

## ANTHROPOLOGY AND INSANITY

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There is a witty French saying that "even the most beautiful of women cannot give more than she has." Even the best student of the subject which I am to approach today would not be able to give you any more than is known in those lines, and I am sorry to say there are many more gaps than there are fillings.

I shall speak on the relations of anthropology and psychiatry, or rather on anthropology in relation to the insane, and I shall divide the subject into three parts: In the first place I shall say something about the nature of anthropological investigations in relation to the insane, particularly in this country. In the second place I shall pass over briefly and imperfectly, as must be done under the circumstances, our knowledge as to insanity in the different races of mankind and in different parts of the world. And in the third place I hope to mention a few of the problems of anthropological investigation on the insane.

Anthropology can on occasion be of considerable help to psychiatry. The two branches of science are not as far distant as one might at first suppose. The conception of anthropology is often too narrow, due, I presume, largely to the fact that the anthropologist deals so much with the skeletal remains of man; often in reality he is looked upon as merely a student of the skull. This is far from being the whole truth in the case. The anthropologist studies especially the skeletal remains because these remains are most available and there are more of them; he has important cranial collections which cover all the peoples that exist, where the material may be seen and studied and re-studied at leisure. But he also studies the living, including the abnormal classes. And he measures to aid and extend his observations. You all know that visual observation has its limits, and especially so with those who are not fully experienced, and therefore you all supplement visual by instrumental observation, and you are doing that more and more as medical science progresses. And that is what the anthropologist is doing. The anthropologists are generally physicians. Only they are no more physicians of indi-

viduals—they aspire to be the physicians of the race, of humanity as a whole, and in this connection they are brought very directly into contact with all forms of abnormalities in the human family, and particularly those abnormalities that lead to insanity. If you will pardon me, I will refer to my own case as an illustration.

I did not begin as an anthropologist nor with any defined intention of becoming an anthropologist: I began as an Interne in one of the State Hospitals for the Insane in New York, but as an Interne who fortunately was able to devote his time to investigation, and it was this which led me to anthropology. In 1896 I became an associate of the State Pathological Institute for the Insane in New York City, and under the auspices of that much regretted institute attempted to organize a medico-anthropological work of large extent, the object of which was a simultaneous, extensive, detailed investigation of the insane and all the other abnormal classes in New York State. Your honored Superintendent, Dr. White, participated with about twenty-five other physicians in the State service in that investigation. The studies, which were of much promise,<sup>1</sup> went on for approximately two years, and there were accumulated data of much interest on many thousands of abnormals of all sorts—when suddenly it became apparent that we could make but a limited use of what we had gathered on account of not having anything with which to contrast the data, that we lacked similar data on the normal population. We had, in other words, no normal standards. Then began a feverish search for such standards on the American population and the different races represented in our institutions, but they were not found, for they did not exist. We next endeavored to make such standards—taking working men, nurses, and everybody else we could easily reach—and we began to find so many unusual things, even abnormal conditions, among these supposedly normal people that we soon saw the impossibility of getting our standards unless we examined many thousands of such individuals, which was not practicable. It was then that, in search of normal humanity, I was led to primitive people, beginning with the American Indian. There I found in a very large measure normal humanity; but unfortunately the racial differences made these more primitive men and women worthless as standards for the white people. It was at this stage that the State Pathological Institute—which had the greatest prospects of usefulness of any institution of similar nature that I have ever known to this date in this country—fell, through

<sup>1</sup> See *Bulletin of the State Hospitals of New York* for 1896.

political machinations, and that I was called to devote my studies to the Indian and to humankind in general. However, I have always preserved a deep interest in the field of my first work, that on the abnormal classes of our own race, and that is perhaps why I have been invited here today and why I accepted.

We may now take up the first real subject of this evening, which is the relation of race to insanity. Since when is insanity known, and how is it found in the different peoples now existing?

I wish we could go far enough into the history of man so that I could give you something tangible on the origins of insanity. As it is, we can barely go back some four or five thousand years. Yet we know that mankind has existed on this earth for at least 350,000 years. We have the actual substantiations of this fact, we have the skeletal remains. There are now in the anthropological collections of Europe remains of man who lived 300,000 years ago or over, and it is probable that even more primitive human beings existed as far back as 500,000 or a million years ago. But the parts of the early human beings that have so far been discovered are scarce, and they give no intimation as to brain pathology. As we progress toward our own time such remains become more and more frequent, but nevertheless they are still too few in number for any valid indications in this line, until the beginning of Egyptian proto history, or about 6,000 to 7,000 years ago, when for the first time they become fairly common. Among the remains of earlier man, we have not seen as yet anything that would lead us to diagnose a case of an abnormality of skull or brain. By abnormality of brain I mean, of course, such an abnormality as would have left its impress on the skull, and as might have led to some form of insanity. These skulls are very primitive, but of good size already. They are very unlike any skulls that exist today, and yet they impress one as quite normal. They are symmetrical; they do not show premature occlusions of the sutures; they do not show traces of intracranial tumor or any other abnormalities that we are able to detect. Nevertheless, I believe it would be wrong to consider insanity as of recent origin, because insanity in various forms is to be found even below the human species, in animals, and may well have existed in our precursors, particularly during the time of their rapid brain development. The time that elapsed between the first direct steps in the differentiation of some ancestral primate towards man and the earliest known human beings, was characterized most of all by the remarkable development of the brain, until it probably doubled its size and weight, and it is reason-

able to assume that during this time the species was in a state of unstable brain equilibrium which may and probably had been attended by numerous psychoses. This, together with various intoxications and head injuries, may safely be taken as an indication that some of the insanities at least, together with epilepsy, are of ancient occurrence in man.

In the pre-dynastic and dynastic Egyptian periods, physical evidence on the skulls as to possible insanity begins to appear in asymmetries, wounds, and other conditions. A large scar with an impress of the bone must surely have produced some sort of abnormal cerebation. But the indications are still rare. The insanities, as you well know, do not leave any characteristic imprint on the skull by which they could be diagnosed with certainty from the skeletal remains. We are now, however, only a step from historical records, and when these become available, whether they relate to Egypt, Babylon, Assyria, or the old Jews, we find everywhere mentions of several forms of insanity, including mania, dementia, and still others which are not always clearly recognizable. Among the Greeks and Romans insanities were already well known, and from then on references to them increase among all peoples.

Anthropological interest in the insane did not begin until the first part of the last century. Anthropology itself did not exist until well within the nineteenth century. Several decades before this, however, there arose a number of investigators of man's natural history, morphology and physiology, upon some of whom today perhaps we are inclined to look with a little askance, but who in those days, in the still almost medieval era of knowledge, were not only among the ablest students but were also perfectly sincere and did what many foremost investigators have done since—made mistakes, which, however, by their very originality and daring, gave rise to such controversies and so much further study as to advance science in definite directions. Among these investigators were particularly the early "phrenologists," such as Gall and Spurzheim. These men began with the idea, or rather with the newly learned knowledge at that time, that parts of the brain corresponded to and governed definite motor parts of the body. As knowledge was gradually enlarged the localization of the motor centers progressed, and as so often happens, some of the more advanced minds, ready to take prompt advantage of any promising discovery, took up this lead and went altogether too far by claiming and by advocating the notion that there were in the brain not merely centers for the motor func-

tions but also that there ought to be and were centers for different mental functions. And in order to substantiate their claims, they began to examine a lot of living heads of both normal and abnormal people and a lot of skulls. They became, with a few of the anatomists, the first assiduous collectors of crania. They subdivided the head and skull into many parts or areas, and each area had a definite relation to certain characteristics of the brain. By the under- or over-development of these parts or areas they judged then as to the special aptitudes and mental peculiarities of the person.

In the course of a relatively short time the fallacy of these teachings became apparent, and they passed away from the realm of science, to become the stock, as they are to this day, of fakirs. Claims of such a far reaching nature naturally roused the attention of many workers who proceeded to test them until they were found to be without foundation; and these very tests advanced science more than many a valid discovery. They originated scientific psychology, and enhanced greatly anthropometric studies, as well as the formation of for that time great collections of crania, such, for instance, as that of Morton in Philadelphia. Morton gathered almost 1,000 crania of many races, which are stored to this day in the Academy of Natural Sciences in Philadelphia, constituting one of our most valued series. And they advanced the interest in abnormal humanity, in the insane and the criminal. We must, therefore, give a due credit for their service to both anthropology and psychiatry to the early phrenologists.

In the early fifties organized scientific anthropology had its birth in France and extended rapidly into other European countries—into England, Germany, Russia, and Italy; and in the eighties the methods of anthropology began to be applied intensively to the study of criminals, insane criminals, and the insane and other abnormals. Here again the one who deserves the greatest credit in this direction is a man who has since been blamed very harshly for his errors. It was Lombroso. He wrote a number of books, beginning with the famed "*L'homme criminel*." They appeared edition after edition and in various translations. They were the most readable books and the most stimulating of any scientific books that ever appeared in these lines. And while subsequently it has been shown that Lombroso was entirely too confident in many respects, and assumed many things that later were proven not to be so, he has nevertheless done a vast deal of good to criminology, anthropology, psychiatry, and the study of abnormal classes in general.

Lombroso had many followers. The researches he initiated were taken up by many men in Italy, France, and other countries; they proceed in modified form to this day, and are still far from finished. Here anthropometry and psychiatry, as well as criminology, proceed hand in hand, and their association is of mutual advantage. The direct influence of the Lombroso school has of course faded. The good of these early investigations was preserved and the bad eliminated, and slowly the more modern anthropological methods are aiding everywhere in the studies of the insane, the idiot, the criminal, the epileptic, and all other sorts of abnormals.

It was in the nineties that such studies began here and there also in this country, and it was in 1896 when, I am glad to acknowledge, partly still under the influence of Lombroso, Féré, and of the European school of investigators in general, began to plan a comprehensive research on all classes of abnormals. This is the research to which I alluded before. The plans were very ambitious, and I really doubt, as I think of it soberly now in more advanced years, whether the ideals could ever have been fully realized; but I have no doubt that if the Pathological Institute had not come to such an unfortunate end, they could have been realized to an important degree. The plan was to establish as reasonably and simply as possible a generally acceptable classification of the abnormals, then to select a number of points of a physiological, pathological, and anatomical nature, and to test these points on the insane, the epileptics, the feeble-minded, and idiotic, as well as the criminals, and thus to follow as far as it would be possible. The work was begun very propitiously. I went from institution to institution, gave talks and demonstrations, and starting with one or two volunteers from the staff worked on the first group of points to be investigated. There were five blanks, a sample of which you may see here.<sup>1</sup> After the men were properly instructed, and the examinations were proceeding with sufficient accuracy, the investigations at that particular place were left in their hands and I proceeded to another institution. The data obtained were sent to the Pathological Institute to be elaborated, and they were to be published serially as soon as they could be prepared for that purpose.

In this manner the investigations proceeded for nearly two years, until they extended to about 11,000 insane and other abnormals. And then developed unforeseen difficulties. The first concerned the

<sup>1</sup> Printed Questionnaire omitted. Those interested can obtain copy from author.

men carrying on the work. This work was not of their own initiative, and hence not strictly their own. Time and again, moreover, they were burdend with their institutional duties, and an overburdened man does not take kindly to a prolonged research of such a nature as this was. He does not readily coöperate unless there are strong incentives for coöperation. These men could not be paid extra, they could not be forced to do the work, and they could not publish it in their own names. Also there were transfers and resignations. The result was a slackening of the investigations in most of the institutions. But there was another and even more serious snag which we struck. This was, as mentioned before, the lack of standards for comparison. When we had a lot of interesting and doubtless important data, we found nothing on the normal population with which to contrast them. You can readily understand that investigations on any particular class of people, unless they be contrasted with similar data on the population at large, can be of but limited significance. Finally there came the last and greatest of our misfortunes, which was the destruction of the Institute through disagreements that arose between the Commission of Lunacy and the Director. With this the whole investigation came necessarily to an end in 1899. The filled out blanks were hurriedly packed up in cases; these were removed to the Ward's Island State Hospital, and it has been impossible to find them since, so that the largest and perhaps, as far as they went, the most valuable set of data ever collected on the insane of this country has apparently been lost.

Since that time no other organized effort on a similar scale in relation to the insane and other abnormals has taken place. There were and still are carried on some individual investigations, investigations by men who had or have certain definite points in view, but nothing concerted. There is much to be learned on the insane and other abnormals with the help of anthropology and anthropological methods, but the times are evidently not propitious; the attention is centered for the present in other directions.

In European countries conditions run almost parallel so far as anthropological investigations on the insane are concerned, to those in the United States. Here and there in France, Bohemia, Germany, Sweden, England, Scotland, Italy and Russia you will find very interesting pieces of work in connection with the insane and other abnormals in which anthropological methods were used with good effect. Yet none of them are of such a scope or prospective value as those that were attempted by the ill-fated Pathological Institute

of the New York State Hospitals. They are generally the work of asylum physicians. They are the work of men who were one year here and one there, who would start a promising piece of work and seldom have a chance to finish. Nevertheless, we have learned through these men quite a good deal about insanity in different peoples, and I shall next, in a necessarily brief and imperfect way, pass over the principal of these peoples and indicate the reported conditions.

In the first place, however, when one comes to the question of any disease in separate peoples or races, it is important that the student should have a fairly clear conception of what these subdivisions of mankind really mean or represent.

There are recognized today three great races in the world. These are the Whites, which run from blond in northwestern Europe to almost black in India and Abyssinia; the Yellow-browns, which comprise a large part of the Asiatic people, a large part of the people of Oceania and the native American Indians; and then the Blacks, which involve three or four types—one the tall African negro; second, the small type of African negro; third, the Negrito; and fourth, the Papuan and Melanesian. There are also the Australians, who, however, are looked upon today as mixed people. These are the principal races, and they all have their sub-types or races in the narrower sense of the word, which differ in many respects. None of these subdivisions can be regarded as different species—they may be compared to the varieties of the different domesticated animals. This is important for psychiatry and every other branch of science dealing with the various groups of mankind, for as long as we do not have as much difference between these groups as exists between species and species of animals, we can hardly expect any very radical differences in their mental make-up and their psychiatric manifestations.

Yet it has been found that different peoples do differ quite markedly in some at least of the insanities. It has also been found that in course of time and contact of the different races, and especially as a result of marked changes of habits, conditions relating to insanity have in some instances changed very perceptibly. In most cases, unfortunately, the change has been decidedly for the worse rather than for the better.

In the first place, we may take the Australians. If you will take the trouble to look up the literature of the early physicians in Australia, during the period of the earliest contact with the natives, you



will see that they point out without exception the almost non-existence of insanities,—but they also point to a number of curious conditions which make it plain why insanities were so infrequent. In the first place, the native life of the Australians was one of but little mental stress. The country was never overpopulated, except perhaps in a limited number of localities; there was no great struggle for existence, although there may have been occasional famines; and there was no great striving in any direction. The Australians lived largely a higher animal sort of existence, which did not call for any great exertion on the part of the brain and nervous system. In addition to that, the rare cases of insanity that happened among them were dealt with in accordance with the crude views of men of such a primitive state of culture. The excited cases, the maniacs, or what corresponded to our maniacs, are said to have been regarded as possessed of bad spirits and as such were done away with. The melancholiac, or rather the depressed—for it is a question whether melancholia as we know it existed among such people—were allowed to do away with themselves, as you know they often do anywhere when left to themselves. The occasional epileptics in severe cases were driven away from their groups, and probably succumbed in a short time under such conditions. Here you have a remarkable primitive sort of way of eliminating the undesirable portions of the race. Also there was no alcohol, there were no addicts to drugs, and there were, so far as recorded, no addicts to other practices which would have tended to cause mental diseases. These conditions became radically changed upon the advent of the whites. The white man introduced destructive diseases which did not exist in Australia before, especially syphilis. He admixed the Australian and introduced not only his own hereditary weaknesses, but possibly also disharmonies, which in cases had unfavorable effect upon mentality. He introduced alcohol and otherwise affected the native unfavorably. Through all these adverse influences, the later medical men in touch with the natives claim, insanity now has become twice as frequent in the native Australian as it is in the native whites of Australia. It is certainly much more frequent than it used to be.

Incidentally to this, there are certain observations on the nature of the insanities that are not observed in the Australians. In the first place, although syphilis has become common, general paresis and tabes are still very rare, if they exist at all in the natives; some of the authors claim outright that they do not exist. In the second place, there is nothing that would correspond to white man's para-

noia, and no such cases as would correspond to the typical cases of acute mania or acute melancholia. The most common mental disorders among these people are manic-depressive states, then the aments and the dements. Dementia praecox is quite common, and is more frequent among the natives now than among the Australian whites without any doubt. Forms of insanity which would manifest themselves in abstract cerebration, in any great imagination, do not exist. So it is plain that there are some marked differences between the insanities of the Australians as they exist today and the insanity of the whites, differences due, on one hand, to different degrees of development of the central nervous system, and, on the other, to varied immunities or predispositions in the two races.

As to the real negro—of the African negro we know as yet very little in these respects. What is known is that occasionally an old negro in Africa, in the wild state, becomes demented. It is also known that epilepsy exists among them and does not even seem to be very scarce. It is further known that a form of mania and a form of depression happens occasionally, and that dementia praecox is not infrequent; but that is about the limit of our data. As to the negro in America, that is another story to which I am going to refer a little later.

The yellow-brown people are very interesting and, curiously enough, they do not behave entirely uniformly in their manifestations as far as mental troubles are concerned. Here again, very strangely, the larger part by far of the yellow-brown race, including the Americans, is very largely free from general paresis. In some places, and in very large districts such as the interior of China, general paresis is a very rare manifestation, and when it does manifest itself it is of subdued form—it is not characterized by grandiose ideas and the actions that we so commonly meet in the disease in the white man. And with general paresis comes a great scarcity of tabes—locomotor ataxia. Yet in all these countries syphilis is common. Many of the local physicians, and there were good observers among them, tried to penetrate the mystery and come to some conclusion as to why syphilis, which is so common in certain parts of China, should not produce general paresis. The only conclusion they reached, and even that but tentatively, was that general paresis and tabes are syphilis plus some unknown quantity, and that this unknown quantity is possibly absent in these Eastern people. A curious condition was observed in this connection in certain of the ports of China. There is a little hospital in Canton under white

man's control. In this hospital syphilitic patients from all parts of China scarcely ever develop a case of either paresis or tabes. But the Chinese mariners who got their syphilitic infection outside of China, especially in a white man's country, showed a larger proportion of tabes and paresis than all the other syphilitic patients in the hospital, which included also white men. Here is something which is well worth further investigation and which one may hope will not only throw a desirable ray of light on our conception of the nature of the disease, but also give a clue as to its prevention and treatment. In Japan, where there are many seafaring people, both tabes and general paresis are fairly common as in white men, and it appears also that general paresis in the Japanese runs the usual course to which we are accustomed.

Another difference of the yellow-browns from the whites in relation to insanity, and very much the same as has been observed in Australia, is the rarity of typical high-class paranoia. There are stages or conditions where the syndrome of paranoia is present, but those cases when observed by experienced white physicians seem to be imperfect, or "off color" if one may use such words; they do not fully reproduce the typical picture of paranoia as known to us. But the yellow-browns give also, like most and probably all of the colored races, a relatively large frequency of dementia praecox, and in the second place a frequency of the maniac depressives. But there is a scarcity again of the pronounced melancholias and pronounced manias. It is plain that between the Oceanians and the yellow-brown people there are many resemblances in these respects, although the Australians etc. and the yellow-brown race have little, if anything in common as to their recent derivation.

We have considerable data on insanities from India, from Burma, from Siam, from Ceylon and from practically all the rest of the British, French and Dutch possessions in the Indian Ocean, and all these reports—into the details of which we cannot enter—show more or less difference between the conditions as observed among these peoples and those we know among the whites. With some exceptions in India, the insanities in general do not seem to be so violent, so extreme, so fatal. A good many of the patients after a longer or shorter time in an institution are able to be sent back into the maelstrom of the population, and they make their living and keep on existing without further serious trouble; but recurrences are not infrequent. There seems not to be much difference in the frequency of insanity between Europe and India, which may be due in

some measure to the large Aryan infusion in India. There occur however, certain insanities that are not observed in Europe, such as that induced by an excessive use of hashish; and a little farther east there is evidently a form of insanity due to the abuse of opium. But in all these countries alcoholic insanities are practically negligible, and the absence of alcoholism serves to modify the frequency and nature of some of the psychoses.

In Polynesia there is a form of mental trouble which does not occur among the whites or even in other parts of Asia; it is the leprotic psychosis-insanity, connected with and according to all indications directly caused by leprosy. This psychosis is occasionally observed in Japan, but it is especially common among the Hawaiians and other Polynesians.

There is a peculiar form of insanity in the Far East which follows pellagra. Pellagra is relatively frequent in Japan and other countries of Asia. It does not seem to be followed by as fatal mental trouble as with us, but there is more of this form of psychosis.

Finally there is a form of insanity in the far southeast which thus far no one has been able exactly to define or to learn the pathology of, and that is the so-called "running amuck." It seems specially common among the Malays, and is almost restricted to the yellow-brown race. You all know the symptoms of the outburst, which is always indiscriminately homicidal. It is generally followed by the killing of the killer, in fact, the native population when they get hold of him chop or break him to pieces, so that further progress of the condition can not be observed.

So much for the Oceanic and Asiatic countries. As to the white race, it only needs to be said here that the different branches of the white race, while in general much alike in relation to the insanities, present nevertheless local, group, differences in the frequency, strength and nature of these abnormal mental manifestations. Take Russia for instance. A series of observations made many years ago along the Baltic coast and in southwestern Russia, and giving information on the Ukrainians, the Germans settled in the Baltic provinces, the great Russians and the Jews, shows very interesting differences in the relative frequency of the different forms of insanity in these various peoples. Similar observations have been made also on various nationalistic groups in other parts of Europe and they show again differences for which sometimes there seems to be a reason, but for which at other times there is no apparent explanation except perhaps that they are based on somewhat different heredity. Take,

for instance, the case of Ireland—the insanities in Ireland are reported to be in general more frequent than they are in England or Scotland. Why this should be so is not clear. The Irish people are a mixed group, and the elements of the mixture are more like those of the English people than is usually imagined—yet there are rather marked differences both in the normal behavior of the two groups and in the abnormal. In Massachusetts, where Swift made some interesting studies on insanity in different racial groups, he finds that the Irish lead in the frequency of the insane, and that they lead especially in alcoholic insanity. Alcohol may however frequently be considered as merely the final agent, which arouses and perhaps intensifies a thing that may or may not have developed into a form of insanity without it. Whatever the causes may be however, the frequency of insanity in the Irish seems to be well attested and is well worthy of attention and further investigation.

Another interesting lot of white people about whom a great deal has been written in regard to insanity, are the Jews. Here unfortunately, much depends on who writes about the Jews, if it is a Jew or a non-Jew. Authors of the same stock try, naturally, to make conditions seem as good as possible, while some at least of the non-Jewish writers have plainly been biased sometimes in the other way. The truth no doubt lies somewhere between the two. What is generally admitted is, that alcoholic insanities—all forms from the lightest to delirium tremens—are less frequent in the Jews than in any other white people on whom there are statistics. On the other hand, dementia praecox, depressions and still other psychoses, appear to be more frequent with Jews than in the native Americans. Here again are interesting conditions, the exact extent, nature and causes of which remain for determination.

There is a very interesting lot of people on this continent outside of the whites of whom a few words may be said in this connection. They are the Indians. The speaker has a considerable experience among these, in which some attention has been paid to the occurrence and nature of insanity, and there are also observations of others. More than this, there are now available the figures of the Government Hospital for the Indian Insane in South Dakota for the last eighteen years. In the United States we have approximately 300,000 Indians. Of this number about 250,000, more or less, are contributing insane to the just-named hospital. The rest are in Alaska or are scattered in regions where they cannot reach or be reached by this institution. Out of these 250,000 Indians there have

been received in the Indian Hospital in eighteen years, 239 patients, and 38 were last June on the waiting list, making together 277 cases. Moreover out of those 277 cases in eighteen years about forty per cent were epilepsies or connected with that disease, leaving only about 166 cases of other psychoses. This tends to indicate a much smaller incidence of insanities in the United States Indians than in any other of our peoples; and this corresponds entirely with my individual observations among both our own and Mexican Indians.

To test the matter still further we may take the Census records of all the insane hospitals in the United States. Some Indians will get into these institutions even though the Government tries to get them in the Indian Hospital. The 1910 Census records show that in all the hospitals for the insane in the United States, the Indian Hospital included, the total number of admissions of Indians and Indian mixed breeds was three times lower than the admissions of the whites in relation to the population; and here again there are included the epilepsies which really should be dealt with separately.

And there is still another criterium. The Indian Insane Asylum is located in the vicinity of one of the greatest of our tribes, namely the Sioux, and from this tribe, which is far from other institutions for insane, the hospital has doubtless secured the full or nearly full quota; nevertheless the proportion of the Sioux insane in that hospital is very much smaller than that of any white people in any of the States or countries of which we have any knowledge in this direction.

Besides the scarcity of insanity in general among the Indians, we find interesting differences in variety. Paranoia is practically absent. In all the eighteen years in the Indian Hospital for the Insane there was but one case diagnosed as paranoia and that was not typical. There is, too, a scarcity of general paresis. There are but four cases recorded in eighteen years, and they apparently differed from the classical cases among the whites, though like those ending fatally.

The bulk of the cases again, as we have seen in Asia, is dementia praecox, manic-depressive cases, and dementias, which latter doubtless include also idiocy and imbecility.

Why should the Indian who to-day is subjected to quite a good deal of stress and to all sorts of introduced diseases, show so much less insanity than the white man and such differences in the psychoses that he does develop, is another fruitful field for investigation.

An even more important racial group than the Indian in the United States is the negro with his admixtures. The subject of insanities in our colored population demands alone a very comprehen-

sive inquiry. The United States Census reports of 1910 give us the information that insanity in general is less common among the negroes in the southern States than among the whites of the same territory, but that the conditions are reversed when we come to the large cities of the north. Also there are differences in the kind of psychoses which affect the negro from those that are shown by the whites, and there must be differences as to frequency and possibly also in kind between the full-bloods and mixed-bloods. The whole subject calls for a thorough scientific investigation.

The above constitutes of necessity the bulk of my presentation to you tonight. All I wish to say in conclusion is to point out a few additional lines of very promising and needed research—research in which anthropology is ready to help to the limit of its possibilities.

The foremost of the subjects in this country which deserves a careful and unbiased investigation is the question of the frequency and nature of the insanities brought into this country by the immigrant. You will see time and again a loose statement that from this particular standpoint, besides others, the immigrant is a detriment rather than an asset. You will find data from reliable students of the question and even from hospital records which will tend to show how much larger percentage of insanities occurs among the immigrants, especially certain classes and nationalities, than among native Americans. But there are many things these observers do not usually take into account. In the first place they compare the number of insane of the immigrant population with that of the native Americans without due discrimination. The native population is a group of families with the majority of individuals children to adolescents, while the immigrant is very largely constituted of adults. There are immigrant children, but the number of adults is more or less out of proportion to these according to the group of immigrants. Now it is not the children as a rule who enter the insane classes unless we include imbecility. The immigrant adults should be compared with native adults, and that adults of similar age and social classes. Until that is done we shall not be able to know just how much the immigrant is a detriment in this particular direction.

Another line of psychiatric research that is decidedly promising for the future is that on the abnormal child. Certain good beginnings have already been made in this country as well as abroad, and yet to this day there are many uncertainties. It is still hard in many cases safely to diagnose the abnormal child, and still harder to gauge

its future or determine upon the most rational treatment. I should advocate, and hope to see, a coöperative investigation of all children suspected of mental abnormality by the psychologists, the anthropologists and the psychiatrist; and I should advocate, and hope to see a regular study of such a nature on all our abnormal classes, not merely children.

There are also many interesting side-lines of psychiatric investigation. It is known, for instance, that the proportion of certain forms of insanity differs in the cities and the country and the causes of this are by no means as yet clearly determined. Why should the country people be more liable to insanity than the great-city people who are so much more subject to all sorts of mental strains? There are also the people of the mountains and the people of the lowlands with indications of at least some difference in relation to the insanities, which one day will be worth while looking into. In this country we have also different, what one might call "super-imposed", strata of population. We have the native, born here yesterday; the native American of one, two, three and four generations, and then the oldest families. Recent studies in anthropology have shown that the American of three or more generations differs perceptibly in physiognomy and otherwise physically as well as in function from the newer elements in this country; and it is reasonable to expect that he differs also in relation to psychiatry. At all events the facts here also remain to be determined.

We then have the question of pigmentation in relation to insanity. The problem has been nicely studied in Scotland by Tocher. He finds that the blond element among the mentally abnormal predominates unduly over the dark, and something similar has been indicated by investigations elsewhere. It would seem especially that in countries where the blonds are not strictly at home they tend to suffer more physically as well as in mental stability. The truth is still to be established in this connection.

I could go on and mention still other lines of practical investigations which await you. As you all know, there is still plenty to be done in the line of occupational effects, of the effects of various mixtures of blood and of still other agencies in relation to insanity. In these subjects it is my strong conviction that in the future psychiatry may and will be benefited by anthropological methods and coöperation: and I trust you will make due use of Anthropology.



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