceptions called forth by the physical stimulus (A). The corresponding motives of desire and of aversion, (concisely pictured as positive interest in the reflex and disinterest in the microscope), although seeming to spring out of the system of memories (Z), which form the context, are none the less separate from it as self-acting sources of stimulus, as a wish apart from the mere brute memory of the talk about reflexes. The wish is thus an accessory cue (B) operating in conjunction with the external stimulus, although revived by the energy of the latter. In this case, the imaginary wish-fulfilment achieves an immediate, though limited, success. Correspondingly, it does not exhibit on its own account the feature of trial-and-error which we have learnt to recognize in the working of the unadjusted sensory stimulus (scratching).

While this dream does not exemplify trial-and-error processes in response to a psychic cue, it is proper to state that the same mechanism can be demonstrated in the more purely psychic dreams, as well as in this one, wherein we have followed the trial apperceptions of a stimulus, from their incipience, to the point of awaking to a conscious recognition of the source of excitation. Moreover, by a more delicate and intricate use of the reconstitutive method it is possible to discover the stimulus-ideas in those cases where the dreamer is not able to testify to their character, as I was in this simple instance; purposely chosen, I may add, to outline the method in its simplest aspect.

According to the reconstitutive method, a dream is sufficiently interpreted and explained by having formulated the operation of the several specific factors, as in the foregoing example; that is, no preconceptions as to content or meaning or transcendental symbols are imported into this sort of purely mechanistic interpretation.

THE PSYCHO-ANALYTIC DILEMMA

Unfortunately, the psycho-analyst, if he applies the current conceptions of symbolism, may well doubt whether the reconstitution has gone far enough, and whether ALL the stimulus-ideas, or all the wish-factors have been found. This is because he does not make it a rule to check up his guesses as to meaning, by specific investigations of the settings-of-ideas, by auscultating the so-called "fringe of thought," or by laying out crucial tests for his own hypothesis in the given case. Such methods, which belong no less to general psychopathology than to the reconstitutive method, do not leave one free to argue from analogy; a privilege which most psycho-analysts enjoy, and have been known to abuse, as Freud and Jung themselves have done.

It follows that one might properly expect the psychoanalyst to dwell especially upon the seemingly phallic "symbols" in the Scratch-Reflex dream, which could be made out in the geometrical features of the microscope and cover-glass. He would thus, as I have shown, be led to unearth a sexual motive—which might be a mare's nest. This searching for sexual symbolism on a purely a priori basis, when no evidence internal or external, and no real clues to a sex idea exist, may become a mere obsession, a

habit of interpretation which is not scientific at all. Unable to distinguish the subconscious operation of a non-sexual context, from that of the more familiar sexual context, the interpreter is at the mercy of superficial resemblances between the properties of the dream-objects and those of the well-known sexual symbols. The ambiguity which has resulted from this condition of affairs, maintains the Psychoanalytic Dilemma: that of not knowing when to stop in apperceiving sexual allusions. Indeed, it is part of the interpretative policy of psycho-analysts not to exclude sexual meanings, in case of doubt; but rather to take the sexual sense for granted.

How far this policy has been carried may perhaps be suggested by the following instance: A well-known physiological psychologist, attempting to show the absurdity of extreme sexual interpretations, remarked to a well-known psycho-analyst that even the geometry of Euclid would, according to the methods under criticism, be open to the imputation of sexual motive. To this the psycho-analyst replied that he did not feel at all sure that Euclid might not have been inspired to write his *Geometry* by the sexual ideas which men have, from time immemorial, embodied in circles and triangles and diameters.—This instance, be it said, implies no criticism of Psycho-analysis beyond the fact that its conception of symbols in dreams and elsewhere is transcendental and historical rather than truly psychological as it purports to be; a state of opinion which the use of the reconstitutive method is calculated to correct.

The difference between the psycho-analytic methods and the reconstitutive method, in a given case, is that the former assume the validity of sexual symbolism unless it can positively be proved absent, which is rarely attempted; whereas, the reconstitutive method assumes no symbolism and no meaning to be present in the mind of the dreamer except as the probability can be demonstrated by specific investigations and inferences as to the interplay of CUES and CONTEXTS or apperception-masses. Moreover, a special technique is used to study the "fringe." [1]

Reverting for a moment to the sexual interpretations of the Scratch-Reflex dream that I manufactured by applying the Freudian ready-made symbolism, and, again, by imitating the constructive fancy of Jung; they must both be judged as having no merit beyond, perhaps, that of coinciding with inherent probabilities in the premises. That is, what they purport to reveal might be made out of whole cloth to fit almost any unmarried man, barring a few individual adaptations, to suit the known circumstances of the dreamer. As these interpretations stand, they do not fit the psychogenesis of the dream. They are rank confabulations on my part; yet they appear to hold water, psychoanalytically.

Enough has been said to suggest, I think, that while Dr. Freud may be honored as the father of dream analysis, with Dr. Jung as its foster-father, yet, to neither of these gentlemen of psycho-analytic fame should be conceded the right to bring up the "child!" That is a task for the psychologist, because he can afford to go deeper into normal processes than has so far been possible in psycho-analytic practice. But he must take pains to employ those scientific methods which comport the rigorous application of logic even to the vagaries of dreams, and the rejection of the argument from mere authority. Of such methods, the exemplars are to be found only among those writers who today are worthily carrying forward the mechanistic traditions originated by Descartes. In so far as psycho-analysts depart from these traditions and, relying on the authority of their leaders, follow them into metaphysical speculations about the Libido, and transcendental notions of symbolism, they are wandering on ground full of pitfalls to common sense.

SUMMARY

The question here considered is whether dream interpretations shall represent the state of the dreamer's mind or the mere fancy of the interpreter. Criticism is directed at the aprioristic and oftentimes hit-or-miss practices of the Vienna and Zurich schools of Psycho-analysis.

For illustration, a simple dream is interpreted by the current methods of Psycho-analysis: first, according to the "reductive method" of Freud, it is made out as symbolizing an infantile and sexual wish-fulfilment, expressing a "voyeur" component of the Libido. Secondly, the dream is re-interpreted by Jung's "constructive method" so as to gloss over the gross Freudian phallicism. It is now made to mean that the dreamer is impelled to higher biological duties, namely marriage and professional success.

The plausibility of these interpretations once shown, they are next proved to be wide of the mark, by the fact that the dream can be more adequately accounted for in another way, i. e., by a proposed "reconstitutive method." This method aims to "reconstitute" the dream-thought (both imaged and imageless) by tracing the wave of nervous excitation from its origin in primary stimulus-ideas (sensory or psychic) through a specific apperception-mass into a consequently derived system of secondary images, which form the manifest dream content. The derivation of the secondary images must be concretely followed through the authenticated channels of association—not assumed on the basis of

"fixed symbolism," or any other a priori conception.

The reconstitution of this particular dream illustrates the *reductio ad absurdum* of the two previous psycho-analytic "solutions." The fact that either of them would apparently have satisfied the demands of the problem, is characterized as an artifact evolved through the interpreter's deliberate confabulation and forcing of analogy; thus causing the scant data of the dream to fall into artificial agreement with the preconceived notions of the Vienna and Zurich schools, respectively. As a guarantee of scientific accuracy, it is urged that the interpreter trace the process of imageless thought (Woodworth) back of the dream, and, in particular, seek the meaning in the Unconscious Settings-of-Ideas (Prince). The reconstitutive method is the extension of these two formulations from normal and abnormal psychology into the field of dream analysis, through the study of Individual Differences (Cattell) and the Application of Logic (Alfred Sidgwick).

It is not denied that Freud's dream theories serve very well to interpret a considerable proportion of common dreams; but the psycho-analytic technique embodies a fallacious assumption that there is a transcendental symbolizing activity in the Unconscious, as it were a language of dreams. This gives rise to a biased "will to interpret." The alleged meaning may thus often be the work of the interpreter's mind although not that in the dreamer's mind.

The reconstitutive method brings into relief the trial-and-error character of the dreaming process: the organism as attempting the physiological resolution of persisting and unadjusted stimulus-ideas. Psychologically speaking, the images evoked in the dream are called trial percepts or trial apperceptions of the stimulus-ideas, corresponding more or less closely to the latter; not through analogy necessarily, but through mere contiguity, as the case may be.

In certain cases, the erroneous apperceptions are observed to form a series of approximations to the correct apprehension of one of the stimulus-ideas at a time. In other cases, the apperceptive errors may take the form of a blended reaction to two or more cues, more or less perfectly achieved.

These mechanisms, when they go wrong, as they often do, produce the incoherency and bizarrerie of the dream; but they do not preclude a significant reconstitution of the process of which the dream is a by-product. Such reconstitutions require to be validated by specific tests and inferences, of such logical character as to bear comparison with the methodology of other sciences. The psychoanalytic arguments from analogy, from precedent and from authority are alike to be rejected.

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In the given instance, the original or primary neurogram possessed a certain passive inertia in responding to the stimulus, and it took a relatively long time for the excitation to raise the neurogic tonus of this primary neurogram so as to attain the level requisite for conscious imagination. But it was otherwise with the secondary or sequential neurograms, whose inertia had already been overcome by the facilitation (Bahnung) of the recent conversation about scratch-reflexes. For these neurograms to flash their imaged (conscious) equivalents into the dream-thought, it was enough that there should be a slight spill-over of excitation from the original neurogram.

Many examples could be cited from dreams, drowsy states and lapses of thought, showing the ways in which sequential neurograms produce trial apperceptions, pending the final revelation, through consciousness, of the original neurogram. The phenomenon of mental groping, here alluded to, is familiar in certain aspects; but, as an explanation of cryptic dreams, has not received the recognition that it deserves. Hence, the trial-and-error theory of dreams.

37. "Perplex," neologism of the writer; used to indicate a phenomenon frequent in both normal and psychopathic subjects; to wit, a group of delimitable stimulus-ideas, persisting as such, and unadjusted—a complex of persisting and unadjusted stimulus-ideas, demanding resolution; not the same as "complex" in Psycho-analysis. Cf. Prince's definitions of the varieties of complexes ("The Unconscious").

A CASE OF POSSESSION

BY DONALD FRASER, M. D., GLASGOW

THE Démoniac possession of the middle ages and of times nearer to our own was largely hysterical in character, and generally occurred in Epidemics.

It was associated with the more superstitious and emotional side of religious beliefs, where a real Hell fire and a personal Devil with attendant Angels or Demons were believed in, and feared, much more intensely and widely than they are today even amongst the ignorant and superstitious, while suggestion and contagion played a large part in its spread, as it did in that other and more hateful form of it known as witchcraft.

Esquirol who wrote clearly about it in his "Maladies Mentales" under the heading of "Demonomania," [1] spoke of it as being propagated "by contagion, and by the force of imitation." This was illustrated in the Epidemic of Loudun, amongst others referred to by him. This epidemic spread to neighbouring towns menaced all the high Languedoc, but was arrested by the wisdom of a Bishop, who did this by depriving the movement of its marvellous elements. In this epidemic form it was in its bodily and mental manifestations really hysteria with characteristic stigmata and convulsions. An excellent example of this religious hysteria was presented as recently as 1857 in an epidemic at Morzines in upper Savoy. It began with two little girls, pious and precocious, who had convulsive attacks. It spread to other children and then to adults. Amongst the younger of those affected, ecstasy, catalepsy, and somnambulism were seen, and later, convulsions only; convulsive attacks returned several times a day. An attack usually began with yawning, restless movements, the aspects of fear passing into fury with violent and impulsive movements, with vociferations and cries that they were lost souls in hell, the mouth-piece of the devil, etc. These attacks would last from ten minutes to half an hour. A feature of this epidemic was the absence of coarse and erotic speech or gestures. Between the convulsions the victims were restless, idle and inattentive, being altered in character for the worse. In our day such epidemics are represented, though in tamer fashion, by Revivalism in its more noisy and extravagant eruptions. At all times, even when such manifestations are not much if at all out of harmony with ordinary religious feeling and action, there is a tendency to pathological conditions. Often its subjects, in the words of Professor James[2] "carry away a feeling of its being a miracle rather than a natural process, voices are often heard, lights seen, or visions witnessed; automatic motor phenomena occur; and it always seems after the surrender of the personal will as if an extraneous higher power had flooded in and taken possession." These are some of the more striking phenomena of mysticism, and are also largely pathological being amongst the major symptoms of hysteria. The history and course of our case illustrated very well this mixed condition. It has been pointed out that the ecstasies, trances, etc., of the mystic, while essentially pathological, have the evil effects of such morbid manifestations modified or largely neutralized by the idealism behind them, by that measure of true religious faith and feeling which dominates the whole process in the case at least of the higher mystics. The ore may be rough and very mixed, but the precious metal is there also, as it was in our patient, though the divine influence for which she craved was perverted into that of the "Evil one." In the individual cases described by Esquirol we recognize a more profound mental disturbance than is shown in the epidemic or hysterical variety. We indeed see many similar cases in our asylums though we generally speak of them as Religious Melancholics rather than as Demonomaniacs. In such cases recovery is slow or may

not occur, the patient passing into a state of chronic mania, or of Dementia. There are other cases where the religious emotions and ideals are completely subordinated to or become identified with feelings of fear or remorse, the result of fixed ideas of a shameful, distressing or frightsome character. A good example of this condition though essentially hysterical in its nature, is detailed by Pierre Janet. [3] The patient, a neurotic, respectable business man thirty-three years of age, a good husband and father, on his return from a business journey of some weeks' duration is found to have become depressed and taciturn, and as the days pass his melancholy deepens. At first he would not speak, but soon when he wished to speak could not, making vain attempts at articulation. Under the influence of medical ideas suggested to him his symptoms simulate first Diabetes next Heart disease and his prostration becomes profound. By and bye he passes into a state only to be described as acute Demonomania marked by maniacal outbreaks in which he cried out and blasphemed, lamenting in quieter intervals his powerlessness to resist the Devil who was, he believed, actually not figuratively within him, who spoke and blasphemed through him, prevented him sleeping, etc. After some months he was sent to the Salpetriere where he came under the observation of Charcot and Pierre Janet. He was cured by means of suggestion by the latter, who also ascertained by his methods that the illness was the result of remorse for an offence committed during the business journey which preceded the outbreak.

[1] For a detailed account of it see the "Dictionary of Psychological Medicine" under the heading "Demonomania."

[2] The Varieties of Religious Experience; William James p. 228.

[3] "Nevroses et Idees Fixes" Vol. I, p. 377.

In many ways our case differs from cases of this type. An important difference was in the intermittent character of the symptoms. For a period of two years the patient alternated between a condition of acute misery from the delusion that the evil one had entered into her body, and one of apparent sanity. At the end of two years she was dismissed cured, and has remained well for several years. She differed also in the absence of blasphemous, extravagant or obscene speech or action. The Devil never at any time used her as the mouthpiece for devilish words or thoughts. He was there, and as she insisted, in bodily form within her, making her intensely miserable by his presence, and with the feeling that she was cast away from "grace" and the privileges of the religious life. Nor were there, as in the case above referred to shameful or remorseful complexes at the root of her mental condition. In presenting the facts of the case, names and special marks of identification have been altered.

Mrs. A., a widow, aged fifty-two years, was admitted to the Paisley District Asylum in 1910 with a history of having suffered for a month previously from mental depression said to be due to distressing delusions of a religious character such as that she was lost, was past forgiveness and dominating and originating all such thoughts was the belief that she was possessed by Satan or an evil spirit, who was in bodily form within her. This delusion caused her acute misery, and so absorbed her thoughts that she had ceased to take any interest in her household affairs, and had even talked of suicide.

Her condition on admission and for two years subsequently was that of recurring states of this acute mental distress, when she would rock to and fro, moaning and crying out, often with tears over her lost and dreadful state, and the presence in her inside of Satan or the "Evil one" whom she said she felt within her, and who made her "repulsive." This condition was varied with intervals of usually from one to three days of apparently complete sanity, when though quiet and somewhat reserved in manner, she was quite cheerful. When questioned at such times as to her delusion, she would admit its absurdity, but refer to an uneasy sensation in the region of the left hypochondrium, which, as she put it, surely meant that there was something wrong there. She would be occasionally normal in this way for a week or more, and on more than one occasion was so well as to be allowed out on parole, but had often to be brought back next day as depressed and delusive as ever. She was always worse in the mornings, and often improved as the day went on. She was a stout, pleasant featured and intelligent woman, somewhat anaemic, and with a slight bluish tinge of lips, though beyond a lack of tone in sounds, the heart was normal. Her anaemic condition was accounted for by her having suffered from menorrhagia for the greater part of two years, which only stopped a few months before her admission to the Asylum. It had during its continuance brought on breathlessness on exertion, and what she called spasms or "grippings at the heart," no doubt the basis of her uneasy feelings in left hypochondrium. There was a slight enlargement of the thyroid gland, but no symptoms referable to it. None of these physical conditions beyond the "grippings at the heart" it maybe, appeared to have any appreciable influence on her mental condition, which as has been noted above was normal until a month before her admission. An interesting feature of the case was the relation between her blood pressure and her varying mental states. Her blood pressure was taken with a Riva Rocci Sphygmomanometer morning and evening, sometimes oftener, during the greater part of 1912-13, and it was noted that her depressed or

delusional states were marked by a low pressure, while a high or relatively high pressure marked her sane and cheerful states, contrary to what is usually observed in melancholia, though similar to what is seen in agitated melancholia and mania.[4] Thus at a pressure of 130" HGs, she was generally very well; at or about 120" HGs she was often well; at 110" HGs or 100" HGs she was always ill. When recovering, and few weeks before dismissal there was a fairly steady pressure of 118" HGs to 120" HGs day after day. It had been also noted throughout, that during a continuous period of depression, or of well-being, the pressure kept steadily high or low day after day according to the mental condition. There was obviously then a constant and close relationship between her blood pressure and her mental states. At first sight it looked as though those states were directly affected by the varying pressure as it may have influenced the nutrition and therefore the functions of the brain, and on physiological grounds it is difficult to exclude such an influence altogether, even though we come to the conclusion as we did that the variations followed the emotional conditions, and did not precede or cause them. The broad general statement has been made that "each pleasurable emotion raises the general blood pressure and increases the blood flow through the brain and each painful emotion: brings about the opposite result." [5] It cannot be said, however, that increased blood pressure will give pleasurable emotion. The splanchnic area can be acted on so as to raise the blood pressure without influencing the emotions. We know also that when it is raised in melancholia the increased pressure is associated with the reverse of pleasurable emotion. Still on therapeutical as well as on other grounds it appeared to us important to determine what, if any, influence the raising of her blood pressure by drugs or otherwise would have on her mental state. We did this by baths, by abdominal pressure by means of a large sand-bag laid over the abdomen, and by such drugs as adrenalin and pituitrin. The results were disappointing so far as therapy was concerned though of interest otherwise. The pressure was raised by all these measures without any improvement following such as occurred when it rose naturally. The rise by abdominal pressure was marked and occurred quickly, but without any apparent effect on her mental condition. When it was raised to 140" HGs under the influence of pituitrin there was marked depression as is shown in the chart for July, 1912. Pituitrin given in m. v. hypodermically three times a day, and after some days in larger doses by the mouth, kept the pressure between 125" HGs and 130" HGs, but with no corresponding mental improvement. For some days after the pituitrin was stopped its influence seemed to persist as the pressure kept high while the mental condition was low. One of her longest spells of continuous mental depression which lasted for twenty-seven days, occurred while her pressure was high under the influence of adrenalin. Digitalis, by the way, had no influence in any way on either her blood pressure or her mental condition. The only drug we found of any value was tinctopii in moderate doses three times a day, but it gradually ceased to do any good.

[4] Maurice Craig, Lancet June 25, 1898.

[5] Leonard Hill, "Cerebral Circulation" p. 74.

Four charts from a very large number are given which illustrate the above points.

It must be understood that these experiments while accurate so far as they go, and carefully conducted under my supervision by a competent assistant, were not made in a well appointed laboratory, but were clinical observations made in the crowded ward of a hospital for the insane. The central disturbance here was the result of shock from sudden and excessive fear acting on a highly sensitive subject as will appear later. It has been shown by Cannon[6] that such major emotions as fear, rage, or pain acting upon the adrenal glands through the autonomic nervous system are accompanied by an increased discharge of adrenalin into the blood, and by a passing of stored glycogen from the liver for circulation through the body as dextrose, the object of which is the increasing and liberation of muscular energy for the animal's successful flight or fight. This discharge takes place very quickly, and we are told that fright exhausts the adrenal glands, a somewhat puzzling statement at first sight, but borne out by the experience of our case where a fall of pressure occurred under the paralyzing effect of extreme fear and distress continued not merely for minutes but for hours at a time. By and bye as her distress lessened and her expression of it became more and more automatic, there was a return to the normal adrenal discharge and consequent normal rise in pressure. It is possible, of course, that there may be another explanation in the inhibition of metabolism caused by fear. Most of us have experienced the arrest of salivation and digestion under the influence of fear or rage. This inhibition would affect the products upon which the adrenal secretion depends, but the more likely cause is where this fear, in this case really a recurring representation of the original shock, acts through the autonomic nervous system on the adrenal glands. The emotional disturbance here then was primarily of central origin, and was certainly not originated by circulatory or visceral changes which were secondary to it, and the facts do not support the James, Lange theory of the emotions as it is generally understood. In this connection we may refer very briefly to the laboratory experiments of Sherrington[7] and Bechterew. [8] The former by spinal and vagal transection in a dog removed "completely the sensation of the viscera, of all the skin and muscle behind the shoulder. The procedure at the same time cuts from connection with the organs of consciousness the whole of the circulatory apparatus of the body. Yet the

dog exhibited rage, fear, disgust, etc., under appropriate stimuli as a normal dog might do." The conclusion reached after admitting possible objections to them is that, "the vasomotor theory of the production of emotion becomes, I think untenable, also that visceral presentations are necessary to emotion." Bechterew, discussing this question as to whether the vascular changes are anterior to the other processes, which determine the alterations of the neuropsychic tone according to the James, Lange theory, states that the experiments in his laboratory by Dr. Serenewsky, appear to lead to an opposite conclusion having shown that under the effects of fear the alteration of the neuropsychic tone is produced before the appearance of the cardiovascular phenomena. There are no doubt objections to accepting laboratory experiments upon inferior animals as conclusive where the psychic part of the process in question is after all the dominant one, nor must we forget that biochemical changes may be as important as the integrity of nerves. We have however referred to these experiments because of their bearing on the conclusions to be drawn from the above described clinical facts which so far as the initiation of the emotional process is concerned confirm them; though we feel that the bodily concomitants of the emotion are essential to its full development, and that we owe much to James's presentation of his theory even admitting its "slap dash"[9] character to use his own phrase. It was to be expected that the artificially raised blood pressure would have had some effect in improving the patient's mental condition, and in the case of adrenalin, at any rate, some such effect should have occurred if we are to accept the recently published conclusions of Crile[10] to the effect that "adrenalin causes increased brain action," "that brain and adrenalin action go hand in hand, that is, that the adrenal secretion activates the brain, and that the brain activates the adrenals." More in harmony with the clinical experiences here is the fact according to Biedl[11] "that the adrenalin affects the intracranial and the pulmonary vessels only slightly if at all." We presume that what is true of adrenalin in this respect will be true of all drugs which increase blood pressure. And while the rise of the arterial pressure generally will accelerate the flow of blood through the brain, yet we know that the cerebral circulation is in "all physiological conditions, but slightly variable." [12] Besides, while that increased flow must necessarily lead to increased cerebral activity, that activity may be pathological as well as physiological, as in our patient, who was quite uninfluenced mentally by the rise of blood pressure which followed the administration of those drugs. The nature and genesis of the emotional disturbance in this case may be understood from the following history and observations.

[6] The interrelations of emotion as suggested by W. B. Cannon. Recent physiological researches, *The American Journal of Psychology*, April, 1914.

[7] *The Integration of the Nervous System*—Sherrington.

[8] Bechterew "La psychologic objective," p. 312.

[9] *Psychological Review*, Vol. I, where Prof. James admits the defective presentation of his theory and uses the above words to express it. He gives all due importance to the associated memories, and ideas to which are related the incoming currents as well as all pleasure and pain tone connected with them, etc.

[10] S. W. Crile, "The Origin and Nature of the Emotions," 1915.

[11] Biedl *innere secretion*—Quoted by Cannon, 2 ed. 1913.

[12] Leonard Hill—*The Cerebral Circulation*.

She had married happily at the age of nineteen years, had a family of eight children, but had been a widow for about twenty years. Her husband died suddenly abroad, where she had lived with her family for two years after his death, and acting on the advice of her friends, she came back to this country bringing all her children with her. This involved her in years of struggle and anxiety to bring them up creditably, which she managed to do. During all these years of widowhood and stress she was mentally well, and latterly she described her life as a happy one surrounded as she was by an affectionate and well doing family. She had been brought up in a puritan household. Her father and her husband had been deeply and consistently religious though strict in their belief and observance of the letter. This upbringing favoured a natural tendency towards religious mysticism which was also promoted by the creed of the church to which she latterly belonged, and of which she was a deaconess. In this church the "gift of tongues" and of "prophesying" was recognized as a part of its heritage, and as she informed me in one of her normal times, she occasionally spoke or prophesied in the public assemblies of the congregation. I gathered that her utterances were generally but a word or two of exhortation or pious aspiration, given expression to in a moment of exaltation. From her description of her state at such times, she was carried out of herself, was oblivious for the moment of the presence and actions of those about her, was in short in a state of ecstasy when she "prophesied." A natural tendency to self-depreciation, and to ideas of unworthiness asserted themselves outside of those periods of exaltation, which were generally followed by doubts as to her fitness to take part in such work, and by the feeling as she expressed it "that she had presumed as she was unworthy," and that God would be angry with

her for her presumption. Throughout her religious life she had been always lacking in "assurance." Latterly this feeling had grown in her and was evidently part of a deeper feeling of mental depression, as she began to think often, and with a feeling of dread that she had been surely too happy these later years which stood in such contrast to the poverty, struggles and disappointments of the early years of her widowhood. This was her mental condition for some little time before her attack of acute mental disturbance which began one night a month before admission to the asylum. She went to bed feeling ill and shivering as if from a chill. In the middle of the night she woke up in a fright from a vivid dream the contents of which merged in a strong sensation as of a hand being pressed on her shoulder. She described the sensation as being that of a positive feeling of pressure, and with it came a feeling of dread, and the conviction that it was the hand of Satan, so that she cried out aloud to him to go out of the house, as it was blessed, referring to the fact, as is the custom in her church that the minister had blessed the house when she went to live in it. She thought of calling to her daughter who was asleep near her, but did not, and after a time fell asleep again being "comforted by the feeling that the Lord would take care of her." Next morning the effects of the "chill" had passed off, but there was left a more or less constant feeling of vague dread and fear of death, and with this a haunting idea born of this strongly felt hallucination of external touch that Satan was within her. The feelings of dread and fear grew steadily and became too strong for her faith in the Lord taking care of her, and very quickly her obsession as to possession by Satan, became the definite delusion it was on admission to the asylum. Hallucinations of what might be termed internal touch leading to this idea of possession, are not unknown in the annals of mysticism of the more morbid types of it. Indeed the more ecstatic the mystic becomes, the more he merges himself in his feelings and tends to develop hallucinatory sensations. He is possessed, and desires to be possessed, fortunately for him, by the Divine and not the evil spirit. Hallucinations of external touch are as might be expected more rare, though not uncommon we understand in the more abnormal types, and occur in people supposed to be normal. Havelock Ellis tells of a "Farmer's daughter who dreamt that she saw a brother, dead some years, with blood streaming from his fingers. She awoke in a fright and was comforting herself with the thought that it was only a dream when she felt a hand grip her shoulder three times in succession. There was no one in the room, the door was locked and no explanation seemed possible to her. She was very frightened, got up at once, dressed, and spent the rest of that night downstairs working. She was so convinced that a real hand had touched her, that although it seemed impossible, she asked her brothers if they had not been playing a trick on her. The nervous shock was considerable, and she was unable to sleep well for some weeks afterwards." The writer's[13] explanation is:—"it is well recognized that involuntary muscular twitches may occur in the shoulder, especially after it has become subject to pressure, and that in some cases such contractions may simulate a touch." In illustration of this he quotes from the *Psychical Society's Report on the "Census of Hallucination"* the case of an overworked, and overworried man who, a few minutes after leaving a car, had the vivid feeling that someone had touched him on the shoulder, though on turning round he had found no one near. He then remembered that on the car he had been leaning on an iron bolt, and therefore what he had experienced was doubtless a spontaneous muscular contraction excited by the pressure. Touches felt on awakening in correspondence with a dream are not so very uncommon. We think as to this likely enough explanation, that whatever the local sensation may have been, or however slight, as it probably was, it could only give rise to an hallucination of having been touched by some external personality when it was absorbed into, and became a part of a considerable emotional disturbance as in the case of the girl above referred to, and of my patient, in both cases associated with a frightsome dream. The illness of the latter began with a dream, and its continuance was in our opinion, largely due to dreams of a painful character. During the whole period of her residence it was noted that she dreamt a great deal, and that they were terrifying or alarming dreams, and that her bad days were generally preceded by a bad dream. Notes of her dreams were regularly made, at one time for ten consecutive nights, and only three of them were so far as she remembered free from dreams. All of her dreams she described as "awful." Many of them were of being mixed up with objectionable people who behaved roughly and used profane language, but, and of this she was very certain, who never talked or acted obscenely. She frequently dreamt of being on high precipitous places from which she was either falling, or could not get away from. She described one vivid dream during which she suffered great misery, and awoke from in great distress. She dreamt that she was listening to a preacher with open Bible in his hand, that he spoke about Peter whom he was accusing of disobedience; a number of people were present but she saw particularly only one man who looked very happy; the sermon ended, and she awoke in "agony," this feeling being due, she said, to the conviction present with her, that the sermon, and the man's happiness were intended to show her how much she had lost since she was cut off from "grace" by Satan dwelling in her body. Again she dreamt of a near relative whom she heard singing, "And they all speak in tongues to magnify the Lord." This brought sorrow to her of which she was conscious during the dream and after she awoke as she thought Satan was putting this before her to show her what she had lost. In another dream she saw three unpleasant looking men talking together. The worst looking of them of Jewish appearance, came close to her face, and argued with her about the evil spirit. She said "he was in her body," and he answered "away with him." She fell asleep and dreamt the same dream again. These dreams were

obviously governed by her dread and fear as to her religious position. The following one is somewhat different:—"A big brown beast came up to her and pressed against her face; she slept again and dreamt she was in a big ship sailing in black and dirty water; that she tried hard to get out of the ship, but could not, and awoke in great distress." We presume Freudians would find in the latent content of all these dreams, particularly in this last one, evidence in favour of their positions, though to us they reveal only, in the blurred and broken way dreams do, the prevailing trend of thoughts governed by morbid religious fears and garbed in the phraseology and symbolism of a judaic faith. The sameness of their ending and meaning to her being obviously due to their relation to the dream which ushered in her illness to which indeed most of them were closely related in genesis and content. No doubt Freudian psychoanalysis would be able to carry her memory back into the region of long forgotten infantile or early sex memories where, as in every normal human being they lie, the shadowy outlines of instinctive feelings whose roots are in a far away, phylogenetic past, having apart from suggestion no role as factors in the production of morbid fears or fancies. The fantastical and too often repulsive dream interpretations of this school forcibly remind us of the words of Lord Bacon, "With regard to the interpretation of natural dreams it is a thing that has been laboriously handled by many writers, but it is full of follies." All kinds of trivial incidents of childhood and early youth are stored up by all of us, and are recalled in sudden and unexpected ways, but not because of any relaxation of a supposed "censor," nor necessarily because of any content of a sex nature, but because they are more often than not associated with fear, chief of the coarser emotions, and a more primitive and more enduring emotion than any of those connected with reproduction, and more alien to the organism than sex memories even of a perverse order, their resurrection being due to some subtle association between the present and the past, generally a sensory one, visual or auditory most frequently. In our own case the earliest recollections of childhood are so associated and recollected. Sunshine amongst trees, and birds singing bring back to us at very long intervals a country scene where as a child we were frightened by threats of a "bogie man." The only childish incidents which unexpectedly recur with us were associated with childish fears and disappointments of a usual and ordinary character never with morbid elements or emotional complexes which were repressed or censored in the Freudian sense, and in this we are not singular.

[13]"The World of Dreams," p. 182.

Again and again, association tests, as prescribed by Jung, and repeated examinations of a psychological character were made without our being able to obtain the slightest indication of their being erotic or similar influences of the slightest value as factors in the causation of her mental disturbance. The chief value of Jung's Tests we have found to be the suggestion of lines of inquiry or the confirmation of evidence obtained in other ways. The results here were negative and in that confirmed what we knew from the history and character of our patient as a pure minded woman of blameless life. She was constitutionally timid, and all her life liable to doubts and fears of a morbid type. As an instance of this she told us that when twelve years of age while influenced by the death of her step-mother, which had just taken place, one morning early her father went out to his work leaving her in bed, and alone in the house. Immediately after he left she heard or more likely thought she heard, someone lift the latch of the door, as if to come in, but though no one came in she was left in a state of great fear, so marked that for long afterwards she dreaded being left alone, and still remembers vividly her feelings during that experience. This temperament she carried into her religious life which as we have seen was marked by fears and doubts. "No one will deny that fear is the type of asthenic manifestations. Yet is it not the mother of phantoms of numberless superstitions, of altogether irrational and chimerical religious practices." [14] The strength and character of her beliefs as well as the religious teachings and influences to which she had been subjected from her earliest years, all tended to develop the mystical in a temperament ready for the dissociation necessary to enable the mystic to attain to that ecstasy or absorption in something outside and beyond the self which is the essence of that state. Why the ecstasy which she knew and desired should pass into its opposite is not difficult to understand when the above history is considered.

[14] Ribot "The Creative Imagination." p. 34.

The shock which originated the attack gave form and reality to fears and doubts which had been assailing her for some time, and to the influence of which she was specially liable at this time by the lowered physiological tension, the result of her previous menorrhagia, and by the fact that the comparative ease and comfort of her later life had given her opportunities for introspection absent during her previous life of struggle for and interest in others. She was then scrupulous, timid and superstitious, a mystical, a psychopathic temperament, taking her place all the same with John Bunyan and other chief of sinners whose self-depreciation and absorption in the struggle for salvation from sin and the power of the Devil, though morbid in character was not pathological. But when Satan became not merely a spirit influencing her, but had entered bodily into her, the border was crossed, and she was to herself literally possessed, and became filled with fear, a fear pathological in action, dominating

her mentally and physically during her dissociated states. Once initiated it is not difficult to see how these dissociated states which recurred so regularly and persisted so long were kept up by her temperament, and her constantly recurring dreams of a terrifying or depressing character, which were, as we have already indicated, but representations of the original shock. The following quotation applies closely to her case. "On this view an intense, sudden painful experience, especially if the significance of it can be dimly felt, but not understood, may persist long and latently unassimilated by the central consciousness and without fusion with it, almost as if it were a foreign body in the psychic system." [15] Professor James has termed the pathological emotion an objectless emotion, but as Professor Dewey puts it "from its own standpoint it is not objectless; it goes on at once to supply itself with an object, with a rational excuse for being." [16] Here the sensations in the left hypochondrium which she had described as "grippings at the heart," became the object which, under the influence of the initial shock with its unusual and alarming sensations and feelings, she interpreted as she did.

[15] Stanley Hall on Fear—The American Journal of Psychology, April 1914.

[16] Psychological Review, Vol. I, page 562.

Her recovery was very gradual and marked by many relapses. In her treatment as in our ideas as to the causation of the disorder, we put the accent on the psychic rather than on the physical factors. We did not however underrate the latter but constantly sought to improve her bodily health and condition. When at her worst in 1911 her weight, taken monthly, was round about one hundred and sixty pounds. In 1912 it went up from one hundred and sixty-six to one hundred and eighty-eight pounds and averaged one hundred and seventy-six pounds. But as in the case of her blood pressure, the rise was due largely to her mental improvement. It may be of interest to note here that during and after a somewhat severe attack of diarrhoea with hemorrhage from the bowels, her mental condition was better than usual, as might even have been expected considering the mental distraction the attack involved.

We were satisfied that we could have shortened materially the duration of her illness—two years,—by hypnotic suggestion, but unfortunately her friends objected to this mode of treatment. Suggestion in the waking state had been abundantly used, but with little apparent effect of an immediate kind.

THE SEX WORSHIP AND SYMBOLISM OF PRIMITIVE RACES

(CONCLUSION)

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PLANT AND FLOWER SYMBOLISM

A number of plant and flower symbols have a different significance from that which is generally given to them. We are all quite familiar with the grape vine of Bacchus and the association of that deity with grapes. According to R. P. Knight, this too, symbolizes a sexual attribute. Speaking of Bacchus, he writes, "The vine was a favorite symbol of the deity, which seems to have been generally employed to signify the generative or preserving attribute; intoxicating liquors were stimulative, and therefore held to be aphrodisiac. The vase is often employed in its stead to express the same idea and is often accompanied by the same accessory symbol."

We have often seen in sculptures and paintings, heads of barley associated with the God of the Harvest. This symbol would appear to be self explanatory; yet we are told by more than one writer that it contains another symbolic meaning as well. H. M. Westropp, speaking of this says, "The kites or female organ, as the symbol of the passive or productive power of nature, generally occurs on ancient Roman Monuments as the Concha Veneris, a fig, barley corn, and the letter Delta." We are told that the grain of barley, because of its form, was a symbol of the vulva.

A great many other female symbols might be mentioned. The pomegranate is constantly seen in the hands of Proserpine. The fig-cone is carried by the Assyrian Baal, and the fig in numerous processions has a similar significance. When we add to these the various forms of tree worship described above, we see to what an extent the products of nature were used as symbols in the worship of sex.

Among flower symbols there is one which recurs constantly throughout the art and mythology of India, Egypt, China, and many other Eastern countries. This is the lotus, of which the Easter lily is the modern representative. The lotus appears in a number of forms in the records of antiquity. We have

symbolic pictures of the lion carrying the lotus in its mouth, doubtless a male and female symbol. The deities of India are depicted standing on the lotus, or are spoken of as being "born of the Lotus." "The Chinese,"[1] says the author of Rites and Ceremonies, "worship a Goddess whom they call Puzza, and of whom their priests give the following account;—they say that 'three nymphs came down from heaven to wash themselves in the river, but scarce had they gotten in the water before the herb lotus appeared on one of their garments, with its coral fruit upon it. They were surprised to think whence it could proceed; and the nymph upon whose garment it was could not resist the temptation of indulging herself in tasting it. But by thus eating some of it she became pregnant, and was delivered of a boy, whom she brought up, and then returned to heaven. He afterwards became a great man, a conqueror and legislator, and the nymph was afterwards worshipped under the name of Puzza.' " Puzza corresponds to the Indian Buddha.

[1] O'Brien: The Round Towers of Ireland.

In Egyptian architecture the lotus is a fundamental form, and indeed it is said to be the main motive of the architecture of that civilization. The capitals of the column are modelled after one form or other of this plant. That of the Doric column is the seed vessel pressed flat. Earlier capitals are simple copies of the bell or seed vessel. The columns consisted of stalks of the plant grouped together. In other cases the leaves are used as ornaments. These orders were copied by the Greeks, and subsequently by western countries.

We may ask ourselves, what is the meaning of this mystic lotus which was held in sufficient veneration to be incorporated in all the temples of religion, as well as in myths of the deity. This, too, refers to the deification of sex. O'Brien, in the "Round Towers of Ireland" states, "The lotus was the most sacred plant of the Ancients, and typified the two principles of the earth fecundation,—the germ standing for the lingam; the filaments and petals for the yoni."

R. P. Knight states, "We find it (the lotus) employed in every part of the Northern Hemisphere where symbolical worship does or ever did prevail. The sacred images of the Tartars, Japanese or Indians, are all placed upon it and it is still sacred in Tibet and China. The upper part of the base of the lingam also consists of the flower of it blended with the most distinctive characteristics of the female sex; in which that of the male is placed, in order to complete this mystic symbol of the ancient religion of the Brahmans; who, in their sacred writings, speak of Brahma sitting upon his lotus throne."

Alexander Wilder,[2] states that the term "Nympe" and its derivations was used to designate young women, brides, the marriage chamber, the lotus flower, oracular temples and the labiae minores of the human female.

[2] The Symbolical Language of Ancient Art and Mythology.

The lotus then, which is found throughout antiquity, in art as well as in religion, was a sexual symbol, representing to the ancients the combination of male and female sexual organs. It is another expression of the sex worship of that period.

Our present conventional symbols of art are very easily traced to ancient symbols of religion. We may expect these to be phallic in their meaning, to just the extent that phallicism was fundamental in the religions where these symbols originated. From the designs of some of the ornamental friezes of Nineveh, we find these principles illustrated. On those bas-reliefs is found the earliest form of art, really the dawn of art upon early civilization. Here is the beginning of certain designs which were destined to be carried to the later civilizations of Greece, Rome and probably of Egypt. These friezes show the pine cone alternating with a modified form of the lotus: the significance of which symbols we have explained. There are also shown animal representations before the sacred tree or grove, a phallic symbol. From these forms and others were designed a number of conventional symbols which were used throughout a much later civilization. (See "Nineveh and Its Remains." A. Layard.)

ANIMAL SYMBOLISM

One sees in the religions of antiquity, especially those of India, Assyria, Greece and Egypt, a great number of sacred animal representations. The Bull was sacred to Osiris in Egypt, and one special animal was attended with all the pomp of a god. At one time in Assyria the god was always associated with a sacred animal, often the goat, which was supposed to possess the qualities for which the god was worshipped. Out of this developed the ideal animal creations, of which the animal body and the human head and the winged bulls of Nineveh are examples. The mystic centaurs and satyrs originated from this source. At a later time the whole was humanized, merely the horns, ears or hoofs remaining as relics of the animal form.

We learn that in these religions the animal was not merely worshipped as such. It was a certain quality which was deified. The Assyrian goat attendant upon the deity, was in some bas-reliefs, not only represented in priapic attitudes, but a female sexual symbol was so placed as to signify sexual union. We shall show later that certain male and female symbolic animals were so placed on coins as to symbolically indicate sexual union.

An animal symbol which has probably been of universal use is that of the snake or serpent. Serpent worship has been described in almost every country of which we have records or legends. In Egypt, we find the serpent on the headdress of many of the Gods. In Africa the snake is still sacred with many tribes. The worship of the hooded snake was probably carried from India to Egypt. The dragon on the flag and porcelain of China is also a serpent symbol. In Central America were found enormous stone serpents carved in various forms. In Scandinavia divine honors were paid to serpents, and the druids of Britain carried on a similar worship.

Serpent worship has been shown by many writers to be a form of sex worship. It is often phallic, and we are told by Hargrave Jennings that the serpent possibly was added to the male and female symbols to represent desire. Thus, the Hindu women carried the lingam in procession between two serpents; and in the sacred procession of Bacchus the Greeks carried in a sacred casket the phallus, the egg, and a serpent.

The Greeks also had a composite or ideal figure. Rays were added to the head of a serpent thereby bringing it into relation with the sun god Apollo; or the crest or comb of a cock was added with similar meaning.

Many reasons have been offered to explain why the serpent has been used to represent the male generative attribute. Some have called attention to its tenacity of life; others have spoken of its supposed mystic power of regeneration by casting its skin. Again, it seems probable that the form is of symbolic significance. However this may be, we find that this universal serpent worship of primitive man was a form of phallicism so prevalent in former times.

Many other animals may be mentioned. The sacred bull, so frequently met with in Egypt, Assyria and Greece, was a form under which Bacchus was worshipped. R. P. Knight speaks as follows; "The mystic Bacchus, or generative power was represented under this form, not only upon coins but upon the temples of the Greeks; sometimes simply as a bull; at other times as a human face; and at others entirely human except the horns and ears."

We would probably be in error to interpret all these animal symbols as exclusively phallic although many were definitely so. Thus, while Hermes was a priapic deity, he was also a deity of the fields and the harvests; so the bull may have been chosen for its strength as well as its sexual attributes.

There are many animals which were symbolic of the female generative power. The cow is frequently so employed. The Hindus have the image of a cow in nearly every temple, the deity corresponding to the Grecian Venus. In the temple of Philae in Egypt, Isis is represented with the horns and ears of a cow joined to a beautiful woman. The cow is still sacred in many parts of Africa. The fish symbol was a very frequent representative of woman, the goddess of the Phoenicians being represented by the head and body of a woman terminating below in a fish. The head of Proserpine is frequently surrounded by dolphins. Indeed, the female principle is regularly shown by some representative of water; fire and water respectively being regarded as male and female principles.

Male and female attributes are often combined on coins for purposes of sexual symbolism. R. P. Knight explains these symbols as follows; "It appears therefore that the asterisk, bull, or minotaur, in the centre of a square or labyrinth equally mean the same as the Indian lingam,—that is the male personification of the productive attribute placed in the female, or heat acting upon humidity. Sometimes the bull is placed between two dolphins, and sometimes upon a dolphin or another fish; and in other instances the goat or the ram occupy the same situation. Which are all different modes of expressing different modifications of the same meaning in symbolical or mystical writings. The female personifications frequently occupy the same place; in which case the male personification is always upon the reverse of the coin, of which numerous instances occur in those of Syracuse, Naples, Tarentum, and other cities." By the asterisk above mentioned the writer refers to a circle surrounded by rays, a sun symbol of male significance. The square or labyrinth is the lozenge shaped symbol or yoni of India.

The above interpretations throw much light on the obscurity of the animal worship of antiquity. This explains the partly humanized types, and the final appearance of a human deity with only animal horns remaining, as representing the form under which the deity was once worshipped. The satyrs, centaurs, and other animal forms are all part of these same representations and are similarly explained.

Our main object in giving the above account of these various symbols has been to illustrate the wide prevalence of sex worship among primitive races. Another end as well has been served; our study gives us a certain insight into the type of mind which evolves symbolism, and so a few remarks on the use of symbolism as here illustrated are not inappropriate.

We feel that while this symbolism may indicate a high degree of mechanical skill in execution, it does not follow that it expresses either deep or complicated intellectual processes. In fact, we are inclined to regard such symbolism as the indication of a comparatively simple intellect. It appears obscure and involved to us, because we do not understand the symbols. From those which we do understand, the meaning is graphically but simply expressed.

On coins, bas-reliefs and monuments; we find the majority of these simple emblems. If the desire is to express the union of male and female principles, a male symbolic animal is simply placed upon the corresponding female symbol. Thus, a goat or bull may be placed upon the back of a dolphin or other fish. This is a graphic presentation but certainly one of a most simple nature. Sometimes the male symbol is on one side of the coin and then the female is always on the reverse. Unions are made which do not occur in nature, and the representation is not a subtle one.

In India, if there was a desire to express a number of attributes of the deity, another head or face is added or additional arms are added to hold up additional symbols. In Greece, when the desire was to express the androgyne qualities of the deity, a beard was added to the female face, or one half of the statuette represented the male form, the other the female. Such representations do not indicate great ingenuity, however skillfully they may be executed.

SUN WORSHIP AND SUN MYTHS

As is generally known, traces of sun worship are found in almost every country of which we have a record. In Egypt Ra was the supreme sun god where there was very elaborate worship conducted in his honor. In Greece Apollo was attended with similar festivities. In the Norse mythology, many of the myths deal with the worship of the sun in one form or another. In England, Stonehenge and the entire system of the Druids had to do with solar worship. In Central America and Peru, temples to the sun were of amazing splendor, furnished as they were with wonderful displays of gold and silver. The North American Indians have many legends relating to sun worship and sacrifices to the sun, and China and Japan give numerous instances of the same religion. Sun worship is so readily shown to be fundamental with primitive races that we will not discuss it in detail at this time, but rather will give the conclusions of certain writers who have explained its meaning.

At the present day, the sun is regularly regarded as a male being, the earth a female. We speak of Mother Earth, etc.; in former times, the ancients depicted the maternal characteristics of the earth in a much more material way. Likewise the sun was a male deity, being often the war god, vigorous and all powerful. We readily see to what an extent the male sun god was portrayed in mythology as a human being. In many myths, the god dies during the winter, reappears in the Spring, is lamented in the Fall, etc., all in keeping with the changes in the activity of the sun during the different seasons.

The moon was associated with the female deity of the ancients. Isis is accompanied by the moon on most coins and emblems. Venus has the same symbols. Indeed, the star and crescent of our modern times, of the Turkish flag and elsewhere, are in reality the sun and crescent of antiquity, male and female symbols in conjunction. Lunar ornaments of pre-historic times have been found throughout England and Ireland, and doubtless explain the superstitions about the moon in those countries. The same prehistoric ornaments are found in Italy. In the legends of the North American Indians, Moon is Sun's wife.

The full extent of these beliefs is pointed out by Mr. John Newton in "Assyrian Grove Worship." Here we see that the ancient Hindus gave a much more literary relationship between the sun and earth than we are accustomed to express in modern times. He states, "This representative of the union of the sexes typifies the divine Sakti, or productive energy, in union with the pro-creative or generative power as seen throughout nature. The earth was the primitive pudendum or yoni which is fecundated by the solar heat, the sun, the primitive linga, to whose vivifying rays man and animals, plants and the fruits of the earth, owe their being and continued existence."

It is not possible to discuss Sun worship at any length without at the same time discussing phallicism and serpent worship. Hargrave Jennings, who has made careful study of these worships, points out their general identity in the following paragraph. He states: "The three most celebrated emblems carried in the Greek mysteries were the phallus, the egg, and the serpent; or otherwise the phallus, the yoni or umbilicus, and the serpent. The first in each case is the emblem of the sun or of fire, as the male

or active generative power. The second denotes the passive nature or female principle or the emblem of water. The third symbol indicates the destroyer, the reformer or the renewer, (the uniter of the two) and thus the preserver or perpetuator eternally renewing itself. The universality of serpentine worship (or Phallic adoration) is attested by emblematic sculptures or architecture all the world over."

The author of the "Round Towers of Ireland" in discussing the symbols of sun worship, serpent worship and phallicism, found on the same tablet, practically reiterates these statements. He says: "I have before me the sameness of design which belonged indifferently to solar worship and to phallic. I shall, ere long, prove that the same characteristic extends equally to ophiolatrea; and if they all three be identical, as it thus necessarily follows, where is the occasion for surprise at our meeting the sun, phallus and serpent, the constituent symbols of each, embossed upon the same table and grouped under the same architrave?"

By a number of references, we could readily show the identity of all these worships. The preceding paragraphs give, in summary form, the conclusions of those writers who have made such religions their special study. We shall not exemplify this further, but will now point out the general relationship of sun worship to the religious festivals and mythology of the Ancients. This relationship becomes important when it is appreciated that the sun worship expressed in the mysteries is also a part of phallicism. On some of these festive occasions the phallus was carried in the front of the procession and at other times the egg, the phallus and the serpent were carried in the secret casket.

ANCIENT FESTIVALS AND MYSTERIES

The Ancients expressed their religious beliefs in a dramatic way on a number of occasions throughout the year. The festivities were held in the Spring, Autumn, or Winter. These were to commemorate the activities of the sun, his renewed activity in the Spring calling forth rejoicing and his decline in the Fall being the cause of sorrow and lamentation. As well as the festivities, there were the various mysteries, such as the Eleusinia, the Dionysia and the Bacchanalia. These were conducted by the priests who moulded religious beliefs and guarded their secrets. The mysteries were of the utmost importance and the most sacred of religious conceptions were here dramatized.

Mythology also gave expression to the religious ideas of the time and we find that the most important myths, dramatically produced at the religious festivals, were sun myths.

The annual festivities and mysteries will be discussed together because both were intended to dramatize the same beliefs. Both were under priestly control and so were national institutions. The festivals were for the common people but the mysteries were fully understood only to the initiated.

While no very clear account of the mysteries has been given, a certain theme seems to run through them all, and this is found in the myths as well. A drama is enacted, in which the god is lost, is lamented, and is found or returns amid great rejoicing.[3] This was enacted in Egypt where the mourning was for Osiris; and in Greece for Adonis, and later for Bacchus. All these are, of course, sun gods, and the whole dramatization or myth is in keeping with the activities of the sun.

[3] The Enactment and Rebirth.

On these occasions, the main object seems to have been to restore the lost god, or to insure his reappearance. The women took the leading part and mourned for Osiris, Adonis or Bacchus. They wandered about the country at night in the most frenzied fashion, avoided all men and sought the god. At times, during the winter festival, the quest would be fruitless. In the Spring, when they indulged themselves in all sorts of orgies and extravagances, Adonis was found.

The underlying motive appears to have been to enact a drama in which the deity was supposed to exercise his procreative function by sexual union with the women. This was an ideal which they wished to express dramatically. In order to realize this ideal obstacles were introduced that they might be overcome; in the old myth, Adonis was emasculated under a pine tree, and in Egypt Osiris was similarly mutilated, his sex organs being lost. But at the festivals it was portrayed that Adonis was found, and in the myth, Osiris was restored to Isis in the form of Horus (the morning sun). In a number of myths, the god is said to have visited the earth to cohabit with the women, an occurrence which was doubtless desired, in order that the deistic attributes might be continued in the race. Thus, judging from what we have been able to learn of this subject, the worship expressed in the mysteries revolved about sexual union, the desire being to dramatize the continued activity of deistic qualities.

This character of many of the festivals and mysteries is very evident. In the Eleusinian mysteries the rape of Persephone by Pluto, the winter god, is portrayed. The mother, Demeter, mourns for her

daughter. Her mourning is dramatically carried out by a large procession, and this enactment requires several days. Finally Persephone is restored. The earlier part of the festival was for dramatic interest, and the real object was the union of Persephone with Bacchus. "The union of Persephone with Bacchus, i.e., with the sun god, whose work is to promote fruitfulness, is an idea special to the mysteries and means the union of humanity with the godhead, the consummation aimed at in the mystic rites. Hence, in all probability the central teaching of the mysteries was Personal Immortality, analogue of the return of the bloom to plants in Spring." [4]

[4] Dr. Otto Rhyne, *Mysteria*.

The mysteries of Samothrace were probably simpler. Here the phallus was carried in procession as the emblem of Hermes. In the Dionysian mysteries which were held in mid-winter, the quest of the women was unsuccessful and the festival was repeated in the Spring. The Roman mysteries of Bacchus were of much later development, and consequently became very debased. Men as well as women eventually came to take part in the ceremony, and the whole affair degenerated into the grossest of sexual excesses and perversions.

We have stated what appears to us to have been the underlying motives of the religious festivals and mysteries; namely, the enactment of a drama in which the reproductive qualities of the deity were portrayed. The phallus was carried in procession for this purpose and the women dramatized the motive as searching for the god. Our account can be regarded as little more than an outline, but it is sufficient for our present purposes. It indicates that the mysteries give an expression of phallic worship, just as do the various monuments of art and religion to which we have referred. It may also be said that this same worship is represented in what may be termed early literature, for much of the early mythology deals with the same subject. The study of origins in mythology, however, cannot be dealt with adequately in our present communication.

CONCLUSION

We have now traced the worship of sex, as recorded by the monuments of antiquity, through its various phases. In its simplest form, the generative organs are worshipped without disguise; the sexual act also forms a part of religious ceremonies. Later, a rude symbolism develops. As the race becomes more advanced, this becomes more elaborate, until finally a considerable degree of ingenuity and skill are evidenced. The worship of sex is not only expressed in religious usages, but comes to dominate early art as well; it is also expressed in mythology, and so we find the same symbolical and allegorical expressions in early literature. In fact, the deepest thoughts of primitive races, as expressed in their religion, eventually dominate most of the customs and usages of every day life.

We may appropriately ask, why did primitive people deify the sexual organs? This question may be answered when we understand the religious ceremonies of primitive tribes. The earliest objects worshipped were those which were of known benefit to man. The Aborigines of Australia have very elaborate ceremonies which superficially seem meaningless but when understood have a very definite meaning. This aim is to ensure some certain product of the earth. If it is a Yam [5] ceremony, an elaborate procedure is carried out which is supposed to make yams grow. There is a secret ceremonial object which is a symbol of the yam and which bears to it more or less resemblance. Other ceremonies are carried out for similar purposes. The meaning of all these semi-religious performances, as clearly shown by Spencer Baldwin, is to ensure the benefits which nature gives. This, in brief, explains nature worship, and were it our object at present, it would be most interesting to show the peculiar resemblance of these ceremonies to those carried on in sex worship.

[5] A kind of sweet potato.

As the early races advanced in knowledge, they came to know that the perpetuation of the race depended upon generative attributes. For this reason human generative attributes were deified and appropriate ceremonies were held, just as in the case of nature worship. These are not "lewd practices," as they are not infrequently called. It is indeed regrettable that the subject of sex worship has been disregarded by many historians, as thereby erroneous impressions are given. The facts of nature worship have always been much better understood and its importance has been realized; those of sex worship have been less carefully recorded.

The literature and philosophy which we are accustomed to associate with Greek thought are of a later date. Once such abstract reasoning is possible, sex worship is no longer seriously entertained. The symbolism remains, but is, associated now, not so much with religion as with art. Likewise in India, the early Buddhism, which was sex worship, has changed to the present day Buddhist Philosophy, the symbols alone remaining.

From all this we are inclined to believe that in sex worship we are dealing with important motives in the development of the race. We make no pretence of having exhausted the subject in this communication. The decadence of this religion, as observed in the early Christian period, and in fact well through the middle ages, forms a very interesting history. It is not our purpose, however, to deal with it at present. Likewise, it should be understood that the motives which we have been discussing are not necessarily the earliest manifested in racial development; we have a record of a time in the history of man when the worship of sex had not yet made its appearance but this period also is not a part of our present topic.

The influence of early racial motives upon present day civilization is a topic of great interest. Its importance is, in fact, the main object of studies of this kind. However, we wish our account to be mainly an historical one, and so will not at present make reference to a number of applications which arise. We have also refrained from making use of the modern writings on matters of sex, as we thereby avoid criticism to the effect that our findings have been drawn from biased sources. We feel that while the reader may disagree in certain details as here set forth, the universal appearance of sex worship at a certain stage of racial development is scarcely to be denied. The writers whom we have cited are all of a former generation, and they were searching for origins in religion, not in sexual life; inadvertently they found the latter, in fact could not avoid it, and so their conclusions are all the more valuable to us.

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REVIEWS

THE MEANING OF DREAMS. By Isador H. Coriat. Little, Brown and Company, Boston, 1915, Pages xiv plus 194.

This concise and well written little book hardly needs reviewing for the readers of the Journal of Abnormal Psychology as all who have followed Dr. Coriat's writings for the last few years will know at once the nature of the book and what it contains. His purpose is evidently to give a simple clear statement of the position of the Freudian school and he accomplishes this with more than ordinary success. He is lavish in his praises of Freud and seemingly accepts unquestionably the whole mass of Freudian doctrines. One searches in vain for the least question or the slightest suggestion that some of the Freudian concepts might possibly be wrong. Everywhere the words of Freud and the beliefs of the author are given as absolute, eternal and unquestionable. He incorporates some of the recent additions to the Freudian teachings, such as Brill's treatment of the "artificial dream," but concerning the fundamentals he leaves the original doctrines without noticeable modification. In discussing the mechanisms of dreams he adds a fifth to the original four, calling his addition "reinforcement." Reinforcement is the mechanism by which "the prominent or primary wish of the dream is reinforced, expressed anew for the purpose of emphasis by means of a second dream following the first, really a dream within a dream." With this exception he leaves the original Freudian teachings intact and unchanged. He says that a dream is the fulfilment of a wish and no modifications of the statement follow that could possibly make one think he meant anything else. His definite position is stated as follows: "The term 'wish' in psycho-analysis is very comprehensive and connotes in a broad sense all our desires, ambitions or strivings." He illustrates his points by numerous dreams which he has himself analyzed. He will probably meet some objection from those who are not ardent Freudians concerning some of these dreams as the interpretation is not always "perfectly clear" as he says it is to him. Some may say that at least a dozen other interpretations might just as well and just as logically have been given, but this is the objection that is raised concerning all Freudian literature. The best characterization of the book is to say that it is typically Freudian.

(As a side issue, it is interesting to notice how many of the dreams given relate to the European War. Some one has said that America shows her concern over the war by the way Americans dream.)

There are two characteristics of the book which are worthy of special mention and for which Dr. Coriat needs special praise. One of these is that it is so simply written that the general public can read it and understand it. No other Freudian publication which the reviewer has seen can boast of the same simplicity. The other point is that absolutely everything concerning sex which could possibly be objectionable has been ruled out. There is not a word or a sentence in the book that a precise maiden lady need hesitate to read to her Sunday School class or at a pink tea. In doing this Dr. Coriat has indeed achieved the impossible as all will readily agree. This book is probably too elementary for the majority of the readers of the Journal of Abnormal Psychology but it is destined to fill a place which no previous Freudian publication could ever fill; it is a book for the general public and the beginner in psychology and for this purpose it is truly a little gem. RAYMOND BELLAMY. Emory and Henry College.

This book is another instance of the lack of a common nomenclature in psychopathology. Psychological mechanisms are penetratingly discussed; and important syntheses are made regarding categories which many American psychopathologists name differently not to speak of the nomenclature of the repressivist of Vienna. It seems to the reviewer indeed, that what the authors call neurasthenia is merely a somewhat complex elaboration of the psychosis by induction to which Babinski has restricted the name hysteria. It is true that certain manifestations of this, especially a false gastropathy, may lead to an increased fatigue, and to this the name neurasthenic might appropriately be given. But still more often one sees the appearance of increased fatigue on account of the patient's faulty notion; and to this the name neurasthenic should certainly not be given.

To place in the same rubric a simple somatic hysteria like a paralysis and the complications of what are comprised in psychological neurasthenia as so lucidly described in this book, seems at first sight irrational; but so at first appeared the placing together of clinical pictures as unlike as cervical struma, phthisis pulmonalis and ossious caries under the rubric of tuberculosis, and in a nearer field the synthesis of catatonia, hebephrenia and cementing paranoia into the rubric of dementia precox. So, recognizing the accuracy of the beautiful analysis of Professor Dejerine of what he calls neurasthenia, we venture to assimilate it with the equally true analysis which Babinski has made of the immediate mechanism of what he wishes to call pithiatism. It is the condition which we personally term hysteria, and the mechanism of which we have more especially studied in the traumatic neuroses and the occupational dyskinesias and some other disorders incident to the exercise of trade or profession. Indeed, the authors say:—"One can see that the helmet headache, the pain in the nape of the neck, and the pain in the spine are frequent among cultivated people and educated neurasthenics, but much rarer among the others" and he explains this by saying that these disturbances "are due to the diffusion of the attention towards obsessions or preoccupations;" and he gives as an example the reply of a patient "I think of my illness or such vicissitude by which it was brought about." Indeed, in one place, Professor Dejerine goes so far as to permit himself to say that the hypochondriac preoccupation itself constitutes originally a purely intellectual conception, a propos of which, but secondarily to it the patient really may work up an emotion, but which is really NOT OF EMOTIONAL ORIGIN, a position first taken and long insisted upon by the reviewer.

What is this when traced to its source but the mechanism of suggestion? The portion of the book describing the functional manifestations of the digestive system is charged with most illuminating instances of associational mechanism typifying the induction of morbid reactions by suggestion. No one perusing them can fail to perceive that the psychological process at work does not differ in principle from that found in the somatic hysterias, from which therefore their separation seems unjustifiable, and at the hands of so eminent an author is likely to maintain rather than diminish present psychological misunderstanding.

The dissimilarity of terms and resemblances of ideas has another illustration in the reference to energy and the will; here it is clearly pointed out that the apparent aboulia of the "neurasthenic" is not a lack, but an unfruitful directing of the will while the Viennese school imply the same idea in their doctrine of sublimation.

The authors believe that neurasthenia differs from the psychasthenia of Janet in that the latter is constitutional, and that the obsessions are secondary, when analysed profoundly, to some pain-bearing contingency which by the mechanism of association has pervaded the mind and which henceforth distorts it with subsequent realities. And yet when Dejerine lays stress upon the fact that badly organized moral hygiene conduces to the emotional preoccupations which lead to obsessions and which he regards as the essential characteristics of the neurasthenic constitution, he leaves no apparent distinction from the psychasthenia of Janet.

"The fundamental distinction of neurasthenia is causation by emotion," but the authors have not extricated this factor from the role played by induction either of idea or its secondary emotion. In such a fundamental matter as anaesthesia for instance, they say: "In our opinion there exist three classes of hysterical anaesthesia. In the first series of facts one may place the cases due to simulation. In the second group of cases we shall range the patients in whom the disturbances of sensibility are directly due to suggestion. Finally there remains a third class of patients in whom the disturbances of sensibility seem to us to be residual emotional phenomena."

"Emotion is able to suppress sensibility entirely by producing absolute side-tracking, and that under such circumstances it was really a question of total anesthesia and not purely psychoanesthesia. When the state has passed and the emotional cause has disappeared the sensibility may return, but

anesthesia which is preserved may also persist, either by auto-suggestion or as in the case of the individual who remarks that he felt none of the various injuries which he has experienced, or it is a question of simple residual phenomenon independent of all suggestion." And yet, further on, the authors say that the phenomena of auto-suggestion cannot be separated from the emotion. All this lacks clarity; and except in the instances of failure of perception or of auto-suggestion, the mechanism is not intelligibly set forth.

The authors, however, although under the deplorable classification of neurasthenia or hysteria, depart from the usual therapeutic methods and seek the cause of the patient's disease outside of the objective symptoms and declare that the "element of diagnosis lies chiefly in the origin of the symptoms."

They make much of the assertion that Dr. Weir Mitchell's method of treatment is based practically upon isolation, rest in bed, over-feeding, douches, massage and electricity, in fact on purely physical measures and Professor Dejerine adds: "I was not long in discovering that unless the patient's state of mind improved, the therapeutic results were far from satisfactory;" and he gives examples.

But in spite of the objections to the nosology and psychopathological theory of the authors, there remains nothing but the highest praise for the presentation of the clinical facts and of the sound advice regarding the therapy of various functional manifestations, and concerning the role of the physician in the prophylaxis of the psychogenic neuroses. It is most desirable that every physician should be aware of the clinical facts which Professor Dejerine has accumulated in his vast experience. In gynaecology, gastroenterology, cardiology, and genitourinary disease the psychogenetic affections are ignored by most physicians.

This book will give a better understanding of what every practitioner of those specialities should be familiar with. TOM A. WILLIAMS.

*** END OF THE PROJECT GUTENBERG EBOOK THE JOURNAL OF ABNORMAL PSYCHOLOGY,
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