CHAPTER IV

FINDINGS AND DISCUSSION

This chapter consists of two parts: findings and discussion. In the first part, the researcher shows the findings of the analysis on John Nash’s utterance which represents a comprehension disturbance or schizophrenia speech from the dialogue on the movie.

In this research, the researcher found 18 utterances from John Nash which represents a comprehension disturbance or schizophrenia speech. The complete explanation can be seen below.

4.1 Findings

Conversation 1:

Neilson: It's the first time the Carnegie Prize has been split. Hansen's all bent.
Bender: Rumor is he's got his sights set on Wheeler Lab, the new military think tank at M.I.T.
Neilson: They're only taking one this year. Hansen's used to being picked first.
Bender: Oh, yeah, he's wasted on math.
Neilson: He should be running for president.
John Nash: There could be a mathematical explanation for how bad your tie is.

In this section, the conversation occurred in front of Princeton University’s dormitory as introducing between junior and senior. All of the students around there talked about the scholarship. Hansen is one of unpredictable man in math and science. Neilson believes that Hansen will get that scholarship
and Neilson added that Hansen should be running for president. Meanwhile, as long as their conversation, John Nash said while playing the light of glass to the Neilson tie that there could be a mathematical explanation for how bad your tie is. People around confused because they didn’t understand what he meant.

John Nash’s utterance is irrelevant with the topic or context. Because according to Andreasen theory of schizophrenia speech or language comprehension disturbance, it can be classified as **derailment**. From the beginning of the conversation he is following his particular train of thought.

The utterance of John Nash in the (conversation 1) is caused by his own hallucination. Because when he saw a tie of Neilson, he believed that there were mathematical explanations for how bad that tie, even it was not actually present.

In the case of derailment, there are 2 conversations and utterances more in the dialog of the movie which I mentioned one of the example in chapter 1, especially in a background of the study.

**Conversation 1.a (Derailment)**

Lady : May be you want to buy me a drink?
John Nash : I don’t exactly know what I’m required to say in order for you to have intercourse with me, but could we assume that I said all that? Essentially we’re talking about fluid exchange, right? So, could we just go straight to the sex?

In the (conversation 1.a), the problem is when some of students spends their time in bar. At that time, John Nash and Neilson drinking in the bar, there are two girls near Neilson and one of them want to try get the attention of John, then this girl try to asks John and he feels difficult to make a conversation.
Conversation 1.b (Derailment)

Student: Can we leave one open, Professor? It's really hot, sir.
John Nash: Your comfort comes second to my ability to hear my own voice. Personally, I think this class will be a waste... of your and what is infinitely worse- my time. However, here we are. So you may attend or not. You may complete your assignments at your whim. We have begun.

In the conversation (1.b), the problem is when the students in the class feel very hot and they complain to John Nash to open the window, but the answer of John Nash is irrelevant with the question of the students.

Conversation 2:

John: Well, Martin Hansen. It is Martin, isn't it?
Hansen: Why, yes, John, it is.
John: I imagine you're getting quite used to miscalculation. I've read your pre-prints-both of them. The one on Nazi ciphers, and the other one on non-linear equations, and I am supremely confident that there is not a single seminal or innovative idea in either one of them. Enjoy your punch.

In conversation 2, John Nash, Neilson, and Bender were made a conversation while drinking, and then lately come Sol, and he introduces him self to John Nash and the other. Martin Hansen came toward them and he asked a glass of beer for drink to John Nash, because Hansen thought that John Nash was a waiter. Finally, John Nash said that he was not a waiter, and then Hansen said that he assumed John Nash as a waiter.

In the conversation 2, the utterance “I imagine you're getting quite used to miscalculation. I've read your pre-prints-both of them. The one on Nazi ciphers, and the other one on non-linear equations, and I am supremely confident that there is not a single seminal or innovative idea in either one of them. Enjoy your
punch”. This uttered by John Nash to give responses of Hansen’s question. This utterance means that John Nash has known that Hansen always wrong in his calculation, and the utterance of John Nash flew from one topic to another topic, which John Nash said that from his preprints about Nazi echipers, non linear equation there is not single seminar or innovative idea in either one of them. And suddenly John Nash stopped his flight of thought and he said “enjoy your punch” and he leaves them. This conversation can be categorized as *Flight of Ideas*, because it is a rapid progression of ideas with a shifting from one topic to another topic.

Flight of ideas happens when the schizophrenic get some disturbance in his thingking, and then makes his utterance disoraganized. The utterance in conversation 2 is caused by his delusion. In the case of Flight of ideas, there are 2 more examples of conversation which categorized as a Flight of ideas, the examples can be seen below.

**Conversation 2.a (Flight of Ideas)**

**John** : Adam Smith needs revision.
**Hansen** : What are you talking about?
**John** : *If we all go for the blonde, we block each other. Not a single one of us is gonna get her. So then we go for her friends, but they will all give us the cold shoulder... because nobody likes to be second choice. Well, what if no one goes for the blonde? We don't get in each other's way, and we don't insult the other girls. That's the only way we win. That's the only way we all get laid. Adam Smith said... the best result comes... from everyone in the group doing... what's best for himself, right? That's what he said, right?*

**Hansen** : Right.
This conversation happened in the billiard room. In that room, there are Hansen and friends, and then there are some of blonde ladies comes. Hansen and friends try to get the strategy to find the blonde lady. And finally, they ask John Nash to give them some idea. They said about the theory of Adam Smith, the father of economic to solve their competition to get the blonde lady, but John Nash gives his another idea which the idea is strange and make his friend confuse with his idea.

Conversation 2.b (Flight of Ideas)

John : I find that polishing my interactions in order to make them sociable requires a tremendous effort. I have a tendency to expedite information flow... by being direct. I often don’t get a pleasant result.

Alicia : Try me.

John : All right. I find you attractive. Your aggressive moves towards me... indicate that you feel the same way. But still, ritual requires that we... continue with a number of platonic activities... before we have sex. I am proceeding with those activities, but in point of actual fact, all I really want to do is have intercourse with you as soon as possible. Are you gonna slap me now?

Alicia : How was that result?

In this conversation, John Nash explains to Alicia about his difficulty to make interaction with another people, Alicia asks him to try make interaction with her, and get another result. John Nash give the opinion and before he gives his opinion, he kisses Alicia.

Conversation 3:

Hansen : Let me ask you something, John.
John : Be my guest, Martin.
Hansen : Bender and Sol here correctly completed Allen's proof of Peyrot's Conjecture.
John : Adequate work... without innovation.
In the conversation 3, it happens when John Nash and Hansen were enjoying their chess competition. They conversing and asked to each other. Then Hansen asked to John Nash something. John Nash also answered that Hansen been him quest. Hansen with his question and said that Bender and Sol correctly completed Allen’s proof Perrot’s Conjecture. And before finished his question, John Nash cuts and said that was adequate work... without innovation.

When John Nash cuts and said “Adequate work... without innovation.”, this utterance means train of speech. When John said “Adequate work...” it is difficult for him to complete his utterance, he stops his speaking for a while and after that he continuous to says “... without innovation”. From the explanation above, this utterance can be clategorized as a Blocking, because it was utterance which caused by an unconscious interruption in the train of thought.

Blocking or thought blocking occurs when the patient of schizophrenia have loss of a train of thought but the patients do not concern that the topic has been lost, the people who have a schizophrenia disease, they will pass onto the one topic which distracted their thinking.

In the conversation 3, John Nash felt that Hansen can read his mind, then when he tried to answer the question of Hansen, it looked difficult for John Nash to concentrate on the topic. In the utterance of John Nash, he said that the work of his friend is without innovation and he felt that he was the best one, because his mind was influenced by delusion.

In this section, the writer only found 1 example of blocking, and there is no another example of blocking in the dialogue movie.
Conversation 4:

John : *Now, pizza I have enormous respect for. And of course beer. I have respect for beer. I have respect for beer!* 

In conversation 4, John Nash has been in the library for two days, but he can not find a topic for his doctorate paper. The hallucination of John Nash was when his friend Charles came to him, he said that on the bright side, John Nash has invented window art. Then John Nash explained what he had painted on the window. Charles left him, and said that he had no respect for theory, but he respected for pizza and beer. After that John Nash left the library, he said that he had respect for beer. And he repeated it for three times.

In this conversation, we can see that John Nash repeated the same word. This utterance can be categorized as perseveration, because he is persistent to repeat of the word.

Perseveration is an occurrence in which the patient uses the same word, thought or idea repeatedly. If he says only once it looks normally, but he says three times, and it is repeatedly.

The utterance in the conversation 4 is caused by his hallucination. His utterance is the repetition of his hallucination friend Charles, who said to him that he had respect for pizza and beer. In this case, there is no one stay in library. But John Nash felt that his friend Charles was in library with him.

The writer found another example of perseveration in a dialogue movie.

Conversation 4.a (perseveration)

Alicia : John?
John : I've almost got it! Charles, you just watch the baby. I've got one more to close!
Alicia : No!
John : I'll be right there.
Alicia : Oh, God. I need a towel. Shhh.
John : Charles was watching him. He was okay

In conversation 4.a, it occurred when John Nash draws his baby bath in the bathroom, and Alicia going to take the laundry. But Alicia hears the radio then she running to that place, after that she knows that John Nash still did some strange work behind her. So he runs home to get her baby.

Conversation 5:
Bender : You made the cover of Fortune... again.
John : Please note the use of the word "you," not "we". That was supposed to be just me.
Sol : oh. (laugh).

In this conversation, John Nash arrives in his office of Wheeler Defense Labs MIT Campus. He stays in one office with his friends Sol and Bender. Bender read a magazine, and he look John Nash’s picture in the cover of that magazine. Than he informs John Nash and he said that he was made the cover of fortune again. John Nash gives response to Bender and said that please note the used of the word “you” not “we” that was supposed to been just him. Then the utterance of John Nash makes Sol laughs.

In the conversation, the answer of John Nash was unrelated with the statement of his friend. And this utterance can be categorized as incoherence, because it was generally marked by illogically connected idea.

Incoherence is occur when the utterance generally marked by illogically connected phrases or ideas. In this conversation, John Nash’s utterance caused by
his delusion, which he believe that another people talk about him and made his picture in the magazine. When his friend said about the picture of John Nash in the cover of magazine, John Nash focuses on the magazine and does not focus on the utterance of his friend. His friend Sol laugh in the end of conversation, because the answer of John Nash is not logic for them.

In the case of incoherence, there two more examples in a dialogue movie which uttered by John Nash. Here we can see another examples below.

**Conversation 5.a (Incoherence)**

John : *So not only do they rob me of the Fields Medal, now they put me on the cover of Fortune magazine... with these hacks, these scholars of trivia.*
Bender : John, exactly what's the difference...between genius and most genius?

In this conversation, John Nash was made the cover of fortune magazine again. And Bender informs him about it.

**Conversation 5.b (Incoherence)**

John : Where am I?
Dr.rosen : Ahem. MacArthur Psychiatric Hospital. I find that highly unlikely.
John : You made a mistake. My work is non-military in application.

This conversation occurred when John Nash tries to give some information to the doctor in the hospital. And the utterance of John Nash was unrelated with the statement of Dr.Rosen.

**Conversation 6:**

Bender : John, exactly what's the difference...between genius and most genius?
John : *Quite a lot. He's your son.*

This conversation occurred in the office, when Bender asked to John Nash that what was the differences between genius and most genius, and John Nash did
not answer the question well, but John Nash said that Bender must quite a lot. Then John Nash asked to Bender about his son. In this case, there was another people over there.

According to Ginsberg theory about this utterance, the utterance of John Nash is not relevant with the question. And it can be categorized as *irrelevant answer*, because the reason when John Nash answer the question has no relevant.

The utterance of John Nash in the conversation 6, the utterance caused by the hallucination. Because, when Bender asks to John Nash, John Nash does not answer in the true answer. And suddenly, he asked to Bender that there was his son. And the utterance of John Nash makes Bender confuse.

There is another example of irrelevant answer, we can see the conversation below.

**Conversation 6.a (Irrelevant answer)**

Alicia : You don't talk much, do you?
John : *I can't talk to you about my work, Alicia.*
Alicia : I don't mean work.

It occured when John Nash and Alicia get their first date in the park. And both of them sitting on the grass and laminar by carpet. In this conversation, Alicia asks to John Nash, because she feels that he does not talk much as she looks.

**Conversation 7:**

Alicia : I'm wondering, Professor Nash, if I can ask you to dinner. You do eat, don't you?
John : *Oh, on occasion, yeah. Table for one. Prometheus alone chained to the rock... with the bird circling overhead, you know how it is.*
In this conversation occurred when Alicia went to John Nash’s office to inform him about his students waiting for him. And before Alicia left the office, she asks John Nash to get dinner together.

In this conversation, the utterance of John Nash can be categorized as *circumstantiality*, because his utterance when he gives a response contains numerous digressions before he returns to the topic of his speech, and he was not able to distinguish essential from non essential detail.

In this case, when Alicia asks to John Nash, suddenly John Nash gives the story before he answer the question correctly. But the story of John Nash looks strange and hard to understand for Alicia. The utterance of John Nash in the conversation 7 is caused by his delusion. John Nash feels that his life without have friend, when Alicia asks him to get dinner together he feels confuse and he do not believe.

The writer found another example of circumstantiality in the conversation, which in the utterance of John Nash. The example will see below.

**Conversation 7.a (Circumstantiality)**

Alicia : I don't mean work.

John : *I find that polishing my interactions... in order to make them sociable requires a tremendous effort. I have a tendency to expedite information flow... by being direct. I often don't get a pleasant result.*

Alicia : Try me.

The context of this conversation occurred when John Nash and Alicia get their first date in the park. And both of them sitting on the grass and laminar by carpet. In this conversation, Alicia asks to John Nash, because she feels that he does not talk much as she looks.
Conversation 8:

Alicia : I missed you. I missed you.
John : I have to talk to you. Okay. Alicia, I've been thinking about it, and I do realize that my behavior... and my inability to discuss the situation with you... must have appeared insane. I left you with no other choice. I do understand... and I'm truly sorry.
Alicia : That's okay.
John : *Everything's gonna be all right. Everything's gonna be all right. We just have to talk quietly. They may be listening. There may be microphones. I'm gonna tell you everything now. It's breaking with protocol... but you need to know, because you have to help me get out of here. I've been doing top secret work for the government. There's a threat that exists of catastrophic proportions. I think the Russians feel my profile is too high. That's why they simply just don't do away with me. They're keeping me here to try to stop me... from doing my work. You have to get to Wheeler. You have to find William Parcher.*
Alicia : Stop.

In this conversation, it occurred when John Nash gets a treatment in the hospital and Alicia came to visit him. In the conversation, Alicia said that she missed him because she does not look John Nash for several days. When she said that she missed him, John Nash did not give a response to Alicia, but he said that he had talked to her. He had thought about that. And the conversation can be seen above between John Nash and Alicia.

The utterance of John Nash in the conversation 8, it was difficult for Alicia to interrupt John Nash speech. When he explained what had happened in his life, he tried to talk the truth to Alicia. But, the story which uttered by John Nash was illogical for Alicia, and then when he tried to stop his utterance it was very difficult for Alicia to interrupt because John Nash always continued his speech. This utterance can be categorized as **Pressure of speech**, because there is an
excessive flow of words to such an extent that it becomes difficult to interrupt the speaker.

Pressure of speech found when the utterance is difficult to interrupt, because he felt that he must explain and tell the truth what had happened. The utterance of John Nash is caused by the delusion, because John Nash believes that what had happened in his life was true.

Another example of pressure of speech will be seen below.

**Conversation 8.a (Pressure of speech)**

Alicia : John, you all right? John?
John : *Turn it off! Turn off the light! Why would you do that? Why would you turn the light on?*

The context of this conversation occured when John Nash forbids Alicia to turn on the lamp, because he believes that the danger was threaten her. There was Parcher in their house, who influences his life and his thought.

4.2 Discussion

In this section, the writer wants to discusses the finding of data analysis. From the explanation of finding above, the writer concluded that there are some types of comprehension disturbance. The following is the answer of the statement of the problem.

4.2.1 The kinds of comprehension disturbance or schizophrenia speech suffered by John Nash as a schizophrenic character.

The writer has analyzed the utterances in “A Beautiful Mind” movie which are classified into type of schizophrenia speech. In the result, the writer found 18 utterances which belong to comprehension disturbance; they are derailment, flight
of ideas, blocking, pressure of speech, circumstantiality, perseveration, incoherence and irrelevant answer. Furthermore, according to Andreasen theory of comprehension disturbance, there are twelve types of schizophrenia speech or comprehension disturbance were not found by the writer; they are poverty of speech, poverty of content of speech, distractible speech, tangentiality, illogicality, clanging, neologism, word approximations, loss of goal, echolalia, stilted speech, and self-reference.

a. Derailment

In this explanation, John Nash as a main character in A Beautiful Mind movie applies comprehension disturbance in his utterance or speaking. The first type found in his speech is derailment. According to Andreasen (1979: 1318-1321), Derailment is a pattern of spontaneous speech in which the ideas slip off the track on to another one that is clearly but obliquely related, or on to one that is completely unrelated. Things may be said in juxtaposition that lack a meaningful relationship, or the patient may shift idiosyncratically from one frame of reference to another. As the example is the utterance in (conversation 1), the utterance of John Nash is out of the topic.

b. Flight of Ideas

According Ginsberg (1985) states that flight of ideas is an extremely rapid progression of ideas with a sifting from one topic to another so that a coherent whole is maintained and considerable digression occurs from the beginning to the
ending of the story. John Nash says in (conversation 2), his utterance seen extremely rapid progression and also shifting from one topic to another topic.

c. **Blocking**

According to Andreasen, Blocking refers to interruption of a train of speech before a thought or idea has been completed. After a period of silence lasting from a few seconds to minutes, the person indicates that he cannot recall what he had been saying or meant to say. Blocking should only be judge to be present if a person voluntarily describes losing his thought or if on questioning by the interviewer he indicates that that was his reason for pausing. As John Nash says in (conversation 3), he says “adequate work...” and suddenly his thought getting trouble, than he says “… without innovation”

d. **Perseveration**

Perseveration refers to persistent repetition of words, ideas or subjects, so that once a patient begins a particular subject or uses a particular word, he continually returns to it in the process of speaking (McKenna, 2005: 24). This may also involve repeatedly giving the same answer to different questions. In (conversation 4) we can see that John Nash repeatedly uses the same of word in his speech.

e. **Incoherence**

According to Andreasen, This type of language disorder is relatively rare. When it occurs, it tends to be severe or extreme, and mild forms are quite uncommon. It may sound quite similar to a Wernicke’s aphasia or jargon aphasia; in these cases, the disorder should only be called incoherence (thereby implying a
psychiatric disorder as opposed to a neurological disorder) when history and laboratory data exclude the possibility of a known organic etiology and formal testing for aphasia gives negative results.

Incoherence often is accompanied by derailment. It differs from derailment in that the abnormality occurs at the level of sentence, within which words or phrases are joined incoherently. The abnormality in derailment involves unclear or confusing connections between larger units, such as sentence or ideas. For example, we can see in (conversation 5) when another people ask something, John Nash answer another thing which illogicaly to another people.

f. **Irrelevant answer**

Ginsberg (1985) states that irrelevant answer is an answer that has no irrelevant to the question asked. We can see in (conversation 6), John Nash answer has no relevant with Alicia question.

g. **Circumstantiality**

According to the theory of Andreasen, Circumstantiality is a pattern of speech that is very indirect and delayed in reaching its goal idea. In the process of explaining something, the speaker brings in many bored details and sometimes makes parenthetical remarks. Circumstantiality replies or statements may last for many minutes if the speaker is not interrupted and urged to get to the point. Interviewers will often recognize circumstantiality on the basis of needing to interrupt the speaker to complete the process of history taking within an allotted time. We can see the example in (conversation 7), which shows about John Nash responses.
h. Pressure of speech

Pressure of speech is an increase in the amount of spontaneous speech as compared with what is considered ordinary or socially customary. The patient talks rapidly and is difficult to interrupt. Some sentences may be left uncompleted because of eagerness to get on to a new idea. Simple questions that could be answered in only a few words or sentences will be answered at great length, so that the answer takes minutes rather than seconds, and indeed may not stop at all if the speaker is not interrupted. Even when interrupted, the speaker often continues to talk. Speech tends to be loud and emphatic. Sometimes speaker with severe pressure will talk without any social stimulation, and talk even though no one is listening.

The example can be seen in (conversation 8), it shows when John Nash speaks and it will flow and it difficult to interrupt or cut his speech.

4.2.2 The context causing the comprehension disturbance

Here, the writer found the context causing of comprehension disturbance are delusion and hallucination. Delusion are described as false beliefs that a person holds on to, despite the fact that there is strong evidence that the beliefs are wrong. People with delusions often believe that a person or group of people is watching them and wants to hurt them, believing other people can read their minds, or beliefs that they have special powers or abilities. For example when John Nash delivering a guest lectures at Harvard University, Nash realizes that he is being watching by a hostile group of people.
Hallucinations are episodes of sensory perceptions, such as sounds or sights, which are not present. As an example in this movie when John Nash’s friends such as Charles and Parcher. Charles comes to his life in John Nash hallucination firstly in roommate, Charles comes when John Nash needs a friend for sharing his problem. And Parcher comes to John Nash’s life when John Nash works in the laboratory of MIT.

Delusions and hallucinations are dangerous thing that makes a person who have a schizophrenia disease frequently has incoherent or disorganized speech. And the people who have this disease, they have unusual behavior or bizarre.

The most schizophrenia speech and comprehension disturbance which shown in John Nash utterance are derailment, flight of idea and incoherence. Because these are have 3 utterances in the movie that include the types of derailment, flight of idea and incoherence. Because when the people who have schizophrenia disease got a delusion or hallucination in his speech and the speech always disturbance, then it makes John Nash’s utterance mostly out of from the topic that he would says.

However, the writer in this research did not find the other types of language comprehension disturbance or schizophrenia speech such as poverty of speech, poverty of content of speech, distractible speech, tangentiality, illogicality, clanging, neologism, word approximations, loss of goal, echolalia, stilted speech, and self-reference, because the main character of this movie use the utterance as his reflect of his thought which influenced by his delusion and hallucination.