

SPEECH PRODUCTION ANALYSIS OF AN AUTISM CHARACTER IN THE MOVIE “RAIN MAN” BY BARRY LEVINSON (A PSYCHOLINGUISTIC STUDY)

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Keywords: Speech Production; Autism; Character; Psycholinguistics	Abstract: This research aims to find out what are the type of autism experience by Raymond in the movie “Rain Man” and to find out how speech production of autistic experience by Raymond. The method used in this research is qualitative and the object studied is the main actor in the film "Rain Man" named Raymond. The researcher collected data from the film and from dialogue transcripts. After the data is obtained then transferred to a computer and listened to many times, then transcribed into conversation. Data were analyze using the theory from Turkington & Anan (2007) to analyze the type of autism and Scovel (1998) to analyze speech production experience by Raymond. Based on this theory, it is known that the main character in the film "Rain Man", namely Raymond, has autistic (high-function), and Raymond has difficulty producing language. He repeated his words, the same phrase, or sentence from the other person when he or she cannot understand the meaning of the conversation. This paper recommended for readers to understand language production in someone with autism, especially for those who have had contact with autistic people in their surrounding environment. And for future researchers who conduct research in the same field, especially those who have the same interest in language disorders in autistic children as a reference or comparison that may be relevant to their research.	
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INTRODUCTION

In daily life, humans cannot be separated from communication and interaction with each other, because humans are social creatures. Communication is conveyed through conversation using good and easy to understand language. Communication does not mean just conveying it verbally. In essence, language is a medium used to communicate. By speaking well and correctly, someone will be able to understand what is being said. Speaking is one of man’s most complex skill. Speaking is a unique skill of human. (Levelt 1989) Producing speech is neurologically and psychologically much more difficult than negotiating a ladder. Yet its complexity is also not appreciated until we experience a tongue injury or tongue slip. In everyday conversation, we usually don't realize how difficult our accomplishments are. Again, it is only through injury that our extraordinary abilities are realized.



Scovel (1998) further stated in his book entitled psycholinguistics, models of psycholinguistics for speech production developed by Levelt (1989). There are four stages:

- a. Conceptualization. Based on American psycholinguist in Scovel's book, he contends how speech was to begin with conceptualized within the human intellect. Agreeing to his hypothesis, primitive phonetic concepts were shaped as two rise to and parallel ways of considering. It is: - syntactic thinking, which produces the series of words that we usually think of when we talk about the beginning of a language. - Imaginative thinking that creates more complete visual communication.
- b. Formulation. In the second stage of speech production or formulation, we approach the final result of the process. all native speakers, listeners can adjust their understanding of the sentence. When they realize that they initially chose the wrong path to understanding, they are forced to retrace their steps and choose the right path to achieve complete understanding. By doing this, he can quickly reveal many important topics in an important speech essay. First, he shows how language errors provide a clear picture of speech production. Second, it illustrates the ability of stress to control the direction of speech production. This approach shows how speech production and comprehension are largely linear processes. the tendency to construct and understand sentences linearly, and any additional information we receive for understanding can force us to change our understanding of what we hear.
- c. Articulation. Articulation of speech sounds is the third important stage in production. The phonological encoder takes the syntactic outline and creates a phonological outline of an utterance, including its 10 possible intonation and stress patterns. The articulator then carries out the phonetic plan by sending instructions to the neuromuscular system. Once all considerations are organized into a language arrange, this data must be sent from the brain to the muscles of the discourse framework so that able to at that point perform the vital developments and deliver the specified sounds. Classification of consonant based on place articulation (Yule, 2010) as follows: 1) Bilabials; 2) Labiodentals; 3) Dentals; 4) Alveorals; 5) Palatals; 6) Velars
- d. Self-monitoring. From time to time, we spontaneously interrupt our conversation and correct ourselves. This correction is called self-monitoring. According to Levelt (1983), Carroll's self-correction typically has a three-part structure. First, we interrupt ourselves after realizing an error in our speech. Second, we usually say one of several modified expressions. Nooteboom's (1980) self-interruption in Carrol's book (examined a collection of 648 speech errors and made some interesting findings. He found that 415 (64%) blunders were rectified. A few blunders were more likely to be adjusted than others; trust; Advance, Nooteboom found, that most intrusions happen exceptionally rapidly after a mistake happens. As a result, interruptions are made primarily the first word boundary after the error. Although this can be studied further, expression editing appears to convey difficulty to the listener 12 which is then corrected by the speaker. in Carroll analyzes expressions containing expressions such as uh and oh, showing that they convey different meanings.

According to Scovel (1998) in his book Psycholinguistics, defining psycholinguistics is the use of language and speech as a window into the nature and structure of the human mind. psycholinguistics consists of two sciences, namely psychology and linguistics. which discusses the relationship between the soul and language? Psychology and linguistics are two different branches of science. Each has different methods and procedures. But both have similarities in



terms of formal material objects, that is in research languages. Psychology studies behavior or language processes. Linguistics studies structure language according to phonology, morphology, syntax and semantics.

Meanwhile, people who are not normal will respond slowly or slowly and makes no sense because there are no adequate connections between brain regions. Brain dysfunction is caused by brain damage. People with brain damage usually have abnormal social interactions. Abnormal social interactions also show weaknesses that are classified as language disorders.

People with language disorders such as autism have difficulty expressing and understanding language. Language disorder itself is a person's inability to understand and produce language. Speech disorders in humans are usually caused by errors in the language process. People with language disorders usually have difficulty expressing and interpreting their thoughts. Therefore, people with autism face major problems in daily conversation, as conversation is the area of language skills most closely related to social functioning. People with autism experience language and communication difficulties.

According to Turkington & Anan (2007) Autism spectrum disorder is a pervasive developmental disorder where the core disorder has a major influence on the child's development. Types of Autism the Classification of autism discovered by Turkington & Anan (2007): 1. Autistic disorder (autism) (high-functioning) 2. Asperger's syndrome 3. Pervasive developmental disorder—not otherwise specified (PDD-NOS).

Autistic savant A person with autism disorder who displays an unusual aptitude for one or more specific skills, such as mathematical calculations, musical talent, or an above-average memory for certain facts. About 10 percent of all people with autism have gifted abilities, but only about 1 percent of people with other developmental disabilities, including intellect disabilities, have gifted abilities. (Turkington & Anan, 20007).

This phenomenon is similar to "Raymond" in the movie "Rain Man". He is an attentive driver with similar routine activities. Autistic intellectuals are born with neurological dysfunction and extraordinary abilities. There are some unique speech phenomena in The Rain Man, such as repeating words, the same phrase, or a sentence from the other person when he or she cannot understand the meaning of the conversation. Therefore, it is interesting to study. Researchers choose movies rather than real life as a source of research data because movies can reveal more than what is said, whereas if taken directly from real life, it will take a long time to be able to communicate with the sufferer. This is because autistic people tend to avoid communication. Except with people he has known for a long time, such as his parents. Therefore, this research focuses on Rain Man's autistic character. The reason for making this movie is because this movie tells the story of an autistic person.

METHOD

This investigate could be a non- experimental subjective expressive think about, since it points to depict the dialect utilized by extremely introverted sufferers whether it is distinctive from the dialect of typical individuals or not. The characteristics of this inquire about are occasions that happen naturally and normally in a characteristic setting that's surrounded in a film.



Separated from that, it moreover endeavors to depict wonders that happen in human life, specifically extremely introverted dialect and it is difficult to degree the information quantitatively since the information is within the shape of words, articulations or discussions taken from movies. On the other hand, subjective investigate is coordinated at getting and improving understanding of thoughts around language in exceptional circumstances, particularly for individuals with discourse disarranges. In substance, subjective inquire about is situated towards examining the dialect utilized or particularly the words delivered by an autistic individual. In determining the validity of the data, techniques are needed to ensure the validity of the data in qualitative research. Researchers use data credibility tests to test the validity of the data. according to Murdianto (2020) Test data credibility or trust in intermediate research data others are carried out in several ways, namely: extending 29 28 observations, increasing persistence, triangulation, analyzing negative cases, using reference materials, holding member checks. In this research, researchers used triangulation. This research emphasizes specific cases of language disorders by using a psycholinguistic approach to analyze the language disorder speech of autistic characters in the film "Rain Man"

RESULT AND DISCUSSION

Result

In this section presents the data obtained by the researcher to answer the research objectives:

1. To find out what are the types of autism experienced by Raymond in Rain Man movie.
2. To find out how speech production of autism experienced by Raymond in Rain Man movie.

This research describes the data through descriptive that have been taken from the movie. Types of Autism experienced by Raymond source the movie.

1. Autistic disorder (autism) (high- functioning)

"High-functioning autism" is not a medical term or official diagnosis. The term is used colloquially to refer to people with autism spectrum disorder (ASD) who are able to learn basic skills such as speaking, reading, writing, eating, and dressing themselves. (Turkington & Anan:2007)

2. Asperger's syndrome

Asperger's Syndrome (AS), a disorder characterized by persistent problems with social interactions and connections, as well as the development of restricted and repetitive patterns of interests, activities, and behavior. The researcher found there were 8 scenes in the movie that showed the Asperger's syndrome of the main character Rain Man.

3. Autistic savant

A person with autism disorder who displays an unusual aptitude for one or more specific skills, such as mathematical calculations, musical talent, or an above- average memory for certain facts.

The researcher found there were 6 scenes in the movie that showed the Autistic savant of the main character Rain Man.

Speech production experienced by Raymond source the movie.

1. Conceptualization

The first stage of speech production is Conceptualization, in this stage someone will plan in the brain about syntactic elements (syntactic thinking) and simultaneously imagine what they want to say (imaginative thinking). (Scovel:1998).



2. Formulation

The second stage of speech production is Formulation, at this stage the reader begins to compose sounds starting from words, phrases, clauses and sentence to express their language (Scovel:1998).

3. Articulation

The third stage of speech production is articulation. In this stage the form of speech in the brain will be pronounced in a sound that is clear and easy to understand. (Scovel: 1998).

4. Self-Monitoring

The last stage of speech production is self-monitoring, in this stage of communication the speaker will be sensitive to the language produced so that he can recognized the mistakes spoken and correct them. (Scovel: 1998).

Discussion

1. To find out what are the types of autism experienced by Raymond in Rain Man movie.

a. Autistic disorder (autism) (high- functioning)

"High-functioning autism" is not a medical term or official diagnosis. The term is used colloquially to refer to people with autism spectrum disorder (ASD) who are able to learn basic skills such as speaking, reading, writing, eating, and dressing themselves (Turkington & Anan:2007).

The researcher found there were 15 scenes in the movie that showed the autistic disorder (autism) (high-functioning) of the main character Rain Man.

Data 1



Picture 1 Data discussion 1 Type of autism (Autism high functioning)

Susanna : I'm sorry, this is not your car.

Raymond : Yeah, my dad lets me drive slow on the driveway. I'm an excellent driver.

Susanna : Are you sure that you drive this car?

Raymond : There's only 28 miles on the odometer since I drove it a week ago Saturday.
Should be more than 28 miles. 67

Susanna : Look, my boyfriend is coming.

Raymond : Of course, today's Monday. I always drive the car on Saturday. Never drive on a Monday.

The scene above taken from the movie at 18.44 minute. From the accompanying data, Raymond shows symptoms of Autistic disorder (autism) (high-functioning). Like the theory put forward by Turkington & Anan (2007), and according to expert, Dr. Ipak Ranto Sp.Kj says that this characteristics is include to autism where one of the symptoms is obsession to object . Like the scene above, where Raymond just focus on the car, he doesn't care while Susana says to him. From the accompanying data, Raymond shows



symptoms of Autistic disorder (autism) (high-functioning). From the accompanying data, Raymond shows symptoms of Autistic disorder (autism) (high-functioning).

b. Asperger's syndrome Asperger's Syndrome (AS)

A disorder characterized by persistent problems with social interactions and connections, as well as the development of restricted and repetitive patterns of interests, activities, and behavior.

The researcher found there were 8 scenes in the movie that showed the Asperger's syndrom of the main character Rain Man.

Data 1



Picture 2 Data 1 Type of autism (Asperger syndrome)

This scene shows Raymond has symptoms of Asperger's type autism. such as the theory put forward by Turkington & Anan. where one of the symptoms is stereotyped or repetitive behavior and rituals that don't work. Like the scene above, where Raymond has a habit of watching the TV show he always watches, at the same time and place he sits.

c. Autistic savant

A person with autism disorder who displays an unusual aptitude for one or more specific skills, such as mathematical calculations, musical talent, or an above- average memory for certain facts.

The researcher found there were 6 scenes in the movie that showed the Autistic savant of the main character Rain Man

Data 3

Psychiatrist : Ray. Raymond.

Raymond : Yeah.

Psychiatrist : Are you good with numbers

Raymond : Yeah.

Psychiatrist : I read about this. I wanna try somethin'

Raymond : Kmart, 400 Oak Street. Charlie What'd I t tell you? After

Psychiatrist : Ray, can we try somethin'? Raymond: Yeah.

Psychiatrist : Do you know how much 312... times 123 is?

Raymond : 38,376. 79

Psychiatrist : He's right.

Charlie : What?

Psychiatrist : He's right. Charlie He's right?

Psychiatrist : Yeah. Ray. How much is 4,343...times 1,234?



Raymond : 5,359,262,
Charlie : He's a genius.

The scene taken from the movie at 01.02.05 minute, the scene show Raymond have symptops of savant, where he can count and answer correctly quickly without calculator. It seems like the theory put by Turkington & Anan (2007) and according to expert Khalida Yurahmi S.Psi, M.Psi, Psychologist says that, An individual with autistic disorder who displays unusual aptitude for one or more specific skills, such as math calculations.

Speech production experienced by Raymond source the movie.

1) Conceptualization

The first stage of speech production is Conceptualization, in this stage someone will plan in the brain about syntactic elements (syntactic thinking) and simultaneously imagine what they want to say (imaginative thinking). (Scovel :1998).

Data 1

Raymond : Yeah, my dad lets me drive slow on the driveway. I'm an excellent driver.
Susanna : Are you sure that you drive this car?
Raymond : There's only 28 miles on the odometer since I drove it a week ago Saturday. Should be more than 28 miles.
Susanna : Look, my boyfriend is coming.
Raymond : Of course, today's Monday. I always drive the car on Saturday. Never drive on a Monday.

The conversation above taken from the movie at 18.35 minute, the scene shows Raymond suddenly approached Susana who was sitting in the car. Susana asked him if he had ever driven the car. But he didn't answer, he just focused on 84 the car. The conversation shows Raymond having difficulty conceptualizing the conversation. Where Raymond didn't answer Susana's questions he just focused on discussing cars. Meanwhile, according to Scovel (1998), the first stage in language production is conceptualization. And according to the psychologist Khalida Yurahmi S.Psi, M.Psi said that when communicating, people with autism have limited vocabulary, they tend to focus on things that have become routine. From the conversation above, Raymond is used to driving the car on Saturdays with his father, so he just says that he drives the car.

2) Formulation

The second stage of speech production is Formulation, at this stage the reader begins to compose sounds starting from words, phrases, clauses and sentence to express their language (Scovel :1998).

Data 1

Charlie : You know, these seats were brown leather. You know this car? Car?
Raymond: I know this car.
Charlie : How do you know this car?



Raymond : I definitely know this car. It's a 1949 Buick Roadmaster. Straight-Eight. Fireball Eight. Only 8,095 production models. Dad lets me drive on the driveway, but not on Monday. Definitely not on Monday.

Charlie : Who's your dad?

Raymond : Sanford Babbitt. 89

Charlie : Who?

Raymond : Sanford Babbitt? 10961 Beechcrest Street, Cincinnati, Ohio.

The conversation above taken from the movie at 19.28, it shows that Raymond can answer the questions asked by Charlie. However, Charlie had to repeat his question, then Raymond could understand Charlie's question. From the conversation, Raymond was able to conceptualize his words, according to the psychologist Khalida Yurahmi S.Psi, M.Psi she said that people with autism can say simple words or sentence. According to Scovel (1998) the second stage of speech production is Formulation, at this stage the speaker begins to compose sounds starting from words, phrases, clauses and sentence to express their language. In the conversation above, Raymond can pronounce words and sentence well, where he can explain how he knows the car that Charlie drives.

3) Articulation

The third stage of speech production is articulation. In this stage the form of speech in the brain will be pronounced in a sound that is clear and easy to understand. (Scovel : 1998).

Data 1

Raymond : Dad lets me drive every Saturday. 'Course the seats were originally brown leather. Nather pitiful red.

Charlie : You know; these seats were brown leather. You know this car? Car?

Raymond : I know this car.

Charlie : How do you know this car?

The sentence above taken from the movie at 19.10 minute. While Raymond explain to Charlie that he knows about the car. Charlie was surprise he ask to Raymond how he know this car, and Raymond explain about the Buick Roadmaster. The segment of the word 'leather' / 'leðe(r)' is almost same with the word 'nather'. The sound /ð/ is voiced dental which is formed with the tongue tip behind the upper front teeth and having the air push through the narrow opening, and the sound /r/ is alveolar. In the words 'lather' and 'nather', Raymond pronounces the 'th' sound to become 'd' /'leder'. As for intonation, Raymond says sentences with a flat intonation, but Raymond's words are still understandable

4) Self-Monitoring

The last stage of speech production is self-monitoring, in this stage of communication the speaker will be sensitive to the language produced so that he can recognized the mistakes spoken and correct them. (Scovel: 1998).

Data 1



Susanna : Raymond, Ted Klosszewski. 98
Raymond : Kluszewski. Ted Kluszewski. 'Big Klu. First base.
Susanna : He played for Cincinnati.
Raymond : Traded for or Dee Fondee, 1957. Lifetime batting average, .298.

The conversation taken from the movie at 22.47 minute. In the conversation above, Raymond was able to answer Susana's words well, Raymond was able to conceptualize her words according to what he heard. Raymond can also monitor himself when he produces a sentence, where he says Kluszweski then he corrects his sentence by saying the full name of Kluszewski.

CONCLUSION

From the data are taken from the movie "Rain Man", the researcher analyzed the type of autism experienced by Raymond in the movie "Rain Man" and the speech production experienced by Raymond in the movie "Rain Man". The researcher using the theory of Turkington and Anan (2007) to find out the type of autism Raymond has. And the second to find out the speech production that Raymond has, the researcher using Scovel (1998) theory. Based on the result of the research and discussion that have been described in the previous chapter, the research presents the conclusion of this study as follows:

1. The first objective of the research is to explain the types of autism that experienced by Raymond in the movie "Rain Man". Researcher discovered the dominant type of autism experienced by Raymond in the movie "Rain Man". The result of this research, from the 21 scenes that the research manages to collect, there was 15 data indicating the type of autistic disorder, 8 data indicating the type of Asperger's disorder and 6 data indicating autistic savant. Meanwhile, For Pervasive developmental disorder-not otherwise specified (PDD-NOS) type, researcher did not find any characteristics that appeared in Raymond's character. In this study, from all the data collected, it can be concluded that Autistic Asperger's is the dominant type of autism. Apart from that, researcher found 6 scenes that showed Raymond had another syndrome that makes Raymond have above average intelligence, namely savant syndrome. So it can be concluded that Raymond suffers from Autistic disorder (autism) (high- functioning), and Raymond also has a concomitant syndrome, namely savant syndrome, or it could be called an Autistic Savant.
2. The second objective of the research are to explain speech production of autism experienced by Raymond in the movie "Rain man". The researcher found there are 44 data of speech production. From all data collected, it can be concluded as follow:
 - a. Conceptualization
Raymond has a little problem in conceptualization, where several times Raymond was unable to conceptualize his words, when Charlie asked him in several times Raymond did not conceptualized answers that were in line with questions asked by Charlie. However, at certain times Raymond can conceptualized his speech, when he hears a question or sentence in a form that is simple and easy for him to understand.
 - b. Articulation
At the articulation stage, Raymond had difficulties with intonation and some pronunciations. For intonation, Raymond often says words/sentences with flat intonation.



Raymond also often says words with too many initial letters added, for example in the word 'window' Raymond says 'wwindow'.

c. Formulation

At the third stage of speech production, namely formulation, Raymond had no problems. Raymond can create and produce words and sentences well.

d. Self-monitoring

In this final stage of speech production, Raymond also had no problems. Raymond can monitor his words, then he can correct his words again

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