5-1-1932

Review and discussion of the symptoms of schizophrenia

Herbert F. Staubitz
University of Nebraska Medical Center

Follow this and additional works at: http://digitalcommons.unmc.edu/mdtheses

Recommended Citation
Staubitz, Herbert F., "Review and discussion of the symptoms of schizophrenia" (1932). MD Theses. Paper 600.

This Thesis is brought to you for free and open access by the College of Medicine at DigitalCommons@UNMC. It has been accepted for inclusion in MD Theses by an authorized administrator of DigitalCommons@UNMC. For more information, please contact digitalcommons@unmc.edu.
REVIEW AND DISCUSSION
OF THE
SYMPTOMS OF SCHIZOPHRENIA

SENIOR THESIS

UNIVERSITY OF NEBRASKA
COLLEGE OF MEDICINE

1932

H. F. STAUBITZ
# REVIEW AND DISCUSSION OF THE SYMPTOMS OF SCHIZOPHRENIA

## INDEX

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Page 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I General Symptoms of Schizophrenia</td>
<td>Page 5</td>
</tr>
<tr>
<td>Chapter II Dementia Simplex</td>
<td>Page 21</td>
</tr>
<tr>
<td>Chapter III Hebephrenia</td>
<td>Page 25</td>
</tr>
<tr>
<td>Chapter IV Paranoid Praecox</td>
<td>Page 29</td>
</tr>
<tr>
<td>Chapter V Catatonia</td>
<td>Page 36</td>
</tr>
<tr>
<td>Chapter VI Conclusion</td>
<td>Page 45</td>
</tr>
<tr>
<td>Bibliography</td>
<td>Page 52</td>
</tr>
</tbody>
</table>
Review and Discussion of the Symptoms of Schizophrenia

Introduction

It is the author's purpose to set forth the various formulations of the Schizophrenic groups and to enumerate, evaluate, and illustrate the symptoms encountered in this disorder. Much of this material will be quoted from various recognized authors, and for the rest I shall draw on the files of the Nebraska State Hospital at Ingleside, Nebraska. These files were open to me through the courtesy of Dr. G. E. Charlton, Superintendent. Dr. W. E. Kelly, Assistant Superintendent, helped me select the cases and pointed out many symptoms which he has observed to be prevalent in the cases under his care.

It seems proper and fitting that a brief history of this condition be considered at this time in this introduction. The history of Schizophrenia is essentially that of Psychiatry itself. Undoubtedly it was recognized in ethical times and reports of cases present at that time fit our present picture of the malady. We shall however mention only descriptions as given since the year 1674. 

Willis at this time describes this condition under the head of stupidity and moroseness in certain young persons who, lively and spirited and at times even brilliant in their early childhood, passed into obtuseness and hebetude during adolescence. There was no attempt at establishing a definite nomenclature at this time and no classification was attempted.

Phillippe Pinel in 1790 describes accurately a case of catatonic deterioration, and called it a type of idiocy. Thus for a long time we find Catatonia classified as a type of feeble-mindedness. This was added to by Esquirol in his "Malades Mentaes", when he used the term "acquired idiocy".

Then in 1764 Vogel coined the term "Paranoia" to correspond to "monomania" and we find the paranoid praecox described and classified under this heading. Heinroth (1818) and Zeller and Ellinger in 1845 introduced the term
"vesania" with practically the same interpretation as paranoia.

In 1850 we have Morel using the term, "démence précoce" but with no mention of the subdivisions as they are recognized today.

Kahlbaum in 1863 in his classification again uses "vesania" and in 1868-1874 describes catatonia while his assistant describes hebephrenia and recognizes its connection with catatonia. In 1884 Kahlbaum adds heboidophrenia to match out simple dementia of today.

Meanwhile, here in the United States, Spitzka and Kieman had accepted catatonia as early as in the early 80's.

In 1898 Krapelin formally introduced the term Dementia Praecox as a disease entity at the Heidelberg meeting. He also developed the various subgroups and described their relationship to each other. The term has several interpretations. The "demential" refers to the symptomatology and aroused much discussion as later investigators claimed to find cases which were arrested before attaining this degree. This criticism is still in a rather doubtful position and subject of conflict among the various schools. The "praecox" is explained in a dual manner; one faction claiming it refers to the precocious age at which the disease appears, and the other interpreting it to indicate the precocious manner in which the dementia develops.

The lay public and especially those of the better educated classes began to regard "Dementia Praecox" as a life sentence to insanity. The term seemed to convey a very poor prognosis and physicians were hesitant to use it in the presence of the family of the patient. Then in 1903 Bleuler coined the term "Schizophrenia" and interpreted to signify the "splitting of the psyche". He claimed this nomenclature was justified on the ambivalency of the symptoms presented by patients classifying under this entity. The subdivisions were retained as formerly considered under the old term of Dementia Praecox.

Thus we find the two terms synonymously in the literature of today with reference being given to the term Schizophrenia and the recognized subdivisions being: Dementia Simplex or Heboidophrenia, Catatonia or Katatonia,
Hebephrenia and Paranoid Precox.

Recently (1922) Adolph Meyer has attacked both of these terms on the

grounds that they both set up a fatalistic tinge which is not consistent

with the standards of an advancing medical profession. He states the malady

should be approached from the early diagnostic standpoint and efforts dir-

ected at control instituted at this time. On the above grounds he prefers

to classify them on a sweeping affective disturbance and other peculiar dis-

turbances of mental function. Then Meyers would have us do away with our

present classification of all psychosis and psycho-neurosis and let symp-

tomatology be our guide. In such a classification our dementia praecox is to

be listed as a "parergastic reaction type" of which more will be said later./\)

Some reason should be offered for our consideration of this clinical

entity. So I am including some statistics in this introduction. It is stated

that there are twice as many hospital cases of Schizophrenia as there are of

Tuberculosis. Each year, not less than thirty to forty thousand individuals,

soon after adolescence or in the first flush of manhood and woman-hood fall

victims to this dread disease. Let us then consider what the percentage is

in one of our own state hospitals. On examining a series of two thousand,

first entries we find Dementia Praecox to head the list with five hundred

and twenty-one cases or a percentage of twenty-six and five hundredths.

This corresponds to figures published for similar instutions which place

it at twenty-five percent. Then when we consider the percentages of the var-

ious types we find the following results.

Unclassified -------------------------- 24.9%

Paranoid ------------------------------ 37.2%

Dementia simplex ---------------------- 15.1%

Catatonia ----------------------------- 11.3%

Hebephrenia --------------------------- 9.2%

( See Table A)
These figures are somewhat out of line with similar figures of other institutions, but we find a wide margin of variance in all sets as regards the incidence of the subdivisions. This is due in part to errors in diagnosis and in part to the fact that many of our first admissions had previously been committed previously and also that our older admissions dated back to the time when the subgroups were not so clearly defined. There is also tendency to let Schizophrenia cover all this class and not differentiate further if the difference is not easily made.

In a series of six hundred first admissions (to our hospital) we find a rather curious age incidence curve. (See Table B) We reach an anti-peak in both sexes at the age of twenty-two years and a peak at the age of thirty years of age. Other similar charts show the highest incidence at the age of twenty-two years with the anti-peak at thirty years of age. We may explain our curve on the previous commitments of some of our patients to other institutions and also the high percentage of the Paranoid type would tend to raise our peak in years.
<table>
<thead>
<tr>
<th>Diseases</th>
<th>per-cent Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traumatic Psychoses</strong></td>
<td></td>
</tr>
<tr>
<td>Senile Dementia</td>
<td>11.5</td>
</tr>
<tr>
<td>Presentile Dementia</td>
<td>.35</td>
</tr>
<tr>
<td>Psychosis with Cerebral Arterio-Sclerosis</td>
<td>5.1</td>
</tr>
<tr>
<td>General Paralysis of the Insane</td>
<td>5.55</td>
</tr>
<tr>
<td>Psychoses with Huntington's Chorea</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Psychoses with other Brain or Nervous Diseases</strong></td>
<td>.05</td>
</tr>
<tr>
<td>Alcoholic Psychoses</td>
<td></td>
</tr>
<tr>
<td>Korsa Kows</td>
<td>.15</td>
</tr>
<tr>
<td>Chronic Alcoholism</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Psychoses Due to Drugs and other Exogenous Toxins</strong></td>
<td></td>
</tr>
<tr>
<td>Drug Addict</td>
<td>.15</td>
</tr>
<tr>
<td>Toxic Psychoses Unclassified</td>
<td>1.05</td>
</tr>
<tr>
<td><strong>Psychoses with other Somatic Diseases</strong></td>
<td></td>
</tr>
<tr>
<td>Post Infectious</td>
<td>2.</td>
</tr>
<tr>
<td>Unclassified</td>
<td>.15</td>
</tr>
<tr>
<td>Exhaustion Psychoses</td>
<td>.65</td>
</tr>
<tr>
<td>Endocrine Instability</td>
<td>.1</td>
</tr>
<tr>
<td><strong>Manic Depressive</strong></td>
<td>25.35</td>
</tr>
<tr>
<td><strong>Involutional Melancholia</strong></td>
<td>.9</td>
</tr>
<tr>
<td><strong>Dementia Praecox</strong></td>
<td></td>
</tr>
<tr>
<td>Unclassified</td>
<td>6.5</td>
</tr>
<tr>
<td>Paranoid</td>
<td>9.7</td>
</tr>
<tr>
<td>Simple</td>
<td>4.45</td>
</tr>
<tr>
<td>Catatonic</td>
<td>3.</td>
</tr>
<tr>
<td>Hebephrenic</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26.05</td>
</tr>
<tr>
<td><strong>Paranoia</strong></td>
<td>2.35</td>
</tr>
<tr>
<td><strong>Epileptic Psychoses</strong></td>
<td>6.</td>
</tr>
<tr>
<td><strong>Psychoneuroses and Neuroses</strong></td>
<td></td>
</tr>
<tr>
<td>Psychoneurosis</td>
<td>.35</td>
</tr>
<tr>
<td>Hysterical Type</td>
<td>.3</td>
</tr>
<tr>
<td>Neurasthenia</td>
<td>1.3</td>
</tr>
<tr>
<td>Anxiety Neuroses</td>
<td>.1</td>
</tr>
<tr>
<td><strong>Psychoses with Psychopathic Personality</strong></td>
<td>2.95</td>
</tr>
<tr>
<td><strong>Psychosis with Mental Deficiency</strong></td>
<td>3.35</td>
</tr>
<tr>
<td><strong>Mental Deficiency without Psychoses</strong></td>
<td></td>
</tr>
<tr>
<td>Imbecile</td>
<td>1.05</td>
</tr>
<tr>
<td>Moron</td>
<td>.1</td>
</tr>
<tr>
<td>Idiot</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,000</td>
</tr>
</tbody>
</table>
Chapter I

General Symptoms of Schizophrenia

In discussing these symptoms I will follow the outline as found on page two hundred and seventy-three in "Clinical Psychiatry" by Strecker and Ebaugh. Later I will try to evaluate them in accordance with their frequency and importance.

The first classification is, "Mental Examination" and the first sub-head is, "general behavior". These patients have oddities of many types which show as impulsive actions either of the motor or sensory character. Thus we see capricious appetite. One of our patients would not eat meat, another had an aversion for butter. To illustrate other types of activity, we had a patient who pulled suddenly at her lip or rapidly run her hands over her face though there was no apparent reason for her so doing. The patient may alter his gait in some peculiar manner so as to attract our attention or may even go so far as to walk backwards. There are numerous other oddities which are not constant and do not occur consistently enough to warrant further mention at this time.

Silliness is frequently present and becomes noticeable after a short acquaintance with the patient. One patient begged me not to sit in a certain chair, but made no attempt to explain his request or to restrain me from so doing. The most trivial affair calls forth a shallow neighing laugh and often this laugh occurs without any cause. Frequently the patient tells you he had no desire to laugh and just could not help it. Grimaces are often seen and add to the general picture of silliness. The same sort of silliness appears in their speech and often a meaningless sort of jargon results, which is often described as a senseless playing on words and phrases. An example of this was given to me by a young male patient. He said, "If I was a doctor I would be a doctor, not a horse or a mule. My father told me not to tell."

Incongruity is noticed in many fields, an example in the affective field
is the laughing of patients when relating a gruesome or sad story. Another
demonstration is the desire to leave the institution and a rattling of the
closed door which if it is opened the patient will ignore and make no at-
tempt to escape. The condition is seen also in that the patient bedecks him-
self with all sorts of metals and then covers them up with his coat lest they
be seen.

Stereotypy is much in evidence and movements are repeated over and over
again. The patient must cross himself before each bite of food or he must kick
his chair each time before rising. He frequently transfers this stereotypy to
his speech. One of our patients would constantly reiterate "ninety-nine", and
persist in this for fifteen to thirty minutes at a time. This stereotypy of
speech does not mean a stereotypy of thought as the patient may tell you a
little later what he was trying to say.

Impulsive outbreaks are common and occur in all fields. In the emotional
field, anger, fear, joy or sorrow may suddenly appear and disappear just as rap-
dly as it appeared. The patient may be sitting perfectly quietly and then
suddenly break forth in a torrent of abuse which is not directed toward any
person or object in particular. This impulsiveness may take the part of mot-
or activity and then the patient comes up fighting and in this state he does
not care whom or what he hits, nor does it make any difference whether he
win or lose. He can not give any reason for this outburst nor does he ex-
press himself as desirous of it. I had one patient tell me that he felt as
if he had to fight but knew that he ought not to and that he tried not to.

Untidyness is frequently seen and becomes most marked in some cases.
Many of our patients refused to go to toilet even though they were phys-
ically able so to do. They did not desire to have their clothes changed
even though they be drenched with urine and putrid with feces. They can not
be taught to bathe themselves or to brush their teeth. They spit on the floor
and on themselves or other patients. Their hair is disheveled and their
clothes are just hung on them, or may be torn off completely. They may re-
tain saliva in their mouth until putrefaction occurs and release it only when
their mouth is forced open by the attendants. One of our patients used to chew a food, swallow it, regurgitate it and chew it again.

There is marked mental inertia and often in the course of an examination they will refuse to solve the simplest of problems and the next day answer it quickly and readily. They often refuse to read on the ground that it is too much effort to keep their mind on the story. They may refuse to talk because their mental activity can not keep up with their stream of speech.

Rigidity is frequently encountered, and one meets with marked resistance in attempting to flex an extremity of a patient in this condition. This is not an elastic form of rigidity and once the attitude is change the patient may remain just as rigidly in the new position as she did in the old. Awkward attitudes are assumed and maintained over long periods of time. One of our patients sat in a chair with his hands in his lap and his chin flexed on his sternum. He maintained this position without any movement until he was led to bed or to the supper table. In bed he maintained the same attitude, though placed on either side. I was told he had maintained this condition for over seven years. If the head was pulled up there was marked resistance and as soon as you let go it started to slowly drop back into the old position again.

Refusal of food is very common and may be explained on several grounds. Some authors suggest a patient gets a pleasurable sensation of an erotic character out of being tubed. Many offer this symptom as evidence of negativism. Many times it may take place as apart of the delusional system, for fear of being poisoned or compelled to eat it. One of our patients refused food on the grounds that people were talking about him and so he did not have to eat. We tubed this man once and after that he was willing to take fluids and existed on this sort of a diet for a period of six weeks or more. Another favorite excuse for not eating is that their throat is blocked up or cut, or that they are minus some of their organs. An occasional excuse is that they are of a devine character and so are not dependant on food for their maintainance.
Such patients are very troublesome as they may not only refuse to eat but may induce emesis and so rid themselves of forced feedings.

We now come to the alterations in activity and speech. Here we find many different types of disturbances.

Incoherence is not unusual in either field. For this reason we get many peculiar answers to our questions at times. That they understand the question is shown in that they may start to answer it and switch off again. Thus when asked his age one patient replied, "Five thousand years and a whole army of them. They are in my veins and lice." Word salad is common and means a senseless jargon of words. An example, "My mother is the sun, a woman is two men, a man is two women, a woman is a devil there are no angels. My father is the sun, and that is one notten or twelve, I file iron it is softer than wood." This trait is explained by some as due to poverty of thought, by others as pure indifference and by others as part of the dream state present.

Rambling is more common in Schizophrenia than in Manic Depressive insanity and often runs into a regular maze with no return to the original theme at any time. There is an aimless sort of speech with no definite goal ever being apparent. The patient may give you his name and then with no break in his stream of talk be talking about horses and thence to children and then finish up in a stream of profanity. One may have to interrupt this jargon by another question in order to complete your examination. Here is an example of this sort of speech, "I am John Doe, three little girls with golden slippers, grandpa, I do not have to tell, buck private in the rear rank, around the rose bush."

Verbigeration consists in repetition of words and phrases and constitutes a stereotypy of speech. This may result in senseless rhyming and "clang" association. Example of one is, "I will never get well, never, never, never, never." Clang association is as follows, "Boy, toy, toy, boy, playday, hay, straw, maw." This type of thing may be repeated time after time and monotonously intoned. It may be said in a glad or sad mood and may be called forth without any sort of external stimulus.
Neologisms are new words coined by these people. Often the are the result of the coupling of two recognizable words. Thus we get "grusor" from the words gruesome and sorrow. Many times the words are incomprehensible to us until the patient explains how they were derived. To some authors this is an evidence of regression on the part of the patient and resembles childishness in the form of prattle. Another explanation is poverty of thought or block of the will.

Echolalia means the repetition of words heard by the patient with no evident purpose to be accomplished. Thus in answer to your question the patient merely repeats your question. It is a sort of mimicry and he may repeat any word or phrase you address to him. This has a counter part in the field of action and then it is known as echopraxia. Thus the patient is apt to assume any pose you might assume in the course of examination without any orders so to do. He will fold his hands if you do and may imitate you as you write though he have neither pen or paper. This is also considered a type of regression or of automatism.

True automatism is that condition in which the patient will do exactly as you tell him though he may perform the action in such a way as that there is no doubt that his mind is not on what he is doing.

Mutism is seldom seen except in the condition of acute catatonia. The patient refuses to talk or else has such a great inhibition of will that he cannot talk. I have seen one young chap try to move his lips and even wet them in preparation to talk and yet not a sound crossed his lips. A few days later his patient burst forth into a stream of foolish prattle with no evidence of difficulty in speech what so ever. The basis for this condition is considered as negativism while others claim it is all a matter of indifference. Ambivalence of the will and the existence of a dream state have also been advanced as explanations of this condition. Not infrequently a very temporary mutism develops in other types of praecox.

Negativism is present in most cases in some degree at least. It may be
present merely as a superficial stubbornness or to the degree where it is a
frank reversal of orders. The patient wants to get up when it is time to go
to bed and to remain in bed when it is time to arise. If asked to open his
eyes he closes them the more tightly. When ordered to eat he refuses to do so.
There may be just an ignoring of your request and any attempt to resist him
calls forth marked resistance on the part of the patient.

True catatonia when present is probably the most disgusting symptom of
them all. The patient ceases to be a human being. They merely sit where they
are placed and appear as a mere mass of flesh and bones. They deposit their
excreta in their clothes and make no effort to move out of them. They assume
awkward and repulsive positions and maintain them indefinitely. They make no
attempt to chase the flies that may be crawling about on their face or to re­
move pins stuck into them. They can be moved only by sheer force and then
give no evidence of realizing they are being moved. They do not speak and on
occasions grunt as if they were some form of animal. Usually the head is bow­
ed and the eyes pressed tightly shut.

Catelepsy or "cerea flexibilitas" frequently accompanies catatonia and
is pathognomonic when it does occur. It consists in a waxy moldability in
which the patients remain in whatever position they are placed. If an extrem­
ity be placed in an awkward and uncomfortable position it may be kept there
over an indefinite period of time.

We now come to the consideration of mood and special preoccupation which
are some of the most constant and diagnostic symptoms. There is a definite
dissociation of affect. Thus there is an outburst of unmeaning abuse without
external cause or strong excitement in the patient himself. I have seen a
patient great the doctor with oaths and a threatening attitude and act as if
he were ready to fight right now. There would be no change in facial express­
on however and in a few seconds he would be talking to the doctor as if they
had been lifelong friends. I have seen a patient rise suddenly up out of his
chair and dash across the room and strike another patient and then tell us
the other patient was his best friend and he did not mean to hit him. This is considered as ambivalency or a conflict in the actions and the mental activity — possibly a conflict of purely mental character. There is also present a loose connection between the elements of thought coupled with a poverty of ideas. This is a failure of psychic synthesis and a loss of the inner unity of the activities of intellect and feeling and volition. Kraepelin says the near connection between thinking and feeling, between deliberation and emotional activity, on the one hand and the practical on the other is lost. Emotions do not correspond to activities or ideas. The patients laugh without recognizable cause, without relationship to their circumstances or experiences, smile while they relate their attempt at suicide and are much pleased that they "matter so foolishly" and must remain in the institution; on the most insignificant occasion they fall into violent terror or outbursts of rage and then immediately break out into a neighing laugh Dr. White describes this as an intra psychic ataxia or a disturbance between the coordination of the intellectual attributes (noopsychic) and the affective attributes (thymopsychic). Bleuler says, "Affect is not consistent with the mental activity at the time." He gives parathymia as meaning a complete reversal of affect, this means the patient cries when the situation demands laughter or vice versa. He attributes this phenomenon to a bivalency of emotional activity. Thus a woman may love her husband and hate him at the same time. A person desires to go to a certain place and abhors the idea at the same time.

Accompanying dissociation of affect we often see paraminia or a diminution of affect. Thus the patient is merely depressed slightly when extreme grief would be the normal reaction. Death of a very close member of the family produces only very slight and most temporary effect on these patients. Delusions of the most horrifying nature are described and related without any evidence of emotional disturbance on the part of the patient. In a very calm and unaffective manner one of my patients told me that people were taking out his eyes and testicles. They often witness surgical procedures on their
own bodies without outward evidence of discomfort or concern. We had occasion to remove a toe from one of our patients and used a local anesthetic. The patient sat up and watched the procedure and talked and laughed all during the operation. He even wanted to put the toe in his pocket at the close of the operation and was slightly irritated when we refused this request.

Indifference is another marked phase of this disorder and may amount to almost complete shutting out of the external world. This constitutes a complete construction of autistic world. They seem to sink into a dream state from which they cannot be aroused. This indifference gives rise to some most bizarre answers to our questions. "I don't know" is the frequent resort of these patients in an effort to frustrate attempts to question them. This type of reaction in which an answer indicating understanding but lack of interest is called "Vorbeireden" by the Germans. An example follows, "How old are you?" "One hundred or two hundred years, sir." This tendency leads to an aloofness, daydreaming, and neglect to studies or work. It also gives rise to such characteristics as yawning and stretching during the course of the examination or while they are being presented in clinic.

This lack of interest may first be detected in the haggard or lazy appearance of the patient. This symptom appears early and is one of the first to be noticed by the relatives of the patient. He desires to spend more and more time in bed and refuses to play or to take part in social activities. He does not want to see people or to be bothered with them. One notices an abruptness in the answers of the patient and refusal to shake hands with former acquaintances. There is at the same time a tendency to replace reality with ideas and fantasy. As the dereistic tendency continues they substitute symbols to express their fears and wishes, about this time they produce symptoms of some dread disease to account for their lack of activity. These ideas gradually assume the proportion of actual delusions and hallucinations. This indifference was beautifully displayed by a young girl when she walked all over the staff room and looked at all the pictures while before the clinic. She
spent only a few minutes at each one however and payed no more attention to the staff or what we were saying about her then if we were not there. She had previous to entrance broken her engagement. They were to have been married just a week after her commitment to the hospital. She offered no explanation merely saying she was tired of it. She did not think he cared much anyway and she surely did not.

This indifference may be obscured by what is apparently a great deal of ambition. There is usually this difference. Many projects are started but a very few of them are completed and there is an evident disregard for detail. The patient starts a piece of embroidery and when it is half finished decides she does not like it. Then she decides to learn to draw and after a few attempts that is laid aside. The same sort of thing happens when a male praecox constantly changes his occupation.

Persecutory delusions are generally present. The basis of these is an attempt to lay their failures at some one elses door. Their neighbors tore down the fence they do not want to repair. The man next door punctured the tire and so he could not go to work today. This gradually assumes an air of grandeur and they become persons of importance. The lodges are all fighting over them and gangs are formed to persecute them as one man is afraid to bother him alone. There is however no attempt to directly approach the men bothering him. He may attempt to follow them or to intimidate his wife. He will avoid his persecutors though and dares not face them and demand a showdown. He may however in a sudden fit of activity shoot to kill or fight but this is the exception rather than the rule, and very rare indeed is it the result of a previously laid plan.

The praecox is often badly treated in his own mind, people are constantly annoying him. They do not give him as good food as his neighbor is getting and they make him work too hard. One man complained the county helped to take care of other families in need in his neighborhood but would do nothing for him although he worked every day. Thus he builds up a general suspicious-
ness of everybody. One patient refused to answer any of my questions till I wrote down my name and address for him. This trait frequently gets them into court as they go there and ask for protection against their imaginary enemies.

Suspicion of attempts to poison them occur so frequently that we always questioned our patients most closely for such ideas. They may deny a direct question on this subject but by asking several differently put questions it can be demonstrated that at one time or another they felt as if some one had put something in their food. One patient was sure his father had sprinkled strychnine on his pancakes, though he could offer no reason for such actions nor had he ever seen his father do anything which might be interpreted as such. Another patient complained a neighbor had applied an ointment to his genitals which was slowly poisoning him.

Ideas of reference frequently develop and are expressed in the most bizarre forms. These references may occur in the form of imaginary voices or taken from conversation of other people or even be extracted from the daily newspaper. One patient heard two men talking, who were utter strangers to him, one of them remarked, "That fellow must have slept in the park all night." The patient translated this to mean they were accusing him of committing a murder. These voices are usually accusatory in nature and often allude to sex conduct of the patient. They accuse him of masterbation, rape, or bigamy. Various acts observed around them are often translated as a direct accusal of some crime, thus a mother spanks a child and the patient translates this to mean the mother would spank him for one of his imaginary wrong doings.

Ideas of influence are not an uncommon occurrence. The patient is being influenced to do things which he has no desire to do. This influence is often accomplished by hypnotism, ventriloquism, wireless, radio, or some form of electricity. One of our patients had what he called "magnetic rheumatism" as we had a big magnet in the basement which when turned on caused him to have pains in all of his joints. Another patient had "thinkers" attached to the top of his head by which people were able to read every thought he had. A woman patient thought our sphgmomanometer was some sort of a radio by which we
could control her actions. Many of them tell weird stories of hypnotism and the hypodermic needle is blamed for all sorts of control. Such patients are very hard to work with if intravenous work is necessary as often they display terror as soon as they see the needle.

Hallucinations of an auditory character are very frequent and are of a most disagreeable nature when they do occur. These voices may be located at a point far distant from the patient or close at hand and in some cases are interpreted by the patient as emanating from his own body. Lengthy conversations occur between these voices or the patient may merely be in a listening attitude for long periods of time. These voices may be identified as belonging to some friend or may be entirely unknown to the patient. They are usually accusatory but may offer advice or issue commands. They are often given a religious identity and may be Christ, God, or the patron saints.

Visual hallucinations are less seldom seen and when present are also of a disagreeable nature. One of our patients saw a huge machine which was belching forth blue smoke and green gas and this so terrified him that he ran several miles to escape this monster. Animals are often seen in these hallucinations and are always large and ferocious. These and other hallucinations show the bizarre stories coined by these people. The tactile hallucinations are less frequently seen and share the same disagreeable character as do the others. Snakes, worms, serpents, or rodents are often felt crawling on or under the skin. One woman insisted she could feel germs crawling around under her finger nails and so was compelled to wash her hands every few minutes.

Bizarre somatic delusions are frequently seen in these patients. Organs are felt to be missing and one of our patients insisted her entire stomach and intestines were missing. Another patient thought his eyes and testicles had been removed. One woman said her bowels were plugged up and attributed this to the presence of snakes in her body. One woman imagined herself to be pregnant and at full term and was even able to produce symptoms such as those
seen in a pregnant woman. She even simulated labor pains and peculiarly it was just nine months from the date on which she fancied her impregnation had taken place. She was also sure it would be necessary to do a caesarian operation to deliver the child.

Over compensation in the form of day dreaming phantaisies are often seen in very bizarre forms. One of our patients told stories at great length of his bear hunts which he took daily though he was working around the hospital all day. These bears were all well over two ton and sold for a very large sum of money. He owned the hospital and had built it all himself. Another patient related stories of being to town and completing business deals of all sorts though he never left the ward. These patients assume great names for themselves and tell stories to match their characters, Christ, Henry Ford, and Christ's wife were all on our wards.

Several miscellaneous mental symptoms are still left for discussion. We find early in the course of the disease insomnia, and the patient is awake most of the night and living in his dream world. Headache is often complained of at this time. Appetite begins to show peculiar changes, the patient may refuse to eat or develop a tremendous appetite. There develops an apprehensive fear which he describes as an indefinite feeling that something is going to happen. One patient got up in the middle of the night to warn his sister that she was in danger though he could not tell her for what reason he thought so. Melancholia may develop and simulate the depression of the manic depressive psychosis but bizarre delusions are usually seen and form the distinguishing feature. Peculiarly the intellect, memory and orientation is rarely changed.

Schizophrenia has a language all of its own and Dr. W. A. White discusses it as "prearchaic" or "archaic". The prearchaic type reveals a lowered intensity of imagery, of affectivity, and lack of an attempt to establish a relationship between these images, and a lack of real thought processes. Thus it resembles the writing of a child and furthers the idea that a regression
occurs in this type of disease.

The archaic writing reveals its images more vividly and assumes a demonic character. It still lacks objective and reveals an inability to separate the hallucinatory and delusional from the realistic. It reveals a paralogical line of thought, with a comparison of objects on similarities and ignoring the differences. This also is described as the law of participation. Thus a woman writes, "The table has legs. A man has legs. A man is a table." We see another example of this in the following, "Stags run fast. Some Indians run fast. Some stags are Indians." There is also a tendency on the part of these patients to convert heteronomes into homonomes. They pick out some insignificant phase, which we would never even observe, and use this as a basis of comparison and form linkages which are incomprehensible until the patient draws our attention to the connection. Clang associations and neologisms are evident in their writings just as they were seen in their speech.

Dr. N. D. C. Lewis offers the following observations on the artistic efforts of the Schizophrenic. "Death symbols are seen and are very poorly disguised. Patients with conflict headache often sketch distorted heads. Symbols of mythology and ethnology are frequently seen. Sadistic and criminological trends are often revealed in an interesting setting; moreover early sexual misdemeanors and experiences with attending conflicts appear in nearly all drawings of Schizophrenia. The substance of their delusions and hallucinations are seen in their drawings which frequently tend to become childish."

I have read the letters of many praecox patients but have never had the opportunity to see any of their artistic attempts. Their letters were often written so as to utilize all the possible space on the paper. They wrote in the margins, between the lines of the printed heading, on the back and then some of them wrote on the inside of the envelope. One most interesting letter came to my desk for reading. It was written in mirror writing and had to be held in front of a mirror or read on the back by holding it up in front of a strong light. The contents were delusional and this letter contained a re-
port of conditions as he found them in this hospital. He also had a peculiar habit of writing his letters in the form of a dialogue. Tracing over of words and underlining is commonly seen, all the words are retraced and underlined so it is not to emphasize any particular part of the letter.

Insight or the understanding that their mind is not functioning as it should is not present. They may simulate insight and tell you their mind is not right but if you further question them it is a part of their delusional symptom and later they will say it is all right. These patients if of a paranoid type are often cunning enough that when they are in clinic they tell us their mind is not right and then they would go back to the ward and tell the attendant that they knew their mind was all right but since we expected him to be insane he would agree with us. Orientation, memory, retention, grasp of general information, and calculation may be unimpaired though appearing to be defective as the result of lack of interest or negativism.

We now come to the physical symptoms which are more vague and less reliable for diagnostic purposes. There are three types of individuals to be considered, the asthenic, the athletic, and the pyknic. The asthenic person gives an impression of a deficiency in thickness, but with adequate length. There is a similar deficiency in skin, fat, muscle, bone, and vascular tissue. The chest is long, narrow, and thin, the ribs can easily be counted and the rib angle is sharp. The stomach is thin and devoid of fat. The skull is small, measuring fifty-five and three tenths centimeters in circumference, with a short sagittal diameter of eighteen centimeters, and broad. (fifteen and six tenths centimeters) The face from the front resembles a shortened egg form, in profile it is angular with hyperplastic jaw. This individual is the type most apt to develop Schizophrenia and the type of body structure most often seen in patients with this diagnosis. (2) 109

The athletic type reveals strong development of skeleton, muscles and skin. They are middle sized to tall in stature with wide shoulders, superb chest and a firm stomach. The waist is narrow, and the legs are strong.
The head is long and held upright on a long, free neck. The trapezius is firm with a sloping contour when viewed from the front. There is marked bone and muscle relief. The face from the front is steep egg form with a thick skin. The skull is circular, medium size and on the average, high, narrow, and of fair medium length. The back of the head is steep and projecting. The face in profile is heavily boned, and wellrounded chin with gently curving line and a snub nose. Many Schizophrenics fall into this class though not as commonly as seen in the asthenic group. 

The pyknic type is a combination of the other two types with a shorter body, and extremities slightly longer than consistent with the body length. They tend to become more rotund in advancing years. There are not many Schizophrenics fall into this group so we not consider them any further.

General vasomotor symptoms are seen in this condition and a disturbance of the sympathetic system. Cyanosis is seen most frequently occurring in the catatonics of long standing. Localized sweating is said to occur. I can recall only one example of this in which the axillary region was involved. Edema may occur but is somewhat rare. Dilated or unequal pupils are frequently seen. Increased salivation is quite prevalent and especially in catatonia. It may be present to such a marked degree that the garments of the patient have to be changed two or three times a day. Langfeldt states that catatonics show the signs of vagotonia while the hebephrenics show sympathetic symptoms.

Institutionalized patients show a tendency to develop Tuberculosis. Our observations at Ingle side show this to be especially true of female patients for whom we had a special tuberculous ward. The condition was not so prevalent on the male side of the house.

The basal metabolic rate is usually not appreciably affected in this malady. Catatonics may show a low rate though it is within normal limits.

Gastro-intestinal upsets occasionally occur and it is often hard to determine whether it is organic or functional in character. These upsets may be explained on the capricious diet of these patients, or on the various delus-
sions, and hallucinations present. The sedentary life of these patients is to be considered as a factor also.

Extreme constipation is not infrequent, and is always present to some degree. I have observed that when the constipation is at its height the patient is harder to handle and becomes more irritable. The heavily coated tongue was usually present when the patient was admitted, and after an extended rest and catharsis the patient often showed a better spirit of cooperation and became more quiet. This constipation is undoubtedly a result of indifference and negativism.

Neurologically there is nothing strictly pathognomic, though occasionally ankle and patellar clonus is described. White finds the deep reflexes to be exaggerated. Dr. W. E. Kelly believes there is a loss of pain sense or at least an indifference to pain. I have seen patients receive injuries which would cause extreme pain in the normal person and they keep on with their work and do not seem to be bothered much. We had an old man with a distended adder which is very painful and yet the man never said a word though his face showed pain was present.

An acne-form eruption in most of these cases has been observed by Dr. C. R. Laird of the staff at Ingleside. After this was called to my attention I was surprised at the large number of cases in which I found it. Dr. Laird thought this to be an evidence of an arrest at puberty or a regression to that period.

Laboratory findings are on the whole negative unless some definite somatic disease be present. Catatonia with retention of urine may develop some urinary findings. Kasanin reports high sustained sugar curve during stupor. Hertz finds a shortening of the blood coagulation time in the præcox.
Chapter II

Dementia Simplex

Bleuler in his definition classifies as simple dementia, those psychoses in which only the basic symptoms are present. He lists the basic symptoms as follows: (1) Disturbances of association are most important, answers are irrelevant, there is an absence of a central idea, dilapidation and incoherence may appear, wishes and fears control mental trend rather than logical thinking, and deprivation of thought occurring readily or too often or too persistently. (2) Affectivity is lost. (indifference, parathymia and paraminia). (3) Ambivalency of thought, emotions, and action. (4) Sensation, memory, orientation are not markedly affected.

White lists this condition as heboidophrenia with the following description: "Constitutes the typical fundamental form of the disease, showing development of deterioration per se without extraneous symptoms." He lists the following group of symptoms: (1) Lack of interest, reduction of associates, and failure to acquire knowledge. (2) Insomnia and headache, may be hysteriform attacks or melancholia. (3) Transitory delusions which are fully expressed, and fleeting hallucinations usually of a disagreeable nature. (4) Irritability and oddities.

Kraepelin gives us the following impression of dementia simplex: "We may consider it a rule that states of depression accompanied at the very beginning by vivid hallucinations or confused delusions form the prelude to dementia praecox. This peculiar and fundamental want of any strong feelings of the impressions of life with unimpaired ability to understand and to remember is really the diagnostic feature of the disease we have before. We must notice the tendency to peculiar distorted speech and the peculiar vacant laugh and the high degree of weakness of judgement."

Singer gives us as diagnostic in this class a lack of interest, headache or hypochondriasis, an aloofness, together with odd or fanciful ideas.
Amsden defines this condition as follows: "The outstanding defensive states are lacking. The individual, apparently quite satisfied with his inner experiences marches on indifferent to the world of reality. The individuals are simply unimpressed with the responsibilities of life, and accept with very little resistance, beyond irritability, intrusion upon the monotony of an existence, with which on the whole they appear peculiarly contented."

Thus we may conclude that the simple type of dementia praecox in which the affective system is materially out of balance, and a diminution or loss of emotion occurs. We likewise see a loss of interest in the external world with resultant aloofness and withdrawal on the part of the patient. This condition is accompanied by hallucinations of an unpleasant nature, and delusions which are vague and poorly organized. The outward manifestations as easily seen on observation is the tendency of the patient to yawn and stretch more often than is consistent with good health or manners. The silly vacant laugh is also characteristic and with a lack of insight into their own condition completes our clinical picture.

I now present the following case as typical of this disorder and will try later to justify my diagnosis.

Case 1 Male. White. Age twenty four years. Salesman. Admitted January 31. Changes in character were noted one year ago. At this time he refused to work as he did not think it necessary. He became very suspicious and began to talk in a whisper. He sits around most of the time and seems to be brooding, he is constantly making motions with his hands and talking to himself. He has passed a butcher knife across his throat and knotted the cord of a bath robe around his neck but made no actual attempts at suicide. Says his brother lives in "Hell" most of the time and that he owns twenty acres of land worth two hundred thousand dollars. He values the table in the court room as worth one million dollars.

Patients education was average and he was a good student. Was of a rather seclusive nature and did much reading most of which was of a religious
nature. He has a somewhat bad hereditary history having a brother and sister in this same hospital with a similar diagnosis.

The personal history as given by the patient shows that he has changed positions very rapidly in the last year and has roamed the country a good deal. He became markedly evasive when questioned as to his attempts to commit suicide and stated he had had some disease which he would not go through with again. Says he has had the desire to shoot someone, but would not tell whom or for what reason nor had he ever made any attempts so to do. Says he had bought a ticket to California which he could not find as the conductor had taken it away from him on his way over here. He thinks that dope or poison has been placed in his cigarettes or on his food. He answers current event questions and geographical and political questions very well. He repeats four digits quickly and correctly. As to his mental condition he said: "I don't know the Superintendent could probably answer." Further questioning along that line produce slight irritability.

During this examination the patient sat quietly with a brooding expression and answered questions spontaneously but with a very detached air. He yawned and stretched frequently and had an attitude of depression, surliness, and suspicion.

When before the staff on February 20, 31, this patient appeared much as when examined on the ward, he yawned and stretched and grimaced and there was a transverse wrinkling of the forehead. He was very suspicious and asked us why all the questions were necessary. He is under the impression that he is under arrest now. He was decidedly manneristic.

Physical examination is practically negative. He is underweight and of the asthenic type. There is an acne-form eruption on the face and thorax, the face has a pinched appearance and the hair is badly disheveled. Wassermann is negative.

Here the prodromal symptoms are seen in his withdrawal into books and the eccentric religious beliefs. Later his indifference becomes more marked and he
quits work and invents the excuse that it is no longer necessary. He becomes suspicious of people and so withdraws from their company and talks to himself. His next symptom is the threat that he might commit suicide though he takes no active steps in this direction. He now develops delusions and tries to magnify his own importance and so develops ideas of wealth. These delusions are not fixed however and are not at all systematized, perhaps do to his inability to remain interested in them long enough to organize them. Further diagnostic symptoms are seen in his brooding and depression which were not consistent as he burst into laughter during these periods and with no apparent external reson for so doing. His speech was slow and hesitant at all times and there was a certain restriction present in his muscular movements.

The rapid change of occupations is also characteristic as he probably became inefficient as his indifference became marked. I had occasion to ask this patient why he had not written to his mother and his only reason was that he did not care to. On being told that his brother and sister were in the hospital he did not make any comments or show any desire to see them. He frequently yawned and grimaced and this also fits into our picture of this condition. He had a habit of interlacing his fingers and also of running his hand repeatedly through his hair. These I interpreted as definite mannerisms.

We have thus satisfied most of our basic principles which I will enumerate once more; (1) Affective disturbance
   (2) Loss of interest
   (3) Vague delusions
   (4) Aloofness
   (5) Ambivalency of thought and action
   (6) Mannerisms
   (7) Lack of insight.
Chapter III
Hebephrenia

Dr. Singer gives the following symptoms of this subdivision, hebephrenia. The patient is nervous, moody and irritable, headache, insomnia, fear of tuberculosis or other malady. These are among the first symptoms to appear. Explosive outbursts of emotion appear on trivial grounds, society is shunned and delusions of persecution are developed. Attention is distracted by his imaginations of an autistic world. His moods are inadequate or contradictory. (7)

Dr. G. S. Amsden describes the typical symptoms as follows; "The personality is not intellectually inferior, but the patient is imaginative and impractical, often he is romantic and artistic. He is lacking in self confidence, deferential and not infrequently suggestible, socially is self conscious, timid and has few friends. He is kind and generous and naturally cheerful, with narrow interests and unsatisfactory diversional resources. Seclusiveness and stubbornness are present though of a weak character." (4)

Dr. White describes hebephrenia with its attendant symptoms as follows: The onset is more abrupt, insomnia, headache, anorexia and loss of weight are early symptoms. Confusion and symptoms of depression now appear. Hallucinations and delusions become more prominent especially in the auditory and visual fields. Suicide may be attempted. Delusions are changeable, fantastic, and silly with a paranoidal tinge. Delusions are not supported by logic and they are not at all assimilated to the mentality of the patient. False ideas, disconnected from the general content of thought, are seen. Emotional deterioration is marked due to a loose connection between the elements and a poverty of ideas. In addition there is a silly laugh, they talk to themselves and a listless apathetic condition is present. (2)

Euler would place in the hebephrenic group all those cases which would not fit in any other group. (4)
Thus from the above formulations my conception of hebephrenia is as follows; It is a condition in which the basic symptoms are more evident. The delusions become more bizarre and less allied to reality. There is a marked poverty of thought as reflected in verbigeration, clang association, word salad and neologisms. The affect is lowered to a point where it is practically absent. Suicide is more common in the hebephrenic and the outbursts of anger, fear and terror are more apt to occur without apparent external cause. There is a streak of extreme incongruity and silliness in the actions, speech and the thoughts of these patients. Logic and association are completely lacking.

I will now present the second case and discuss it. Case 11

Male, white. Age thirty-two years. Day laborer. Admitted May 1, 1931. Onset was observed by the father and sister three years ago. They describe it as mental deterioration of a progressive nature. Patient began talking to himself, pacing the floor and exhibiting signs of a tendency toward violence. He stays at home by himself and makes no effort to get employment and laughs to himself without any apparent cause. When examined at the county hospital he presented an apathetic, indifferent and shut in attitude. Is low spirited and nervous, and claims a woman in Chicago is trying to force him into marriage claiming he is the father of his child. He sleeps poorly and sees visions of a baby at night.

A personal history as given by the patient is as follows; States he is five thousand years old and was born five thousand years ago. He has been well and suffered no injuries. He completed the eighth grade in school and was an average student. Says he lived at X eight years and in C five or six months and the rest of the time at O. Says he is a painter and chauffeur. Denies use of drugs but says he has drank a great deal. Asserts he was married five thousand two hundred and seventy-nine years ago and has not had time lately to count his children. Denies suicide and says there are a lot of people he is going to murder. States he has been arrested often but gives no reason for them. This patient's face had a pinch appearance and his posture was very
slouchy, he walked in a very careless and shiftless manner. Speech was productive and often just a jumble of words, answers were often irrelevant and there was a definite flight of ideas, no objective seeming to be in evidence. The patient was irritated and suspicious. He was at times angry but made no attempt to strike the examiner. Questions on current events were irrelevant and there was a marked lack of interest in such events. He became quite excited when talking about his affairs but this was very transitory. He was the president there was no governor, just bishops, why should he work problems? His attention could be held only for short intervals and then only partially.

He said he had resided at the county hospital one hundred years. This is a lousy joint and they are putting live lice on his body. States that bishops get inside of his body and he now has a million billion of them there. He is building a block of steel and concrete in which to place these people as he removes them from his body. He owns this institution and wants the other men put off of the place. He does not have his own body or his own heart because the bishop has taken them. The attendant on the ward is in his head now and taking his eyes out. He smiled foolishly as he made this statement. He owns his own army and navy and will kill all these people as soon as he gets out. He is not insane nor are any of the people on his ward insane.

Physical examination was essentially negative. The type of body is asthenic and he is underweight. The pulse was quite rapid and then a few minutes later would be much slower.

When before the staff this patient sat comfortably in his chair though he changed position often. There were transverse wrinkles in his forehead and he grimaced occasionally. Patient thinks bishop x is in his body and that his own brother is another inhabitant of his body. He owns his own marines. There was a splendid example of word salad presented at this point. "I am not crazy is crazy, deal him out, kill them all, I am in charge, you are right, he has my heart, who said so, why, I think it is rotten." He talked nearly all of the time while in the room and paid very little attention to what the rest of us
and we listening to him could only rarely make out a complete sentence and no connection existed between his ideas. This same attitude persisted as was observed on the ward. He would swear at the doctor as he came in and offer him his hand but never would shake it. In a few minutes this outburst would be over and then he would ignore the doctor entirely. Peculiarly when before the staff and in the presence of a lady he did not swear.

This patient presents a typical hebephrenic reaction type. The initial symptoms of nervousness, moodiness, irritability, and insomnia were all present and quite typical. Emotional outbursts on trivial grounds is markedly displayed. He withdrew from society and was content to remain at home, and it was soon after this that he developed persecutory ideas. His delusions were bizarre and changeable, he also professed some thoughts of grandeur as evidenced by the fact that bishops were bothering him. Word salad was beautifully portrayed when this patient was at staff clinic. Auditory hallucinations are found in his talking to these bishops and he had had visual hallucinations when in the county hospital. He catered to his importance in the delusions of unlimited wealth and manpower at his command.

Romanticism found voice in his army and deeds of daring. The lack of any logic is clearly evident, and there is no attempt made to justify them or to associate them with realism. He lacked self confidence as he would not leave the ward for a long time unless forced so to do and he made no attempt to talk with the other patients. Indifference was most marked.

Thus we find our formulation satisfied in most respects. (1) Bizarre delusions (2) Verbigeration and word salad. (3) Lowering of the affect (4) Outbursts of excitement and anger. (5) A general impression of silliness and a lack of logic and association. The prodromal symptoms are also typical.
Chapter IV

Paranoid Praecox

Kraepelin gives as the characteristics of this group; indifference, delusions of grandeur, negativism, and ideas of persecution. Echolalia, echo-praxia, and catelepsy as well as hallucinations of sight and hearing are often present. This is attended with a peculiar feeble-mindedness. The knee jerks are apt to be exaggerated.

Bleuler describes it as that type of Schizophrenia in which delusions and hallucinations are in the foreground. The delusions are of the persecutory nature and present in massive form, with more of a tendency to organization.

White discusses the paranoidal form in the following manner: "Fundamental fact is that in dementia praecox presenting the paranoid syndrome, delusions of persecution and grandeur are somewhat systematized with perhaps hallucinations of hearing being present." He lists some subgroups under this classification. Paranoidia Systemica is essentially Magnon's "delire chronique" with well defined but mild praecox deterioration. Paranoidia Expansiva occurs only in women and is characterized by exuberant megalomania with predominant exultant mood and slight excitement. Paranoidia Confabulans is a delusional system presenting both persecutory and grandiose components has its foundation in memory falsification.

Amsden describes three types of this disorder, with an "all or none" basis as a general classification, and a lack of self confidence partially covered by traits of self assertion. Type one is stubborn, suspicious, and inaccessible. Patients here have an average or better intelligence, are slightly more practical and some judgement is in evidence. There is a reasonable amount of aggressiveness and forcefulness. Self consciousness and social withdrawal is seen with a sensitiveness to criticism. They are disobedient as children to a marked degree and do not listen to advice nor favor correction. They are suspicious and scrutinize the motives of others and cooperate poorly and will not
discuss their difficulties. Their interests are narrow and they avoid group activity or competition. Type two are less firm and less energetic, tending to be more imaginative and visionary. Type three shows a falling off of stubbornness and suspicion. They are weak and present less firm habitual defensive reaction. There is a tendence toward retirement and bashfulness. (12)

Singer claims the paranoid type has more or less systematized delusions with ideas of reference and a more insidious onset. Hallucinations are present with persecutory trends. Their reactions are weak and insufficient and there is a tendency to wander to escape their persecutors. Later, as a defensive reaction they assume personal greatness. Eventually the delusions tend to become monotonous and stereotyped and with less evidence of emotional reaction. The care of personal appearance is decreased and their usefulness is correspondingly decreased. (9)

From the above descriptions my concept of the paranoid form is as follows: This a type in which the prodromal period is prolonged and less evident so that the patients are usually older before their commitment takes place. Delusions occupy a prominent position and tend to become more systematized and lose that scattered condition as seen in the other types. Eventually these delusions become fixed and monotonous and then call forth less emotional activity on the part of the patient. These delusions tend to set up the patient as a personage of importance at least in their own minds. Hallucinations are usually present though somewhat harder to determine due to the suspicion on the patients part and his general inaccessibility. This is in accord with the persecutory trend of his delusions. Mannerisms, the silly laugh, and the indifference are still present though more apt to be crowded into the background of the case. Echolalia and echopraxia and other dilapidations of speech are to be discovered at times. Suspicion of attempted poisoning, plans to keep the patient from work, and the attempt to steal his property are most common. The patient rarely makes any plans to frustrate these attempts or if he does they are usually thwarted by his indifference or the incompleteness of his thoughts.
We will now consider two cases typical of this classification. These patients are both females and show the tendency of these patients to be deranged for a period of years before being sent to an institution.

Case 111 Admitted April 23, 1931. Female. White. Age forty-two years. Divorced. One year of college education. Stenographer. Delusions present for the last ten or twelve years. Thinks there is pressure brought to bear on her by unseen forces which requires her to do reform work. She forged checks in order to obtain funds to carry on this work. Thinks she can not use the telephone without someone listening in on her. She talks much more than normal.

The personal history as given by the patient follows. She was born December 16, 1888. Finished schooling as listed above and then took up stenography, and worked chiefly in institutions such as Ingleside. She now has a complete change of character as she continues her story. She is here for the purpose of improving this and other institutions of its kind, which will eventually be controlled by the United States Board of Public Health. Then the patients will be into their own, the place will be run entirely for the patients benefit and the hired help will find something else to do than just draw their pay. She has persecutory ideas pressed on her by Dr. K. who impresses her with his thoughts for the purpose and care of infirm patients. Hallucinatory experiences of and auditory nature convey these to her by the power of hypnotism and ventriloquism. She does not admit she has ever been ill mentally and says the other patients are all right and are here probably because they were in someone's way. She regards it as her life work to carry on the desires of Dr. K. and while she is not officially employed and gets no pay she feels she will be recompensated if the patients get more humane treatment, more liberty, and better and cleaner clothes and food. Dr. K. did not express this to be his wish in exact words but conveyed it to her by the power of hypnotism and by ventriloquism.

She is well oriented and her remote and recent memory are good. Her general knowledge of current events is fair. Appearance and attitude are good.
Speech is good though slightly overproductive. Emotional reaction is inadequate. Physical examination is entirely negative in this case she is of the asthenic type.

Patient made the following statements when before the staff for clinic; Patient feels that she is under hypnotic influence which has been used for the purpose of disturbing her. Dr. K. is the source of this force and uses her for his own ends. She has been so annoyed at him that she would have killed him if she could get to him. She has been made to feel she was a burden at home so she went to a lawyer for money for food and clothes. She states that "we" went to X in connection with a vice investigation. "We" refers to some other persons working with her though she does not know who they are. She went into the Loyal Hotel to investigate the conditions and so a rumor developed that she had been in a house of bad repute. Someone else has been responsible for her conduct since 1920. She has always kept a close watch on her drugs lest some one substitute poison for them. She is strongly bent toward the Catholic faith this time because they are antagonistic toward the Masons. At this time she is a bone of contention between these two organizations as the Masons will not give her up without a fight.

This patient has a peculiar mannerism of drawing up the right side of her mouth and sucking and biting her lip. On the ward she is quiet and does not attempt to talk to the other patients. If a doctor comes in she scolds and says we are holding her unjustly and tells her story all over again. Her emotions are practically unaltered in telling this story and the story itself is varied on in minor details. She frequently laughs and talks to herself and if questioned seems reluctant to tell her story but will tell it spontaneously if left alone. She does not help with the ward work and chatters about how poorly the work is done. She has a habit of shifting conversation and often wanders and has to be recalled to the topic when one is questioning her. She is not jumble up her words very much and the greatest tendency to repetition is that she tells the entire story over and over again.

Housewife. Normal average school history. Was married at fifteen years of age which was shortly after she left home. Her husband was addicted to liquor at that time but discontinued this practice shortly after their marriage. Three weeks ago began to show mania. She has mild delusions of eavesdropping and persecution and believes she is wired for wireless of some kind. Radio boxes are all around her. Mr. C. has followed her for many years, (he is an entirely fictitious character). Her husband and daughter are threatening her and the doctors at I made a hole in her head. Mr. C. constantly gives her advice and threatens her. She both sees and hears this man. The course of the disease is intermittent being exaggerated in the spring. This information is obtained from the commitment papers.

The following information is taken from a questionnaire answered by her husband. She first had these attacks forty-one years ago, they occur yearly about the spring of the year. She has been committed to three other institutions for short periods. Before these spells are over she accuses me of having intercourse with other women, she says I have hundreds of children about the town. For the last twelve years she talks of Mr. C. and he tells her to do the things she does. She says he is a wire man. There is no such man and she will talk to him day and night and you would think there were two persons in the room.

The personal history as given by the patient agreed with the above as to dates and general statements. Showing such a close correlation as to dispel any diagnosis of senility. She believes she is under the control of Mr. C., he follows her continually and wears a white dress. She came under his control while in L. and has known him since she was seven years of age. He controls her by means of boxes which contain wires similar to a radio. She can talk to him and he torments her by keeping her awake nights, making fun of her and telling her untruths. Mr. C. pushed three shots into her by wireless. Dr. W. removed a bone from her foot by wireless and she took the bone on her tongue.
and flipped it off with her fingers. Her husband has tried to kill her because she is under the influence of wireless. Orientation, memory, retention and recall are good. Believes she is under compulsion and must talk continually. Her insight and judgement are both defective as there are no insane on her ward and she herself is entirely normal. She showed an unusual amount of spirit at times and then seemed later to be very tired. She smiled all the time she told her story and interrupted it at intervals to laugh though the story was not so amusing at that particular moment. She related this story in much greater detail than I have here and had to be recalled to the subject several times in order that the story did not become too long. She had marked ideas of reference and when we would be talking to some other patient she often answered for the other patient and said she just knew we meant her though we had asked the other patient. She also always interpreted our sphygmomanometer as one of Mr. C's. boxes.

Physical examination was essentially negative. Blood pressure was \(140/90\) and the pulse rate seventy-two per minute. The skin was somewhat senile.

This patient before the staff states she is forty-two years old and was under C in L thirteen years and had had two trainers before him. (C is identified at this time as a woman physician at one of the hospitals where she was previously committed and so explains the reason why he always wears white)

These two cases then meet the principals we have set down as diagnostic of this psychosis. Delusions of a persecutory nature are very prominent in both cases. The experiences are described as being unpleasant to both of these women. These women have both withdrawn from the external world and have made an imaginary world all of their own. Affectivity is markedly diminished as questioning showed no interest whatsoever in their children. They were no longer interested in any of their relatives and were quite content to remain in the institution. Bivalency is seen in that though both them hate their persecutor they will make no effort to overcome this influence and keep trying to do the will of this person. They are both examples of the amazing
ability of these people to remain outside the institution for a long period of years before it becomes necessary to confine them. The choice of words and phrases show an intellect in both of these women above the average. The delusions are well organized and there is present a certain amount of logic and judgment. Their stories contain more of a tinge of the realistic than have the previous delusions noted. A certain amount of these two factors must have persisted for several years or these women would have found their way to our institution long before they did.

The peculiar laugh still shows up in these cases though not so marked or so frequently repeated. Mannerisms too are in the background and stereotypy is revealed in the monotonous repetition of their stories. The apparent cyclic appearance in the one case is somewhat baffling. On further inspection it is seen to be only a decrease in the activity of the patient and at no time could she be described as perfectly normal. It is possible that her house work was more demanding at that time and thus irritated her enough to accentuate her symptoms. Insight is plainly lacking in both of these cases while orientation, memory retention and recall are not affected.
Chapter V

Catatonia

Singer offers the following description of Catatonia: There is a severe disorder in muscular tonus and marked automatism and negativism. There is a rigidity and sustained body attitudes. A hypochondriacal moodiness and unrest occurs, the restlessness and talkativeness characterizes this excitement with marked mannerisms, monotony and inaccessibility. Impulsive actions are common. Neologisms, verbigeration, repetition and word salad with an incomprehensible jargon of words results. They do not respond to stimuli and an immobility, mutism or cerea flexibilitas develops. Severe constipation, ptysialism, and Schnautkrampf are frequently seen. (3)

Amsden classifies the catatonic as a dreamy type, fearful, bashful, and easily frightened. (1c)

White describes the following symptoms as prevailing in catatonia. Onset may be more abrupt and is characterized by depression, there may be epileptic seizures or hysteriform attacks. This is followed by catatonic stupor or catatonic excitement. The stupor, negativism and muscular tension are usually seen in these cases. There is no reaction to stimuli, mutism, failure to eat, or to go to toilet, there is salivation and opposite reactions are often obtained. There is marked resistance to moving the body, rigidity, and cerea flexibilitas is often seen. Echolalia, echopraxia, command automatism and suggestibility are much in evidence. Then the excitement stage follows with markedly increased psychomotor activity. They throw themselves around wildly and talk frantically. The speech is incoherent, no consistency nor attempt to reach an end is discernible. There is repetition, verbigeration, and senseless rhyming. Stereotypy and lack of distractability, impulsiveness and peculiar habits of action are observed. The physical symptoms are more marked here and are to be found more consistently. There is a variation in the size of the pupils with a pupillary unrest. The tendon reflexes are exaggerated and cutaneous sensa-
tion is lowered. Cyanosis and dermographia are often present, there is a loss of weight and secretions are disturbed. Bleuler lists the following symptoms as those of catatonia; catalepsy, stupor, hyperkinesis, stereotyped expressions and movements, attitudes, mannerisms, negativeism, command automatism, echolalia, echopraxia, and impulsiveness. He also describes two acute syndromes; depressive affect, rigid and superficial utterances when exaggerated and pathetic form the stuporous syndrome. Unemotional unmotivated mania of purposeless character comprises the excitement stage. In the stuporous stage there is a complete withdrawal into the dream state.

Kraepelin gives us the following symptoms for this condition. The patient understands perfectly, speech is babbling like a child's now lisping and now stammering, suddenly he grimaces, they carry out orders in an extraordinary manner. There is negativism and purposeless movements. There is an inaccessibility, and repetition of phrases with an outburst of unmeaning abuse without external cause or strong excitement on the part of the patient. One sees catalepsy and vague and mixed delusions and hallucinations. What strikes us most in this state of excitement is the contrast between the complete confusion of speech and slight disturbances of comprehension and sense of their position. There is good comprehension, atrophy of emotion and various kinds of vitiation of the will, which is characteristic of this malady.

I will now attempt to describe my own impression of this condition. To me there are two different stages, which may or may not be cyclic in their appearance. I was fortunate enough to see both states in several cases and a splendid example of the stuporous stage in another. The picture I got of this stuporous stage is as follows: The patient loses all personality and ceases to be a human being. He becomes mute and makes efforts to speak but cannot force words beyond his lips, if he does form words they are silly and may be just the opposite of just what he wants to say. The patient assumes a rigid and awkward attitude and maintains this position day in and day out. He becomes entirely withdrawn from the world...
heeding not even the calls of nature, and making no protest against the severe discomfort this must cause him. He eats his food only because it is forced on him and in his dumb way he knows he will be tube fed if he does not eat. He is impervious to threats, dangers or pleasures. If his limbs be placed in an awkward position he is aware of it but unable to move them. Finally he closes his eyes and shuts off all contact with the world. One wonders what sort activity can be taking place in that mind which controls him in this manner and if thoughts are occurring how painful it must be to him. He is virtually a robot obeying commands passively and mechanically sometimes just the opposite to what he knows you desire and occasionally as you order them. To me this form of insanity is most pathetic and disgusting to our finer emotions.

The excitement state is not so gruesome nor as pathetic. The patient smiles, laughs and gibbers foolishly, but at least he acts happy and human. His speech is babbling and silly. His actions are rapid, aimless and futile. He knocks things over and strikes those near him and remains oblivious to the havoc he has wrought. He has delusions and hallucinations but they are so un-fixed and heterogenous that they can scarcely be made out. He breaks forth in excited gibbering and may close it in severe profanity, but he smiles and laughs as he says it.

There is also what appears to be a mixed state. The rigidity and cerea flexibilitas are present but an emotional instability reveals itself weaved in with these symptoms. The patient huffs and cries though he cannot speak. They move restlessly, but stiffly, about and often make attempts to kill themselves while in this state. Their speech is babbling and interrupted by the emotional upsets and a silliness mixed with pathetic jestures and actions takes place, and they must be closely guarded.

Let me discuss a case or two on which a complete history was not obtainable but which made a lasting impression on me. One of these was a male white of about fifty or fifty-five years of age. For months this man sat on a stiff
back chair with his chin flexed on his chest. His eyes were pressed tightly together, he never moved and he deposited his feces and urine just wherever he was. Nasal secretions flowed from his nose and across his mouth, to drop with his saliva, which was markedly in excess, on his clothes. At meal time he had to be lifted and pushed to the table, he never raised his head and opened his eyes merely to a slit and ate only when no one was watching him. He never spoke and at night had to be snored to bed, where he just dropped and had to be undressed and covered up. This man had been a very successful business man at one time. What are his thoughts now? God is merciful if he lets this man's mind be a total blank. It must be terrible mental anguish to be cognizant of such a condition and still be able to overcome it.

Another male patient of about the same age sat in his chair without moving, his head was erect and he looked out of unseeing eyes, or if he saw there was no evidence of the same. If one stepped into the room and called his name he arose stiffly from his chair and with arms stiff at his sides, and with no change he walked towards you. His eyes stared straight ahead and on through you. A terrible frown and grimace gave him an awe inspiring appearance. On your command that he was to dance and sing no change occurred, but if you repeated your request often enough he would grin foolishly and a slight gleam of understanding appeared in his eyes and he executed a foolish dance and song. He smiled happily while doing this and went through it with several minutes before that old unseeing stare came back. I used to like to think he liked this break in his wretched existence and he used to dance for me about twice a week.

Case V admitted March 5, 1931. White. Male. Age twenty years.

Farmer. Average education with a good school history. Heredity bad, as there is insanity on his mother's side of the family. Onset yesterday with wild ideas and no definite aggressive tendencies, was going to "clean-up".

Personal history; patient says he is behind in his classes. Says this is Y (wrong) later changed to Z (also wrong). Says he is not insane nor are
any of the patients on his ward insane. There are no very definite delusions or hallucinations, but his mind was very confused. The appearance and actions of this patient were very interesting. Facial expression was dull with many grimaces, he sat in a stooped posture and moved his hands about his body in a vague and peculiar manner. Then he sat for quite a while with his hands stretched out before him as if on a desk or table. He answered questions willingly but irrelevantly. His answers had absolutely no relation to the questions. When asked about the purpose of a stethoscope he answered something about Belgium horses. Emotional reaction was entirely absent. Expression was blank or confused.

Physical examination reveals a beautiful physique and a well nourished body. He is of the athletic type and a powerfully build lad. The heart appeared slightly enlarged to the left, the apex beat being best heard two centimeters lateral to the nipple line in the sixth intercostal space. There were no murmurs.

When this patient appeared before the staff he made an effort to reply to questions but produced no sound, there was some muscular rigidity.

I was fortunate enough to have this man on one of my wards and his progress in this hospital was very interesting. When I first saw him he was sitting stupidly in a chair with a foolish grin on his face and a silly smile. He distorted his face with many grimaces and rarely moved. He was untidy and had to be spoon fed. When one asked him questions he pursed his lips and the muscles in his face and neck moved as if to form words, but he never made a sound. There was marked rigidity of his muscles and he would settle more firmly in his chair if told to get up. He had to be forced to bed and forced to get up. He held a paper in front of him as if reading but the paper was often on its side or upsidedown. You could place his extremities in most any position and he maintained them there indefinitely.

Imagine my surprise then one morning in August to walk in and hear him shouting lustily and having to be restrained! He was yelling at the top of
his voice and the conversation ran about like this: "Hunh! By God I am a man. Say! I play football, crossed a bridge. Camel. Say. Hunh, that's a cigarette, I like Camels. Horses. By God I'm a man!" He had to be put in bed and for several days full restraint was necessary as he wildly threw himself around. One night he got out of restraint and took the man in the next bed out of a camesole and together they tore up both mattresses and scattered the straw all over the floor. They then laid down with their arms around each other and went to sleep. This excitement was still present when I last saw the patient on January 2, 1932.

Thus in this case we see an abrupt onset, the negativism, the withdrawal into self, the catelepsy, the scattered and inhibited speech, the awkward poses, the silly laugh and simple grimacing, the cerea flexibilitas and the apparent retention of memory and unimpaired orientation. Then we see this same patient enter the excitement stage and present a hopeless jumble of words as an offering of speech with a frequent repetition of words and a great poverty of ideas. The disrupted speech gives us a suggestion of hallucinations and delusions, but the mental block is so pronounced as to obscure the content of such even if they be present. Echolalia was suggestive as at one time the patient repeated questions asked him and answered in almost the same words as the questions asked. For example; "Can you talk Bohemian? By God I talk Bohemian. Can he talk Bohemian? Hunh? Say!"

One may take the attitude which the patient assumed when sitting as if his arms were on a table to be an example of echopraxia.

Case VI. Admitted May 16, 1931. Female. White. Age thirty-seven years. Housewife. Eighth grade education. Normal early development. Later developed nervousness. December 28, 1930 gave birth to a child which lived only a few hours. At this time she complained of stomach trouble which gradually became worse. Following this she developed insomnina, avaricious appetite, and worried much about her health. She has a delusion that she is gone and that her body will live on as when she started. She thinks she has
no brain, just a skull, has a new disease which noone else ever had.
Would try to get matches and go to the barn or the basement, says it would no doo to commit suicide as her body will live on forever. Threatens to do something but does not mention what, says she cannot get well. This information was obtained from her commitment papers.

Personal history: Recounts the facts as listed above. Repeats several times the phrase; "My husband says, 'why don't you get well?'" Says she has had difficulty in talking since May 3, 1931. Says she has lost "spunk", that she used to weigh more and liked to work. She says, in reference to her condition, "I'll tell the world there never was anything like it. "She cries at this point.

Mental status: Patient does not sit still but weaves to and fro in her chair. At times she wanders about the room. Her face has an expression of appeal. There is a marked tremor of the lower lip and jaw at which time she endeavors to speak but emits no sound. The effort may end in either laughing or crying. She talks connectedly for several minutes and then has difficulty in expressing herself. She closes her eyes and it requires desperate effort for her to open them again. Often she becomes restless and stands stooped over with her head resting on the bed.

Stream of mental activity: Stereotypy has been observed at this time. "Bill, (her husband) takes me for rides, rides, rides." States, "I will never get well. No, never, never and never." Emotional reaction is diminished and her husband states she has lost interest in everything.

Mental trend: Somatic delusions predominate. Her brain faded away and there is nothing there but her skull. She cannot talk right and she has had a condition no one else has ever had. She was lying in bed beside her sister and had a feeling she was floating in the air. Something seemed to grab her stomach and she felt light in her head.

Orientation: Normal for time, place, and person.

Recent and remote memory are fair.
Special memory cannot be judged on account of lack of co-operation, nor would she attempt to calculate.

Disorders of volition: There is a decided blocking of the will as shown by interference in speech. As soon as the blockade is raised function is resumed until the next time contrary impulse interferes. Negativism is noticed in her refusal to eat and the necessity for forced feeding.

Insight and judgment: States her mind is wrong, terribly wrong, and it went faster than anyone else's. "There are many insane here, but they are a whole lot better off than I am."

Physical examination: There is an acute acneform eruption over the face and thoracic cage. Evidence of loss of weight. The tongue is badly coated. Pulse rate sixty per minute. Blood pressure 110 systolic, 60 diastolic. Otherwise negative.

Staff notes: Patient has considerable difficulty in speaking. Diagnosis made of Schizophrenia, catatonic type.

Notes from continuous record: July 28, 1931. Patient is restless, moaning, and crying. She tore the top off of a Dutch Cleanser can and tore it in two and tried to cut her throat with the jagged edges.

July 30, 1931. Patient opened a hairpin and inserted it full length into her body under the costal margin and now shows considerable pain.

August 2, 1931. Patient weak. Temperature 102. Pulse 82. Complains of pain on the left side. There is a fluctuating mass in the region where the hair pin was inserted. Opened by Dr. Stretton and fecal material expressed.

August 4, 1931. Patient very ill. Dr. Smith opened the area of fistulation and fecal material withdrawn. Incision left open for drainage. Temperature 104. Pulse 85. Marked rigidity of both recti muscles.

This fever gradually subsided and the fistula closed itself. Physical condition improved fairly rapidly. Then as the patient was allowed out of bed a state of stupor developed. She now sits in one position in her chair.
and raises her head only when spoken to, she looks up appealingly but does not speak. Crying and laughing spells still persist. There is some muscle rigidity.

Thus we have another typical picture of Catatonia. The onset is less abrupt but quite rapid. Delusions are present and a suggestion of hallucinations. Excitement is manifest, and she makes a desperate effort at suicide. Negativism is also marked and she shows echolalia and verbigeration with a tendency to stereotypy. Mannerisms are present as evidenced by her strange positions, her laughing and crying. She has a definite blocking of the will. Here again we see orientation, memory and intellect to be but slightly impaired. Gateeplepsy is present and she has completely lost interest in the outside world. When we come to consider the presence of insight we are rather puzzled. Does she really realize her mind is deranged, or is it a part of her delusional system? It fits in so well with her somatic delusions that I would not classify it as actual insight.
Chapter VI
Conclusion

In this chapter we will consider some general formulations of this reaction type and mention a few differentiating symptoms, though no attempt will be made to give a complete differential diagnosis.

We will first present Dr. Adolph Meyers concept which is a new viewpoint in considering this disorder. He first determines the anergastic or dysergastic disorders. Amnesia disorders and defects states constituting the anergastic (organic) disorder and later standing for a lasting structural deficit. The delirious toxic reaction type illustrates the usually transitory dysergastic changes. The more clearly functional disorders are then reviewed from the angle of mere part disorders, and the more sweeping disorders which I took first for affective involvement and the content disorders without or with evidence of substitutive reactions and symbolization dissociations and distortions.

The affective disorders with depressions or elations. Considering preoccupation, delusions and hallucinations, and their compatibility with affect disorders. When affects are impure, content disorders are usually predominant. When we get delirious reactions and the hallucinosis and the paranoid episodes and developments. The closer we come towards autistic thinking, projection and more or less leading hallucinations without adequate excuse by affect or without dysergastic disorder of the sensorium, the more likely do we deal with Schizophrenic reactions; consisting of more or less forced action under tension with varying degrees of dissociation, passivity reaction, compensation of a more nearly affective type and distortions of varying degree of ominousness. (4a)

He then quotes Dr. Phyllis Grenau's formulation; (6a)

(1) Distortions and misinterpretations of actual occurrences.
(Delusions of reference and persecution.)
(2) Influence and passivity feelings as expressed in automatism, mind reading, electrical influence, and similar phenomena.

(3) Hallucinations (especially when vague and more or less odd and incongruous content.)

(4) Gross distortions of body sense and body appreciation.

(5) Incongruous behaviour occurring either episodically as "antics" or more persistently as ill connected mannerisms, but not in keeping with or apparently not motivated by a prevailing affect.

Dr. Meyers then offers his concept as follows: Consider first the amount and type of affect and its specific content and complications. Where deviation of content is not explained by the affect type I consider the presence and extent of uncontrolled fancy, day dreams and projection, and then the types of "dissociation" as seen in hallucinosis, hysteroid and hypnoid reactions, passivity, complex determined activity and automatism and actual discrepancies and distortions of reaction and the amount of insight and judgment. "Schizophrenic reaction, as I see it, implies a disorder not characteristically and specifically accounted for by a diffuse and sweeping affect; it presents a more typical type of disorder akin to the psychoneurotic, part disorders but not adequately systematized. The peculiar feature is a peculiar lack of distinctiveness, ambitendencies and an irregularity of the process of fusion and differentiation in available associative material. A sort of superficial linkage akin to a drifting imagination. The prognosis is poorest if fever, pernicious refusal of food and evacuation functions, retention of urine, and incongruous pupillary phenomena."

In another article he urges us not to type these patients, and then abandon them as hopeless, but to study their symptoms and to evaluate and explain them. Then he suggests a symptomaticological classification. Schizophrenia would then be classed under the parergastic reaction type and would
not exist as an entity with a name suggestive of a fatalistic outcome. The determining symptoms would be; scattering, incongruities, fantastic or passivity reactions without memory disorders or disturbance of orientation. Hallucination, dream states and fear reactions. Thus he urges us to be more scientific in our diagnosis and not so prone to accept fatalism.

Dr. Hoskins gives us a very simple formulation for dementia praecox; "Dementia praecox is a disorder that characteristically takes onset in the early prime of life and persists for many years. As one sees this dream state in a mental hospital the patient shows all gradations from deep submergence with seeming complete obliviousness to his surroundings to manifestations that are not greatly unlike the preoccupation of a professor. Dementia praecox is due to an intolerable sense a personal failure arising out of a loss of self respect, with a sense of isolation, and a feeling of instability of cosmos. It is a defensive reaction in a sensitive human being to a feeling of personal failure."

Dr. Devine lists the following formulations; "there is a failure of psychic synthesis, a loss of the inner unity of the activities of intellect, feeling, and volition. 'The near connection between thinking and feeling' Kriepelin says, 'between the deliberation and emotional activities on the one hand and practical on the other is lost. Emotions do not correspond to ideas. The patients laugh and weep without recognizable cause, without relation to their circumstances and experiences, smile while they narrate their suicidal attempts; they are very much pleased that they 'chatter so foolishly' and must remain in the institution; on the most insignificant occasion they fall into violent terror or outbursts of rage, then immediately break out into a neighing laugh.' He seems altogether apart from common life and lives an inner life of his own which no one else can share. This is preceded by a prepsychotic personality and such persons do not have a tendency to be open or to get in contact with environment, are hard to influence, reticent and seclusive, sensitive and stubborn, and a tendency to live in a world of fant-
Kraepelin recognizes a definite syndrome, as follows; "we may consider it a rule that states of depression which are accompanied at the very beginning by vivid hallucinations or confused delusions usually form the prelude to dementia praecox. This peculiar and fundamental want of any strong feelings of the impressions of life, with unimpaired ability to understand and remember is really the diagnostic symptom of this disease. There is also a high degree of weakness of judgment, and flightiness though pure memory has suffered little at all. The first of these symptoms is the silly, vacant laugh which is constantly observed in dementia praecox. There is no joyous humor corresponding to this laugh, indeed, some patients complain they cannot help laughing, without being inclined to laugh at all. Other important symptoms are making faces or grimacing and a fine muscular twitching in the face. Then we must notice the tendency to peculiar distorted terms of speech, and a senseless playing with syllables and words."  

Bleuler lists the basic symptoms as; disturbances of association and obstruction of thought, loss of affectivity, ambivalence of thought, word, and action, unimpairment of memory, sensation and orientation. Accessory symptoms are; sense deceptions in form of hallucinations, delusions, accessory memory disturbances, changeable personality, appersonifications, physical symptoms (altered gland function, cyanosis, tremor, and catatonic states).  

White offers; "dementia praecox is a psychosis essentially of the period of puberty and adolescence, characterized by mental deterioration with a tendency to progressiveness, though frequently interrupted by remissions." He lists the following symptoms; intrapsychic ataxia, splitting of the Psyche, loss of interest, emotional deterioration, obstruction of thought. Physical symptoms are emaciation, anorexia, insomnia, cyanosis, tachycardia, thermographia, deep reflexes exaggerated, dilated pupils and catatonia.  

Dr. Amsden says that the lack of interest, autism, and refusal to accept
the responsibilities of life are outstanding symptoms, together with the various symptoms we have previously listed in his description of the various subgroups. He recognizes the loss of affectivity, the increased muscular tonus, and the eventual feeble-mindedness of a peculiar character. He also suggests a tendency to suspicion together with delusions and hallucinations.\(^{(49)}\)

Dr. Singer lists the following general symptoms; autism, ambivalency, indifference, hallucinations, delusions, deterioration. Somatic symptoms such as marked changes in muscle tonus with localized spasm, syncopal attacks, subjective complaints, fluctuation in weight and vascular changes.\(^{(5)}\)

The symptoms listed by Doctors Strecker and Ebaugh are; oddities of general behavior, stream of activity and speech deviations, dissociation of affect, persecution and ideas of reference, hallucinations, and physical symptoms as previously considered.\(^{(7)}\)

I now wish to present my concept of Schizophrenia; prodromal period is short and occurs usually early in life. The symptoms first presenting themselves are; a loss of interest in the outside world, and a tendency to withdraw into a world of fantasy. There is an insomnia together with an apprehensive fear of some impending disaster. The patient does not heed advice and is antagonistic toward any type of correction, disobedience is commonly seen. Depression is usually present together with vague and disorganized delusions and hallucinations which are of an auditory and visual character.

In the acute stages I consider the following symptoms of importance; primarily there is a loss of affectivity, by this I mean a leveling of the emotion to a marked degree. Secondarily there is a loss of interest in the external world and a further withdrawal into the world of fantasy. Frequent yawning and stretching is generally present and is further evidence of indifference. Next in importance is a presence of delusions and particularly those of persecution or grandeur. The extent of their organization would be a deciding factor in placing the case in the various sub-groups. Hallucinations are usually present and those first to appear are auditory in character.
and then the visual type appear. Tactile hallucinations are more rare but may appear. Evidences of negativism, such as mutism, automatism, catalepsy, verbigeration, echolalia, and echopraxia are next in importance. Ambivalence of thought, word, and action is usually seen. Grimaces, a silly vacant laugh and oddities of mannerism are very diagnostic and essential in this disorder.

In the later stages of the condition the marked deterioration appears in all phases. Speech defects become more manifest. Delusions and hallucinations tend to become more stereotyped and are related with less emotional accompaniment by the patient. Untidiness and a state of peculiar feeblemindedness develops. The sense of judgment is completely lost. Insight is completely absent or present only in a very slight degree at any stage of this psychosis.

Certain physical symptoms are present in a sufficient number of cases to merit mention and consideration. The outstanding symptom is that of a disturbed muscular tonus producing hypertonus or flexibility known as "cerea flexibilitas." Perhaps next in importance is exaggerated reflexes. I firmly believe there is a loss of sensation to pain. Cardiac and vasculo-motor symptoms are less constant but of some value. The blood pressure is usually low in catatonia. The acneform eruption is to be seen in most of these cases.

These symptoms all occur in other forms of insanity and diagnosis must necessarily rest on a combination rather than any one definite symptom. The symptoms coming nearest to being pathognomonic for Schizophrenia are few; loss of affect and interest, word-salad, "cerea flexibilitas", and stupor with mutism fall into this class. Most other types of insanity show more defects in memory and orientation than does this condition.

To further explain my meaning I should like to list a few differences in these symptoms as they appear in other types of insanity. These differences are outlined by Dr. White.
1. The manic depressive shows repeated attacks of symptoms without deterioration.

2. Delusions in manic depressive are apt to be self accusatory, in praecox they are more grotesque and have their origin outside of the patient.

3. Action is purposeful in manic depressive while praecox it is diffuse and lacks direction.

4. Early stages simulate neurasthenia and anxiety neurosis, but delusions are more grotesque and attended by conduct disorders of a bizarre nature in praecox.

5. Infectious psychosis clears up with the infection but praecox symptoms persist.

6. In Paresis the positive Wassermann and increased spinal fluid cell count with plasma cells differentiates.

7. Alcoholic psychosis comes on later in life and with less deterioration.

8. In hysteria the psychic splitting is massive while in praecox it is molecular in comparison.

9. In hysteria interest is transferred to outside objects whereas the praecox loses interest in outside objects.

Names and towns have purposely been left out of our case history at the request of Dr. G. E. Charlton.
BIBLIOGRAPHY

(1) Schizophrenia (Dementia Praecox) An Investigation by the Association for Research in Nervous and Mental Diseases
   (a) Chapter I The Evolution of the Dementia Praecox Concept.--Adolph Meyers Pages 3-15
   (b) Chapter II On the Definition and Delimitation of the Schizophrenic Reaction Type--C. Macfie Campbell Pages 16-30.
   (c) Chapter VIII Mental and Emotional Components of the Personality in Schizophrenia--George S. Amsden Pages 133-140
   (d) Chapter XX The Language of Schizophrenia--William A. White Pages 323-343
   (e) Chapter XXI Graphic Art in Schizophrenia--Nolan D. C. Lewis Pages 344-370

(2) Outline of Psychiatry--William A. White
   Chapter XI Dementia Praecox Pages 197-240

(3) Clinical Psychiatry--Kraepelin
   (a) Chapter III Dementia Praecox Pages 21-29
   (b) Chapter IV Katatonic Stupor Pages 30-38
   (c) Paranoid Forms of Dementia Praecox Pages 153-162
   (d) Final Stages of Dementia Praecox Pages 204-214

(4) Textbook of Psychiatry--Bleuler-Brill
   Chapter IX Schizophrenia Pages 373-444


   Constructive Formulation of Schizophrenia Adolph Meyers

   The "Complaint" as the Center of Genetico-Dynamic and Nosological Teaching in Psychiatry Adolph Meyer M.D.
BIBLIOGRAPHY (continued)

(7) Clinical Psychiatry Streeker and Ebaugh Pages 270-322
Chapter VIII Dementia Praecox (Schizophrenic Reaction Types)

(8) Recent Advances in Psychiatry H. Devine

(9) Dementia Praecox, a Simple Formulation R. G. Hoskins
Journal of the American Medical Association Volume 96 April 1, 1931 Pages 1209-1210

The numbers used in this list correspond to the numbers inserted throughout the thesis and the smaller numbers following the general numbers are page numbers. Example (2)-197 means Outlines of Psychiatry William A. White Page 197