

*Supp. H
copy of*

NATHAN LEOPOLD

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Witnesses	Direct	Cross	Re-Dir	Re-Cr

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Among his notes are the following papers which may be of interest: There is a typewritten list of all the bones of the body. There is a single sheet of paper in which the Lord's prayer is typed in English, French, Latin and German. There is a printed reprint of "Spring migration notes of the Chicago Area", compiled by James D. Watson, George Porter Lewis and Nathan F. Leopold, Jr. There is a reprint entitled "Reason and Instinct in bird migration" which appeared in the Auk, Vol. 40, number 3, July 1933 by N. F. Leopold, Jr., and another reprint entitled the "Kirtland's Warbler in its Summer Home", from the Auk vol. 41, number 1, January 1924 by N. F. Leopold, Jr..

There are several of his college papers. In history his grades are very high and his comments by his professors are quite commending. There is also a paper which he wrote for English entitled "Avifauna of the Chicago Area." This paper shows an appreciable amount of work. On the other hand there are some papers, probably in English, where the grades are high, but the work is very superficially done. These are written in the school year 1919 and 1920. An example

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of a theme is one written early in November, 1919
in Class V. He was given an A grade for this.
It is as follows:

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IMPRESSIONS WHILE SICK

- I . Introduction
 - a Symptoms.

- II. Feelings while awaiting the doctor.
 - a Fear and misgiving.
 - b. Imagination.

- III. After the doctor's visit.
 - a. The ailment.
 - b. The period of convalescence.

- IV. Conclusion.

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IMPRESSIONS WHILE SICK

I know of no more unpleasant condition, than to awake at night and feel positively that one is sick, although entirely ignorant of the nature of the malady. At such a time one's imagination is on the "qui vive" and one is very susceptible to hallucinations. I will do my best to set forth briefly the feelings which I have experienced or imagine that others have experienced upon being taken sick. One night at about eleven o'clock, I awake suddenly and knew definitely that I was sick. I had a pain, and upon considering it closely, I decided that it was on the right side, where I had been taught by hearsay that the appendix has its domicile. By association of ideas I felt reasonably sure that I was suffering from appendicitis. Hence, not relishing the thought of having a rip saw inserted forcibly into my side and afterwards having my appendix carefully chiseled or planed off, I knew not which I was far from happy.

However, I decided that I did not care to have my appendix, which in my opinion was no more

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or less than a balloon placed inside the human body for the express purpose of filling itself with pus and causing its owner, or, as one might say, wearer no end of trouble, burst, and scatter its contents throughout my body, so I decided to call a doctor. While I was awaiting his arrival, my over-wrought imagination could feel my appendix gradually swelling, and I wondered whether the doctor arrive in time. When he did at least arrive, he made a careful examination and used a stethoscope on my side. Then he dispelled my fears concerning appendicitis and told me that I was suffering only from a slight organic attack and would be perfectly well in a few days. This of course relieved me greatly.

This tends to show how a distorted imagination may make mountains out of molehills, and that most things (about) which we worry () never materialize.

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PSYCHIATRIC OBSERVATIONS

X The patient's intellectual functions are intact, and he is, quite obviously, an individual of high intelligence. He is correctly oriented, and in excellent contact with his surroundings. He has had a number of hallucinatory experiences, of a rather vague character. Last summer when he was in Wyoming, several times he had the experience of seeing a sort of a blurring which looked to him like a white hearse in the sky. This occurred two or three times. It was not at all clear cut. The patient had no feeling that there actually was a white hearse there, and he tends to minimize the whole experience.

X Another time when driving an automobile, when he was considerably tired out, he imagined that he saw the tail light of an automobile in front of him, when there was nothing there.

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He has always had very strong and vivid phantasies, which, at times, approach actual hallucinations. If he sees an exciting football game he is likely to have a very vivid phantasy in which the game appears to him.

He has had sexual phantasies, which have been intensely clear and vivid.

On the other hand, his phantasies of his mother have been very "insipid and colorless".

The patient has had certain compulsions and superstitions. For instance, he almost invariably has to get up to see if he has set his alarm clock, after he has set it. When staying where there is gas lighting, he may have to get up several times to make sure that he has turned off the gas.

He has carried out a number of superstitious ideas. For example, he always crosses his fingers when passing an undertaker's shop. He always avoids a black cat, and if he sees one, he spits over his left shoulder. He would never allow anyone to be the third to light his cigarette from a match.

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The patient states that he really doesn't believe in these superstitious ideas, but has acted them out largely because the boys in his group do so.

He has no feeling that people are against him, or that he is being treated unfairly.

He has never had any idea that poison was being placed in his food, or that people were plotting to injure him.

The patient has always been extremely self-centered, egotistical and selfish.

To an extreme degree he has indulged in phantasies and reveries since early childhood. These phantasies have been of a very special and peculiar nature, and have a definite bearing on his behavior, particularly with respect to the commission of crimes.

In this phantasy there has been the definite relationship of "King and Slave", with the implicit power of the King over the life and behavior of the Slave.

It is of importance to note that in his relationship with his companion, there was this same rela-

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tionship as in his phantasy, namely, that one individual was under the complete domination of the other.

Recently he has woven his companion into his phantasy, so that there has been this marked identification of the world of phantasy with the world of reality. He brings over certain ideas from his world of phantasy into his world of reality and from his world of reality into his world of phantasy. This resulted in his becoming pathologically suggestible to ideas in the world of reality which would fit in with his world of phantasy and made him uncritical of abnormal ideas.

This idea of implicit obedience by one party and complete domination by the other, which has so dominated his phantasies for years, expresses itself in his actual relationship with his companion, so that an absolute, solemn pact is made, under which the patient places himself absolutely under the commands of his companion, and they have a special code phrase to express this relationship whenever it is to be utilized (this phrase being "for Robert's sake").

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The patient has always had a marked feeling of inferiority, apparently based largely on the idea that he was physically inferior to his comrades. On the other hand, he quickly realized that he was their mental superior. The result was that he emphasized his mental superiority, in every possible way, with his comrades, assuming a proud, intolerant and contemptuous attitude toward them, and endeavoring to show his superiority whenever possible. He endeavored to stifle all emotional traits which might tend to make him feel at all inferior, and to substitute in their place an ideal intellectual life.

As the patient felt inferior, physically, to others, and could not mingle on equal terms with them, physically, he endeavored to compensate for this by a world of phantasy in which his desire for physical perfection could be satisfied. We see him, therefore, phantasying himself as a slave, who was the strongest man in the world, and who would often fight as a champion for his side against the strongest man of the other side, and always win. In other phantasies he saw himself being attacked, physically, by

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thousands of men, and yet able to overcome them.

It is quite obvious, therefore, that we see here the condition in which an individual substitutes a world of phantasy, in which his desires are satisfied, in place of a world of reality, in which his desires are not satisfied, and in which he feels inferior.

And in addition to this, we see a definite tendency to live out his phantasies in the world of reality. In other words, to force his phantasies into the world of reality and confuse them with it.

His phantasies were so vivid and so necessary to his emotional life that he felt forced to create facts in the world of reality that would conform with his phantasies. His acceptance of suggestions which fitted into his phantasies and his living out of these in the world of reality is definitely abnormal.

He had a marked idea of his own inferiority. The facts largely contradicted this, in that he was forced to realize that he was superior, mentally, to most of those whom he met. He preferred to hunt until he found someone to whom he was actually inferior mentally, to having this contradiction between his feeling of inferiority and his knowledge of superiority. Once he found a person whom he regarded as his superior

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mentally, he established the closest of friendships,
and was pleased to play the role of the inferior.

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It has been emphasized, that the patient felt himself physically inferior to others, when a small boy. As he grew older this feeling of inferiority was further emphasized with regard to his sex life. His masturbation caused him to feel inferior, and the fact that he lacked the same desire for normal relations with the opposite sex, which his companions had, added to this. He compensated for his sexual inferiority by constantly boasting of his prowess and numerous and various heterosexual experiences.

Physiologically he has a marked sex drive. Psychologically sex has played an enormous role in his life. Since he has had a marked sex drive, and has not been able to satisfy it in the normal heterosexual relations, this has undoubtedly been a profound, upsetting condition on his whole emotional life.

While the patient sought to pose as an individual creature without emotions, he was quite at the mercy of his own instincts and emotions, particularly his sex desires. His behavior for the past year has been largely dominated by his own emotional drives, and

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he has merely used his high intelligence to rationalize whatever behavior his emotions have led him to do. Actually his behavior has been motivated by his subconscious mind, and his conscious mind was not strong enough to resist his impulses, provided they would be satisfactory to the one towards whom his sex instinct was directed and whose love and admiration he so desperately needed.

From the patient's own statements, and from all accounts, and from direct observation, the patient appears to be lacking in a normal ethical sense. The only time that he ever seems to have reproached himself or to have felt guilty was when his mother died and when he seemed to feel that her death was due to a nephritis which had been caused by his birth. As he himself expressed it, "My presence is the cause of her absence". And this was said with the appearance of sincere sorrow.

He has discussed, in considerable detail, his various delinquencies, consisting of lying, stealing,

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drunkenness, kidnapping, and murder, and he does not consider that he should be blamed, or that he is guilty of any wrong conduct, for what he has done. He feels sorry that he has been caught, but not sorry for what he has done. As an example, when the question of his eyesight was being discussed, he told of having been fitted to glasses, and then smiles ruefully and says, "I am sorry I ever got them."

On all other matters related to the crime he has no emotional feeling whatever. There has never been any special elation at carrying out the crime when it was thought to be proceeding successfully. He did not get any real thrill from considering himself a "Master Criminal". He did not get a marked feeling of superiority from knowing more about the crime than others, and the only unpleasant emotion he experienced, in retrospect, was the possibility that he might be apprehended. He denied the slightest feeling of grief for any harm or suffering he might have inflicted upon others. He lacks the emotional reaction of either the normal individual or the hardened criminal.

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This split between the intellectual and the emotional processes is very striking. The split between the emotional and intellectual life of the individual is considered by Kraepelin to be the essential feature of dementia praecox (Schizophrenia).

It is a well recognized role in the emotional and intellectual life of an individual, and that alterations between the emotional and intellectual qualities of the individual frequently occur in disorders of these glands. The physical makeup of an individual makes him think very intensely and with a great deal of emotion along some lines, whereas there may be an almost complete lack of emotion when he thinks along other lines. It is being more and more recognized that disturbances of the endocrine glands are closely related with disturbances in the intellectual and emotional life of the individual.

During the examinations the patient was very easily distracted. He often tended to wander away from the subject under discussion, and did not keep his attention carefully focused on the topic before him for any great length of time. This tendency to

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be distracted, or show fatigue of attention, is also shown from a study of his note books, in which it is quite evident that he was constantly inattentive to his environment and occupying himself with phantasies. These phantasies seem to have been prompted, largely, by memories which were more or less from the sub-conscious.

Several special topics appear to have dominated his thinking while in class, and to have been the subject for his note-book drawings. These topics were all ones in which he had a definite and marked interest. His drawings represent, therefore, his interests in religion, in birds, in languages, in sex, and in time.

Although the patient is of high intelligence, and his development, in many respects, is mature for his years, he is, in some respects, quite immature. Emotionally he shows a definite immaturity. His judgments have always been quite immature. He has never developed to the healthy adult level where an individual's emotions are harnessed and directed by his intellectual processes for his own well-being. He has

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remained at the childish level, where his behavior has been controlled almost entirely by his emotions. His intelligence, which is highly developed, has been used mainly to rationalize and explain his behavior, in a satisfactory manner to himself and to others, after he has done it.

He has lacked a proper sense of proportion, and has assigned very high emotional values to certain topics and very low emotional values to other topics. This valuation seems to have been determined by his own emotional reactions, rather than by an intellectual process.

The patient's attitude and reaction to the examination can best be summed up in his own statement:

"I suppose the function of all this is to prolong my life as something worth while. I can't quite correlate that with my philosophy, but it is usually considered a worthwhile life. My folks have decided on all this. Of course I am desperately trying to co-operate with them. As for me I think

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"this medical 'Psychiatric' stuff is all horseshit. Now, I don't know what it's all about, you've not let me in on it, but if you insist on a lumbar puncture you must have good reasons, which you think out-weigh the discomfort for me."

The patient then went on to beg for an anesthetic, either general or local, or for hypnosis, when the lumbar puncture should be done. Then he said he could stand it, if he could make up his mind to it, but probably the doctor would have a "terrific neuresthenic in a nervous tantrum" on his hands. After some more discussion the patient finally said that the question should be left to his family to decide.

His blasé attitude is very largely an over-compensation for his feelings of inferiority, as he himself says. But in part it may be regarded as an inability to react normally to stimuli, to which others do react with more emotion than he does.

His interest in sex dominates his thinking, emotions and behavior in much the same manner that the interest in religion dominates the thinking, emo-

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tions and behavior of some intensely religious people.

In his early life the patient had an intense interest in religion. He was also interested in some pictures of Madonnas, and there was some identification of his mother and his aunt with each other, and with the madonna. There is also the regarding of himself as a very superior being, not subject to the ordinary man-made laws. At times he has drawn pictures of the Crucifixion.

Of late years he has been emphatic in calling himself an Atheist. He has been critical of God, if there were such an individual. We see, therefore, evidence of a mental conflict between his desire for religion and his rejection of it.

With the identification of his mother as the Madonna, with his regarding of himself as a superior individual, not subject to man-made laws, and his intense interest in the Crucifixion, there is possibly the beginning of an identification of himself with Christ, or an insane transformation of his personality from Nathan Leopold, Junior, to Christ. This

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type of thinking is, characteristically, present in the early stages of dementia praecox (Schizophrenia), even before a definite diagnosis of the disease can be made, because of its insidious onset and development.

Since this disease commonly develops very insiduously there are many cases in which it is impossible to say exactly when the disease starts, and there is a certain prodromal period in which we see a number of vague, but fairly characteristic, symptoms. The development of this disease is very variable, depending upon the physical and mental makeup of the individual, his education and his environment.

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ENDOCRINE SUMMARY

The patient shows definite evidence of a disorder of the endocrine glands. The following physical signs are again mentioned for discussion:

The patient has a marked vasomotor instability, and a definite neuro-circulatory asthenia. He has considerable hypertrichosis (over-development of hair). He runs a low temperature, a low pulse rate, and a low respiration rate. His temperature is 98.2, his pulse is 63 per minute, and his respirations are 10 to 13 per minute. He runs a low blood pressure, which has varied, during a number of observations, from 80 to 110 mgs., systolic pressure, and from 35 to 60 mgs. diastolic pressure. Although under some emotional tension and not relaxing perfectly, so that results of different tests did not check properly, he has a basal metabolism of minus 5 percent. He has an abnormal blood sugar tolerance curve, and sugar appears in the urine during this test. This demonstrates an inability to properly handle carbohydrates and a decreased tolerance towards sugar. His

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fasting blood shows 100 mgs. of dextrose. One-half hour after the ingestion of sugar it is 173 mgs.; one hour after the ingestion of sugar it is 210 mgs., and two hours after the ingestion of sugar it is 148 mgs.. The normal blood sugar curve should not show a rise above 180 mgs., and at the end of two hours should be back to the fasting level. The patient shows, therefore, an abnormally high rise in the blood sugar, with a failure of the blood sugar to return to the normal within two hours.

The carbon-dioxide combining power of the blood plasma is 52.2 volumes percent, the normal value being 65 volumes percent. This demonstrates a slight tendency towards acidosis. The blood non-protein nitrogen is 44 mgs. per 100 cc of blood. The normal non-protein nitrogen varies from about 30-40. The patient, therefore, has a slight increase, which would raise the question of cardiac-renal disease (incipient Bright's disease).

The X-ray examination of the skull reveals a small sella turcica, which is almost closed, by the fact that the anterior and posterior clinoid processes almost meet. There is a marked calcifica-

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tion of the pineal gland.

The right coronal suture shows osteosclerosis throughout the greater part of its length, and the suture line is practically obliterated.

The lambdoidal suture is very much less well visualized than is the rule for this age of individual. In fact, it may be said to be obliterated.

The patient shows very little reaction to the injection of one-half cc of adrenalin chloride solution, one to one thousand.

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This whole picture may be taken as indicative of a disorder of the vegetative nervous system and of the glands of internal secretion, which are closely linked up with the vegetative nervous system.

The disorder of the vegetative nervous system seems to be mainly in the autonomic segments, although we now know that no one part may be affected without the other parts being affected to a certain extent.

The essential feature of this disorder of the vegetative nervous system is a vagatonis, together with considerable irritation of the sympathetic portion.

There is definite evidence of involvement of the pineal and pituitary glands. The X-ray shows a marked calcification of the pineal gland. This disorder is but little understood. However, it has been well established that intellectual and sexual precocity are often linked up with such a disorder. This has been strikingly illustrated in a number of cases of tumor of the pineal gland. When we appreciated the intellectual precocity of the patient and

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the marked sex urge which has for years caused him to masturbate two to three times a day, these findings have considerable significance.

As evidence of a pituitary disorder there is the small and almost closed sella turcica, the hypertrichosis, with the nasal eyebrow, and the abnormal sugar curve.

The X-ray of the chest does not show any present enlargement of the thymus. The rest of the X-ray shows nothing of pathological importance.

This seems to be a case of definite endocrine disorder involving particularly the pineal and the pituitary glands and the autonomic segment of the vegetative nervous system, associated with a cardio-vasculo-renal inferiority.

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The influence of the patient's governess, "Sweetie", is of great importance in understanding this case. She was a definitely abnormal individual, who, being closely associated with him in the tender and formative years of his development, produced a profound and unwholesome effect. She produced a definite antagonism between the patient and his parents and brothers, which later was developed by the patient as a revolt against all authority. This governess set herself up as being superior to the patient's parents in every way, and the patient accepted this idea. He even believed that her absurd taste in dress was superior to that of his mother. She gave the patient a very abnormal and unhealthy introduction to sex topics, and he has never been able to secure a normal viewpoint on this subject since. Some of the things which she did to him have been forgotten or repressed, but the effects of such treatment still remain and still act as determinants for his behaving and thinking.

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The mental condition which the patient manifests is an acquired one, and there is no evidence of any similar disorder in the family, with the possible exception of one incident in the collateral line, namely, a second cousin.

Physically, part of his trouble is hereditary, namely, a predisposition to Bright's disease, and part of his trouble may be associated with his mother's health before he was born, but science has not yet progressed sufficiently to be able to state the exact cause of the rest of his sickness.

However, it may be said that our present degree of knowledge gives us no reason to feel that a mental condition such as the patient's is of a hereditary nature or that it will reappear in future generations.

With the predisposing effect of his physical condition the unfortunate experiences of his early childhood are the most important causes leading to the development of his present condition.

The family have apparently endeavored to do everything possible to bring the patient up in a suitable manner, and there has been no conscious error or neglect on their part. Although he is young, the prognosis is not good.

June 30, 1924 Karl M. Bowman M.D. Boston

(LEOPOLD) June 30, 1924 H.S. Hulbert M.D. Chicago