

## THE APPROVAL SHEET

### LINGUISTICS DISORDER OF APHASIA IN THE MAIN CHARACTER OF THE MOVIE MY BEAUTIFUL BROKEN BRAIN

**Dien Azizah Hati**

**0413.1510.1440.41**

Supervised and Approved by:

Advisor I



**Ade Surista, M.Pd**

NIDN. 0425127503

Advisor II



**Subandar, S.S., M.Pd**  
NIK. 43D199051

The Chairman of STBA – JIA



**Drs. H. Sudjianto, M.Hum**

NIDM. 195906051985031004



**LINGUISTICS DISORDER OF APHASIA IN THE MAIN  
CHARACTER OF THE MOVIE *MY BEAUTIFUL BROKEN  
BRAIN***

**A PAPER**

Submitte to the School of Foreign Language – JIA as partial fulfillment of  
requirement for he undergraduate degree in English Literature Programme



**DIEN AZIZAH HATI**

**43131510144041**

**ENGLISH LITERATURE PROGRAMME  
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**THE IMPROVEMENT SHEET**

Name : Dien Azizah Hati  
Student Number : 0431315.10144.041  
Title : LINGUISTICS DISORDER OF APHASIA IN THE  
MAIN CHARACTER OF THE MOVIE MY BEAUTIFUL  
BROKEN BRAIN

Supervised and Approved by:

Examiner I



Elsan Arvian, SS., M.Hum  
NIDN. 0326037402

Examiner II



Ester Ria Romauli, S.S., M.Pd  
NIK. 043D1117166

The Chairman of STBA JIA



Drs. H. Sudianto, M. Hum



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Name : Dien Azizah Hati  
Student Number : 4313.1510.1440.41  
Programme : English Literature  
Title : LINGUISTICS DISORDER OF APHASIA IN THE MAIN  
CHARACTER OF THE MOVIE MY BEAUTIFUL  
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Dien Azizah Hati

## **MOTTO AND DEDICATION**

**MOTTO:** *Follow by example (*

**DEDICATION:** I dedicated this research to my beloved parents, family and my beloved someone that always give inspiration for me, to written this research and make the research more better, and also to my friend for the struggle to make this paper finish. And also, this research is dedicated for someone who has a disorder in utterance. I hope this paper will bring some advantages for the people vicinity to handle a disorder.

# LINGUISTICS DISORDER OF APHASIA IN THE MAIN CHARACTERS OF THE MOVIE *MY BEAUTIFUL BROKEN BRAIN*

DIEN AZIZAH HATI

## ABSTRACT

*This study aims to find out and study the analysis of language processing produced by aphasia sufferers through the neurolinguistics linguistic disorder approach in the film My Beautiful Broken Brain. The author conducted this study from March to August 2018. This research method is qualitative research. The main theory used by Ardila and Papathanasiou and supported by Carroll about linguistics disorder. In their books Ardila and Papathanasiou gave six types of aphasia, namely (1) broca aphasia, (2) wenicke aphasia, (3) conduction aphasia, (4) global aphasia, (5) anomic aphasia, and (6) transcortical aphasia. And with the theoretical support of Carroll gave 2 types of linguistics disorder, namely (1) expressive language and (2) receptive language. From the analysis process, the total data collected in this study is 31 data. The results vary in the frequency of the most disorder linguistics types that are 24 data result. The next is followed by a receptive language with 7 data. Then, based on the way the patient produces language, broca aphasia becomes dominated by a percentage of 71%, then anomic aphasia has 16.12%, conduction aphasia and transcortical aphasia have the same percentage of 6.45% that is the result of aphasia based on the characteristics and types of linguistics disorder found in the film My Beautiful Broken Brain.*

*Keyword : Neurolinguistics, linguistics disorder, aphasia.*

**GANGGUAN LINGUISTIK PADA APHASIA KARAKTER UTAMA  
DALAM FILM *MY BEAUTIFUL BROKEN BRAIN***

**DIEN AZIZAH HATI**

**ABSTRAK**

*Penelitian ini bertujuan untuk mengetahui dan mempelajari analisis pemrosesan bahasa yang dihasilkan oleh penderita aphasia melalui pendekatan neurolinguistics linguistics disorder dalam film My Beautiful Broken Brain. Penulis melakukan penelitian ini dari bulan Maret hingga Agustus 2018. Metode penelitian ini merupakan penelitian kualitatif. Teori utama yang digunakan dari Ardila dan Papathanasiou serta didukung oleh Carroll tentang linguistics disorder. Dalam bukunya Ardila dan Papathanasiou memberikan enam jenis aphasia, yakni (1) broca aphasia, (2) wenicke aphasia, (3) conduction aphasia, (4) global aphasia, (5) anomic aphasia, dan (6) transcortical aphasia. Serta dengan dukungan teori dari Carroll memberikan 2 jenis linguistics disorder, yakni (1) expressive language dan (2) receptive language. Dari proses analisis, total data yang dikumpulkan dalam penelitian ini adalah 31 data. Hasilnya beragam dalam frekuensi jenis linguistics disorder yang paling banyak adalah expressive language berjumlah 24 data. Selanjutnya, diikuti oleh receptive language dengan 7 data. Kemudian, berdasarkan cara pasien memproduksi bahasa, broca aphasia menjadi dominasi dengan presentase 71%, selanjutnya anomic aphasia memiliki 16,12%, conduction aphasia dan transcortical aphasia memiliki persentase yang sama yaitu 6,45% itulah hasil dari aphasia berdasarkan karakteristik dan jenis linguistics disorder yang ditemukan pada film My Beautiful Broken Brain.*

*Kata kunci : Neurolinguistik, gangguan linguistik, afasia.*

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This paper writing is to fulfill one of the requirements for taking undergraduate program (S1) of English Department of School of Foreign Language JIA: In this Paper, the writers explain the source domain metaphor of business in headline news of the news week magazine.

During the research, writer uncounted a lot of hardship and difficulties both finding the data and arranging it into and accepted scientific paper. Therefore, the writer would like to take this opportunity to express her thankfulness to all the following people who have advised and supported data and information to finish the paper, especially to:

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## CHAPTER I

### INTRODUCTION

#### A. Background of the research

People exchange messages via communication. It is possible to be done because of the existence of language. Everyone may use English, Spanish, French or any other languages to express their thoughts, ideas, needs, and feelings. As a result, language holds an important role in a conversation such as to transfer many kinds of information. In communicating, it is important that there are language skills in order to get messages or information.

Language for human is a tool to communicate as a bridge to connect each other. In the presence of language it can develop the content of the mind from the informer with the interlocutors who are interconnected. And language also would be the one way to express the content of the thoughts and feelings to others or the other person. The thought arises because of the adaptation and reaction of the outer man himself as social beings, humans need others to cooperate and share feelings or problems. Thus the statement above is conveyed through language.

In other word, language and human are the two different things that cannot be apart. Because of them are increasing together. And language for human is important for the bridge to reveal to the other people. It can be seen that language used by human in daily and have to be a bridge for communicating each other. As its growth a physics of human, it means a growth of language



that used to recognize of people is better than before, excepts a baby born has physical disability.

Linguistics is a base of the language learning in skill of communication. The benefit of linguistics can help and do the task properly. Linguistics is the scientific study of language, and involves an analysis of language form, language meaning. In this perspective, linguistics that has a general character of the human itself, cause linguistics study about all languages. In relation to language and humans, language is not escape the cognitive that humans have in the brain and memory. Studies that study the case are better known as neurolinguistics.

The study of neurolinguistics is also learn that seeks to understand the workings of the brain to process language activities as psycholinguistics is just different focus points. Not only acquired language disorders, but also developmental language disorders, that is, disorders that are found in people who have not experienced any specific lesion event, are of interest to neurolinguistics. Neurolinguistics approaches to developmental language disorders, such as specific language disorder, and developmental reading and writing problems, including aphasia, typically compare these conditions to similar acquired disorders, bearing in mind the special condition of language acquisition.

Linguistics disorder or language impairments are disorders of language that interfere with communication, adversely affect performance and functioning in the student's typical learning environment, and result in the

need for exceptional student education. Language impairment is defined as a disorder in one or more of the basic learning processes involved in understanding or in using spoken or written language. In adults, language impairment usually occurs in patients who appear in stroke patients.

Stroke patients who have been known to have a problem in the hemispheres left brain, causing interruption of speech. Symptoms, the difficulty of the patient tells a speech smoothly so that the structure of the language becomes defective. Language defects occur in stroke sufferers due to chaotic thoughts. This caused by disruption of the left brain area, then the brain command anyway is not clear, so the spoken language becomes irregular. That matter because, if someone gets a stroke, then the first area injured not only the frontal lobe, but also the temporal-parietal-occipital area.

Disorders are in the brain is what makes a person has an obstacles in language and produce irregular grammar. Damage to spoken language and written language caused by cracks the cerebral cortex has caused problems to be borne by neurolinguistics. A person who is distracted by his language will be very problematic in communicating. More precisely the disruption of one's communication system which causes sufferers to experience difficulties in communicating, this of course disturbs the memory system in the human brain. One of these diseases is aphasia.

Aphasia is a speech impairment that occurs in a head collision and touches the left hemisphere and hippocampus disturbance in the frontal lobe of the brain. The hippocampus is one of the components in the brain that regulates

memory while speaking, and stores memories of listening. Assessment of aphasia has contributed results which is very large in the form of general principles of internal language organization brain. By way of determining the communication processes separately subjected to damage of certain brain parts, it has been able to know language processes that contribute to individual language skills normal brain. There are six types of aphasia. Those are namely Broca aphasia, Wernicke aphasia, conduction aphasia, global aphasia, anomic aphasia and transcortical aphasia.

Aphasia develops as a result of brain damage. The origin of such brain damage is mostly a blood vessel disorder. In the brains there are all sorts of areas with different functions. For most people the areas for the use of language are located in the left half of the brains. In case of injury in these language areas is about aphasia. The difficulties of people with aphasia can range from occasional trouble finding words to losing the ability to speak, read, or write; intelligence, however, is unaffected. This is caused by trauma to the hippocampus that is present in the temporal lobe.

Standing in the temporal lobes of the cerebrum, the hippocampus has two parts, namely the left and right sides that resemble a sea horse. The soreness of damage to the hippocampus is only limited to the temporal lobe located in the frontal lobes, the first disorder to be attacked. Therefore, only doing one therapy can restore the memory in the hippocampus. However, aphasia speech disturbances cannot be cured.

A form of visual communication named movie, which has pictures, sounds and tells something can be either information or just a fictitious story. In conveying information or expressing a taste to the recipient of information, usually not only in the form of text, writing or just voice. Someone also uses the film media to share experiences or the least convey a sense to the community a lot.

The writer purposes to take My Beautiful Broken Brain movie as data object is because the film focuses a person and is a documentary type film. So, the object of data is not sorting into different people as the center of research. And the title of LINGUISTICS DISORDER OF APHASIA IN THE MAIN CHARACTER OF THE MOVIE "*MY BEATIFUL BROKEN BRAIN*" as the main requirement of graduation is for the writer to better understand the meaning of the disorder and can overcome how to behave when dealing with people with aphasia or other disorder sufferers.

In short, the writer is interested in analyzing the language abnormalities and accompanying behaviors of aphasia. The linguistics disorders are mostly related to a particular brain damage. In this case, when aphasia occurs, the sufferer may get a disruption on his or her mind influencing the utterances or speech. Therefore, it is of relevance to discuss the phenomenon by employing the approach of neurolinguistics.

## **B. Questions and Scopes of the research**

### **A. Questions Of The Research**

Based on the background above, through this research the writer formulates these following questions:

1. How is the linguistics disorder produced by aphasia in the main character of the movie My Beautiful Broken Brain ?
2. What are the kinds of linguistics disorder produced by an aphasia patient in the movie My Beautiful Broken Brain ?
3. What are kinds of aphasia in linguistics disorder in which the main character has in the movie My Beautiful Broken Brain by the characteristics that appear the most ?

### **B. Scope Of The Research**

Based on the title of the research in this paper is analysis of using characteristics of the spoken language to analyze the linguistics disorder produced by aphasia in character of the movie My Beautiful Broken Brain. The writer focused in spoken language that the main character in the movie said to find out the kinds of linguistics disorder produced by an aphasia character in the movie My Beautiful Broken Brain. The analysis just finds out the kinds of aphasia characteristics in linguistics disorder which the character has in the movie My Beautiful Broken Brain.

## **C. Objectives and Significances of the Research**

### **a. Objectives of the Research**

- a) To know the linguistics disorder produced by aphasia in the character of the movie *My Beautiful Broken Brain* by the symptom of language
- b) To know kinds of linguistics disorder produced by aphasia in the movie *My Beautiful Broken Brain*.
- c) To know kinds of aphasia based on the characteristics of linguistics disorder which the character has in the movie *My Beautiful Broken Brain*.

### **b. Significances of the Research**

During the writing in this research, the writer has learned and analyzed the theory deeply to produce accurate and credible result. Automatically the writer can get more information about neurolinguistics based on the sample of the data and the analysis. Provide a positive contribution to enrich the discipline especially grammatical language. Make donations to enrich micro-science especially applied linguistics in neurolinguistics.

Though this paper, the writer hopes that the reader will understand more about linguistics disorder that the other people have and the writer hope the reader will understand about what should do if people are facing the patient with aphasia. Provide self-confidence to patients with aphasia who had a stroke to follow rehabilitation linguist. And as an input to

linguistic therapists for easier improve grammatically afflicted aphasia patients stroke

The result of this research will add the number of collection of scientific paper in library. This can help to the future research that college student can make a good structure and how to linguistics disorder could make people realize that neurolinguistics is the important sub-study for learning and get some more of doing to the other people in disorder.

#### **D. Operational Definition**

Neurolinguistics is a branch of science that interdisciplinary studies between human brain mechanisms in learning the language and processing of language activities. In his case, neurolinguistics focuses on a neural program effort that is reconstructing the workings of the brain in the process of speaking, listening, reading, writing and even sign language.

Linguistics disorder is inhibiting the process of language acquisition such as talking, understanding information, composing sentences correctly. Patients who have linguistics disorder is usually caused because of a injury in the brain or indeed caused because of birth.

Stroke is the loss of brain functions quickly because of the disruption of blood supply to the brain. This happens due to blockage of blood vessels and the presence of bleeding to the brain causing trauma.

Aphasia is a condition where the loss of language ability comes from the brain making it difficult to communicate. Aphasia greatly affects the ability of

the patient to express the language in writing, oral and understanding in the speech of a person. Aphasia is usually abrupt and due to a brain stroke or trauma.

Movie is an audio visual communication media to deliver a message to a group of people who gathered in a particular place. The film aims to convey a message, information or just to convey a sense of the transmitter.

#### **E. Systematization of the Research**

The systematic of the research means to present the research well edited composition. This research is divided into five chapters as follow :

Chapter I is an introduction. This chapter explains about the background of the research, question and scope of the research, objective and significant of the research, operational definition and the systematization of the research.

Chapter II is the theoretical Description. This chapter consists about theories from many references to support the research such as the explanation of linguistics disorder and aphasia.

Chapter III is methodology of the study. This chapter explains setting of the study, subject of the study, method of the study, instrument of the study, technique of data analysis and procedures of study.

Chapter IV is the analysis of the study. This chapter is contained of analysis that has been found in My Beautiful broken brain movie. This analysis will describe about structure of the sentence usage aphasia in



linguistics disorder using syntactically, semantically and phonologically approaches.

Chapter V is the conclusion, it gives the conclusion (related hypothesis discussion), suggestion (relates to significant of the research).

## CHAPTER II

### THEORITICAL DESCRIPTION

#### A. Neurolinguistics

Neurolinguistics is the one of an interdisciplinary in linguistics that described about medical science and language of human in which examine a relation between the brain how to process a human language activity. According to Yule (2010) that described that the study of the relationship between language and the brain is called neurolinguistics. Although this is a relatively recent term, the field of study dates back to the nineteenth century. Establishing the location of language in the brain was an early challenge, but one event incidentally provided a clue. (p. 157)

In another statement by Ahlsén (2006) also described that neurolinguistics studies the relation of language and communication to different aspects of brain function, in other words it tries to explore how the brain understands and produces language and communication. This involves attempting to combine neurological or neurophysiological theory how the brain is structured and how it functions with linguistic theory how language is structured and how it functions. Apart from neurology and linguistics, psychology is another central source discipline for neurolinguistics. Neurolinguistics has a very close relationship to psycholinguistics, but focuses more on studies of the brain.

Studies of language and communication after brain damage are perhaps the most common type of neurolinguistics studies. (p. 3)

Based on the theory about neurolinguistics, Caplan (1998) explained that neurolinguistics consists of the study of language and brain relationships. Its origins are in clinical neurology of the late nineteenth century, and it continues to be a clinically related field of observation and theory construction. Modern imaging techniques have greatly increased the ability of scientists to visualize lesions in the brain during life, and thus allow greater scope for lesion symptom. (p.3)

However, despite their distance and recent histories, these fields have recently developed new directions and vigor, and the new terms are appropriate and increasingly popular. An increasing number of scientists from the fields of linguistics, psychology, speech pathology, and neuroscience are beginning to make their primary study the questions of how language is represented and processed in the brain, and how it breaks down after brain injury.

Ingram (2007) described that neurolinguistics is the technical term for this field, neurolinguistics is a key assumption of neurolinguistics that a proper and adequate understanding of language depends upon correlating information from a variety of fields concerned with the structure and function of language and brain, minimally neurology and linguistics. A good articulated cognitive science is needed to provide the hoped for integration of two otherwise very different fields of study language and neurobiology. (p.3)

Finally, based on the theories above, the writer concluded that the study of language has been crucial to understanding the brain or mind relationship. Conversely, research on the brain in humans and other is helping to answer questions concerning the neurological basis for language. The study of the biological and neural foundations of language is called neurolinguistics. A study of neurolinguistic research is often based on data from a typical or impaired language and uses such data to understand properties of human language in general.

## **B. Language and Brain**

The brain is the most complex organ of the body. It lies under the skull and consists of approximately a hundred billion nerve cells called neurons and billions of fibers that interconnect them. The surface of the brain is the cortex, often called gray matter, consisting of billions of neurons. The cortex is the decision-making organ of the body. It receives messages from all of the sensory organs, initiates all voluntary and involuntary actions, and is the storehouse of our memories. Somewhere in this gray matter resides the grammar that represents our knowledge of language. The brain is composed of cerebral hemispheres, one on the right and one on the left, joined by the corpus callosum, a network of more than two hundred million fibers. The corpus callosum allows the two hemispheres of the brain to communicate with each other (Fromkin, Rodman & Hyams, 2011, p.4).

As stated by Miller (2006) that by understanding what the mind is and its mental states, including belief, desire, and knowledge, someone will be able to

know other people behavior. Since mental states are unobservable, the existence of language helps people to understand what the mental states means. For instance, people may be able to learn the meaning of a word like “run” by observing what happens when the word is said. On the other hand, if there exists a word “think”, people cannot observe what happens when the word is said. Therefore, language becomes a necessary thing to represent what the mind does. Besides, the mind is also important for communication. It means that when someone wants to communicate with others, his or her mind then will work to define what the language he or she has to choose to transfer the message (p.142-145).

### **C. Brain Structure and Function**

A brain is known as the command center of human body and it has an important function. In this case, the brain serves as the central processing of the body information. Related to the process happening in human brain, all activities are controlled by a central system of the brain which is called as a nervous system. According to Rogers (2011), the nervous system is seen as the most crucial thing influencing the activities of the body. He also states that the nervous system helps the brain in delivering all information and telling the body how to react. Every single part of movements actually depends on the nervous system because it can reflect on what the thoughts do in communication. Thus, the existence of the human nervous system becomes a necessary thing since it has diverse functions, such as controlling movement

of the body and having abilities to receive, process, and deliver the information. (p.11)

Generally, the nervous system is composed of central and peripheral system. In line with Plontke theory (2003) who states that there are two nervous systems in human brain. They are central system and peripheral system. The central system consists of the brain and spinal cord, while the peripheral system works for the body regulation, like breathing and keeping a temperature.(p.1).

There is the most basic unit of the nervous system called as a neuron. It includes three parts, such as dendrite, a cell body, and axon. Those parts work properly in transmitting the signals or information. For example, when the dendrite receives the signals, it then moves to the cell body and travels until it reaches the end of an axon. (Rogers, 2011, p. 11) The processing in the neural network system is illustrated below:

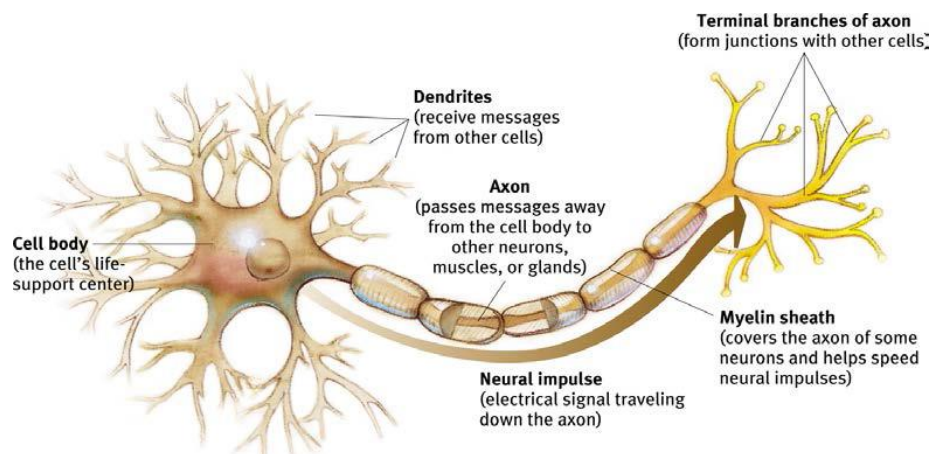


Figure. 1. The cell and neural network

According to Plontke (2003), the human brain is divided into two parts. Those parts are the left hemisphere and the right hemisphere which will control every movement happens in the human brain. The left hemisphere controls activities on the right half of the body, meanwhile the right hemisphere controls the left side. (p.3)

The left hemisphere controls the right side of the body, including the right hand, arm, and face, while the right hemisphere manages the movement on the left side of the body. In short, it can be said that each hemisphere has different functions. (Steinberg, 2001, p.313). As stated by Roger (2011), each hemisphere handles distinct functions. For instance, the left hemisphere will be useful when someone wants to deal with calculating on math and thinking logically. The right one is related to the language, visual imagery, and musical skills. (p.12)

Therefore, the activities in the human brain are very complex and well arranged. In a central area through both hemispheres, there is an area called as cortex. According to Rogers (2011), the cerebral cortex is the outer layer of gray matter on each outer layer of both hemispheres. Also cortex is divided into four types. They are the frontal lobes, temporal lobes, occipital lobes, and parietal lobes. The frontal lobes have to handle human ability to think, memorize, speak, and move their body. The temporal lobes take care of hearing, tasting, and smelling. The occipital lobe functions in sight and the parietal lobes manage touch. (p.20-23). The brain structure can be illustrated as in the following figure.

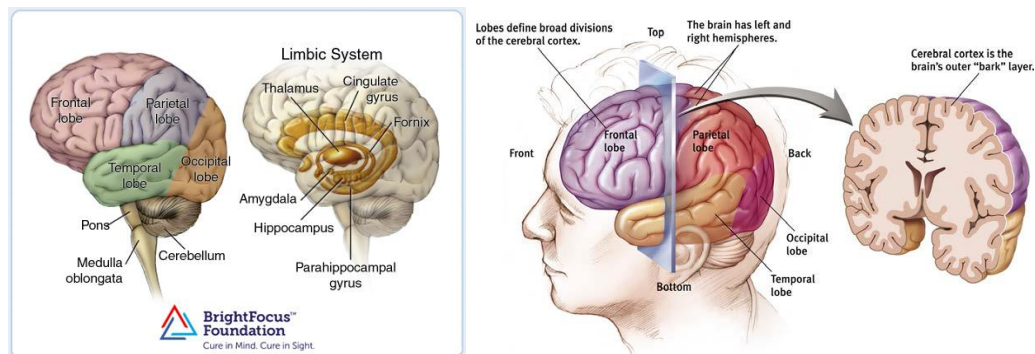


Figure 2. The brain structure: hemispheres and the side view

On the general structure, the human brain has only approximately the shape of sphere, but its two sides are referred to as the left and right hemisphere. With its two halves, it looks sort of like a pair of boxing gloves side by side, with a big thumb outside and pointing forward. The two halves of the brain exercise contralateral control of the body. That is, the left and right hemispheres control their opposite sides of the body.

According to Sastra (2011) and Hudson (2000) described that the outer layer of the brain, about a quarter inch thick, is a cortex. The cortex is multiply fissured or enfolded, and compared with rest of the brain, packed with nerves about ten billion. The major visible parts of the brain, each with left and right hemisphere equivalents, are the following:

- a. Temporal lobes, the thumb-like shapes. Serves as a board with things related to hearing.
- b. Frontal lobes, above and in front of the temporal lobes. Serves as a cognitive-related management board.



- c. Occipital lobes, behind the temporal lobes. Handles all things related to vision.
- d. Parietal lobes, above and behind the temporal lobes. It takes care of the somasthetics, the feeling that is on the hands, feet, face, and others.

According to Fromkin, Rodman & Hyams (2011), two hemispheres would operate independently. In general, the left hemisphere controls the right side of the body, and the right hemisphere controls the left side. Pointing with right hand, the left hemisphere is responsible for the action. Similarly, sensory information from the right side of the body like as right ear, right hand, right visual field is received by the left hemisphere of the brain, and sensory input to the left side of the body is received by the right hemisphere. This is referred to as contralateral brain function. (p.5)

#### **D. Aphasia**

The study of aphasia has been an important area of research in understanding the relationship between brain and language. Aphasia is the neurological term for any language disorder that results from brain damage caused by disease or trauma. According to Papathanasiou, Coppens & Portagas, (2008), aphasia is an acquired language impairment resulting from a focal brain lesion in the absence of other cognitive, motor, or sensory impairments. This language impairment can be present in all language components. From a cognitive perspective, aphasia is considered the selective

breakdown of language processing itself, of underlying cognitive skills.(p. XX)

Roth and Worthington (2011), aphasia is a language disorder due to brain damage that results in impairment in the comprehension or formulation of language and can affect both the spoken and written modalities. The major cause of aphasia is stroke due to hemorrhage or blockage of blood flow to the brain. Strokes are also referred to as cerebrovascular accidents (CVAs). Other etiologies or originating from include tumors, head trauma, and certain disease processes, such as encephalitis. (p.238)

In the other condition, Ahlsén (2006) aphasia is usually defined as damaging the language caused by brain damage. This is one of the problems that caused the appearance of the brain which is indeed the area to see. However, aphasia occurs due to factors that affect dysphasia, which is a disorder in children in the center of speech. But elsewhere, there is no such implicit age limit. Definitions are obtained, limiting the types of brain damage, and at the very least, the definition of language all affects what counts as aphasia. Furthermore, aphasia is usually a symptom diagnosis. This means that the presence of symptoms, or in other words, a language disorder, is the main criterion for diagnosis (p.101).

Aphasia is impairment, due to acquired damage of the central nervous system, of the ability to comprehend and formulate language. It is a multimodality disorder represented by a variety of impairments in auditory comprehension, reading, oral-expressive language, and writing. The disrupted

language may be influenced by physiological inefficiency or impaired recognition, but it cannot be explained by dementia, sensory loss, or motor dysfunction.

Also Damico (2010) described that the classic aphasia types traditionally arising from left hemisphere damage that most often grouped according to whether they are fluent or non-fluent forms of aphasia. The fluency dimension is closely linked to anatomy, fluent forms of aphasia are said to arise from a lesion posterior to the central Rolandic fissure and non-fluent forms from lesions anterior to the Rolandic fissure. It has been suggested that classification of aphasia need go no further than this basic fluency distinction. Still others attempt to upgrade and modernize the classical types. A range of features or aphasic symptoms is associated with this basic fluent–non-fluent division. (p.337)

As stated by Roth and Worthington (2011) said that aphasia is associated with damage to the dominant hemisphere for language in the brain, which is the left hemisphere in most individuals. It is accompanied by motor and sensory deficits. As the left hemisphere controls the contralateral or opposite side of the body, these motors and sensory impairments are most often right-sided in individuals with aphasia. Common motor impairments are hemiplegia or hemiparesis, paralysis or weakness on one side of the body, respectively. Hemianopsia is a visual field deficit in which an individual cannot see the right or left of the midline in one or both eyes. (p.238)

Ahlsén (2006) also added that aphasia has not been seen as primarily a pragmatic disorder. But aphasia can involve impaired comprehension of longer utterances and connected texts; difficulties handling grammatical structures; problems with metaphor interpretation, inference, abstraction in general, or context like as and, in some cases, difficulties affecting body communication. Thus, there are plenty of possible sources of semantic-pragmatic dysfunction. Aphasia affecting other aspects of language, such as word finding, word mobilization, and comprehension of words and structures, can also result in more secondary pragmatic problems, such as the apparent violation of conversational principles and conventional patterns of interaction. (p.102)

As can be gathered from the preceding description, aphasia has been classified in several different ways, there are six types of aphasia namely *Broca Aphasia*, *Wenicke Aphasia*, *Conduction Aphasia*, *Global Aphasia*, *Anomic Aphasia* and *Trascortical Aphasia*. Papathanasiou, Coppens & Portagas, 2008, p. 42-43).

### **1. Broca Aphasia**

According to Ardila (2010) described that speech in broca aphasia is not fluent but language understanding is relatively normal. Repetition is abnormal due to the apraxia of speech as a matter of fact, during repetition, the same disturbances observed in spontaneous speech are found. Pointing something is relatively normal. Indeed, pointing is a type of language understanding. (p. 67)

Meanwhile Fromkin, Rodman & Hyams (2011) said that Broca aphasics also often called agrammatic aphasics. It may also have difficulty understanding complex sentences in which comprehension depends exclusively on syntactic structure and where they cannot rely on their real-world knowledge. (p.8)

Papathanasiou, Coppens & Portagas, (2008) also added the condition that in Broca aphasia, speech is effortful, non-fluent, consisting of short phrases or single words. However, the clinical picture may vary from a complete loss of speech to a mild deficit characterized simply by word-finding difficulties. As in the case of telegraphic speech, all small, function words like preposition using are absent and the patient communicates using mainly nouns and verbs. This pattern may also extend to written language. Automated verbal sequences, such as reciting the days of the week or counting, and occasionally cursing or emotional speech, are usually preserved. (p.42)

Meanwhile in the theory of Devinsky and D'esposito (2004) said that subsequently, the sparse speech is spontaneous, slow, effortful, and interrupted by pauses that often overshadow the output. Patients often produce fewer than a dozen words a minute. Speech automaticity is lost as the fluid stream of words disintegrates into individual, strained words. Impaired articulation, with phonetic distortions and impaired melodic intonation and inflection, produces flat and unnatural but usually intelligible speech. Patients automatically produce expletives (*e.g., shit,*

*damn it*) that are correctly articulated, phonemically structured, intonated, and used in appropriate settings (*e.g., stubbing one's toe, inability to speak*). (p. 177)

## 2. Wernicke Aphasia

As the theory of Papathanasiou, Coppens & Portagas, (2008) described that an almost reverse image, with difficulty in understanding language while the ability of verbal expression remains unaffected, is diagnosed as wernicke aphasia. The extent of comprehension problems may vary among patients and moderate comprehension deficits are not uncommon. Verbal output is fluent, and it is characterized by the presence of phonemic and semantic paraphasias, neologisms, and empty speech, while rich content words are reduced in frequency. (p. 42)

Ingram (2007) described that the speech of a wernicke patient is quite fluent: no *ums* and *ers* or painful, groping and prolonged pauses. Speech rate and intonation sound normal. There are no obvious difficulties with articulation, unlike the broca patient. But the wernicke aphasics have problems with the phonological form of some words, making numerous sound substitutions or paraphasias and occasional *neologisms*. (p.50)

In assuming by Ardila (2010) that wernicke aphasia has been named in many different ways, those are sensory, receptive aphasia, central, verbal agnosia and others. Wernicke aphasia results from pathology in wernicke area. Wernicke area corresponds to the auditory association area

of the left hemisphere. There is, however, some disagreement about the exact limits of Wernicke area. (p.61)

Meanwhile in theory of Devinsky and D'esposito (2004) said that those with Wernicke's aphasia are unable to assemble phonemes, repeat sentences, or name things. To an English speaker, a foreigner with Wernicke's aphasia, speaking an unfamiliar language, would sound similar to a foreigner with normal speech. As with other anomic patients, patients with Wernicke's aphasia frequently use nonspecific and "filler" words, such as thing, it, that, and you know. Wernicke aphasia refers to fluent, well-articulated, but incomprehensible speech, which is often due to abundant neologisms. (p. 181 – 182)

### **3. Conduction Aphasia**

According to Papathanasiou, Coppens & Portagas, (2008), in conduction aphasia, repetition is compromised though speech remains relatively fluent, albeit characterized by phonemic paraphasias and word-finding difficulties. Patients are aware of their verbal paraphasias, and often, while trying to correct themselves, they produce several phonemic variations of the target word. Patients generally have problems understanding the syntactic structure in complex sentences. So, the patients have difficulties with repetition of speech. And most of them are lack of writing. (p.42)

Verbal or semantics paraphasia is word substitution, often of words related to the intended word, as in "*John drove my wheel*" and "*Steve*

*threw the glove.*" When anomia is present, superordinate words are often substituted for more specific words. Semantic paraphasias may be composed of morphemes that are inappropriate for the context (e.g., "*He was the best on heavenly and earth*") or may be linguistically incorrect (e.g., "*The clamorific Martian queen*"). (Devinsky and D'esposito, 2004, p.174)

In the other theory of Devinsky and D'esposito (2004) said that conduction aphasia, marked by disproportionate impairment in repeating spoken language. In conduction aphasia, spontaneous speech is usually fluent with frequent literal (phonemic) paraphasias, but word-finding pauses may be present. In some cases, hesitations, broken melody (dysprosody), and phonemic paraphasias suggest Broca's aphasia. However, preserved grammar and articulation, abundant phonemic paraphasias, and absence of hemiparesis distinguish conduction aphasias with decreased fluency from Broca's aphasia. (p.184)

Carroll (2008) described that a third major type of aphasia is conduction aphasia, which is a disturbance of repetition. Individuals with conduction aphasia appear to be able to understand and produce speech but have difficulty in repeating what they have heard. It attributes this form of aphasia to a disconnection between Broca and Wernicke areas, although other interpretations are possible. (p.360)

Meanwhile Ingram (2007) described that complementarity follows from the proximity of the respective language areas to their respective



adjacent motor and sensory regions. But the contrasting pattern of deficits project from speech into language itself: Broca aphasia into the grammatical impairments of language production and perception; wernicke aphasia into symptoms of lexical deficits. (p. 51)

It means, the ability to repeat or parrot back a short phrase is an example of such a task, whereas to maintain an interlocutor role in a conversational exchange of any substance would be an example of a complex verbal exchange, engaging the full cognitive resources of speaker and listener. Thus, disconnection of the direct connections between the sensory and motor speech areas through a lesion of the arcuate fasciculus should impair simple repetition more than it should conversational language use. This is precisely the predicted symptom pattern of conduction aphasia.

#### **4. Global Aphasia**

As stated by Caplan (1998), global aphasia consists of such a severe disturbance in all language functions that the patient achieves virtually no comprehension, and can at most produce stereotypic and automatic language output. The lesion responsible affects the entire perisylvian area and severely damages all the centers and connections postulated. (p.146)

In another statement by Ahlsén (2006) that global aphasia is the most serious type of aphasia, where the patient basically has no linguistic ability. It means global aphasia patient has difficulties in both expressive

and receptive language. Expressive and receptive language difficulties usually damaged the brain that has a function the skill about speaking and understanding. (p.41)

### **5. Anomic Aphasia**

As stated by Papathanasiou, Coppens & Portagas (2008) said that anomic aphasia is often referred to as amnesic, or nominal aphasia. Anomia refers to the patient inability to find names of people or objects. The patient, although aware of the nature of an object, is unable to name it upon request. Verbal output is fluent, characterized by word-finding difficulties, frequent pauses, and circumlocutions or in the other name is a word that no necessary, while phonemic and semantic paraphasias are rare. Repetition, comprehension, and reading aloud are spared. Anomic aphasia may be associated with lesions affecting posterior language areas. (p.43)

Patient in anomy aphasia has difficulty accessing a word from mental vocabulary. Severe naming difficulty is termed anomia. Example: When asked to name a hammock in a picture, the client responds, *It's to sleep in ... under trees ... you know, with a rope.* (Roth and Worthington, 2011, p. 239)

### **6. Trascortical Aphasia**

According to Papathanasiou, Coppens & Portagas, (2008), described that transcortical aphasias are characterized by a disproportionately preserved capacity of repetition. They result from a more or less complete isolation of the speech areas, they are the

perisylvian language zone of the left hemisphere from the rest of the cortex. Patients suffering from transcortical motor aphasia demonstrate non – fluent speech with preserved comprehension and relatively spared naming. Reading aloud and writing are impaired, and phonemic paraphasias are observed in some cases. There is a striking preservation of the repetition capacity that in some cases, takes the form of passive, “parrot-like” echoing of everything heard. (p.43)

In the same theory of Papathanasiou, Coppens & Portagas, (2008) said that transcortical aphasia divided into two parts, those are transcortical sensory aphasia and transcortical motor aphasia. In transcortical sensory aphasia, speech of patient actually is fluent, but in many cases it is meaningless and usually has a difficulties in comprehension of oral written language, reading, naming and writing are severely impaired. Mixed transcortical aphasia is a rare syndrome combining signs and symptoms of motor and sensory transcortical aphasias. Speech is nonfluent, and comprehension, naming, writing, and reading are severely impaired. Its salient feature is preserved repetition of words and sentences, often in the form of echolalia. (p.43)

In the classification of aphasia syndrome Roth and Worthington (2011) said that there are some characteristics of aphasia. Non-fluent aphasias is one of poor output with relatively spared comprehension. It generally is characterized by reduced vocabulary; agrammatism; and impairments of articulation, rate, and prosody, resulting in labored and effortful production.

The type of aphasia that has a characteristics non – fluent aphasia are broca aphasia, transcortical aphasia, global aphasia. Meanwhile, fluent aphasias consist of impairment in language comprehension with maintenance of normal melodic speech contour. The main characteristics are word-retrieval difficulties, phonological paraphasias, neologisms, perseveration, and the maintenance of normal melodic speech contour. The type of aphasia that has a characteristic fluent aphasia are wernicke aphasia, conduction aphasia and anomic aphasia. (p.239 – 241)

1. Broca Aphasia

Agrammatism; effortful articulation of phrase-length utterances; impaired prosody and intonation; concomitant apraxia of speech; good comprehension; lesion in the posterior inferior frontal lobe, as well as central and inferior parietal regions.

2. Wernicke Aphasia

Wernicke aphasia is fluent but often meaningless speech (jargon); impaired comprehension, good articulation, intonation, and prosody; lesion in the posterior portion of the first temporal gyrus of the left hemisphere.

3. Conduction Aphasia

Relatively fluent speech; frequent phonemic paraphasias; marked difficulty with imitation; good language comprehension; lesion in the arcuate fasciculus, deep supramarginal gyrus, or superior temporal gyrus.

#### 4. Global Aphasia

Severe deficits in all areas of language comprehension and production; output may be limited to stereotypic utterances; lesion encompasses both pre- and postrolandic speech zones.

#### 5. Anomic Aphasia

Significant word-finding difficulties in the presence of otherwise fluent and grammatical speech, good comprehension, lesion in the angular gyrus region

#### 6. Transcortical Aphasia

This aphasia is a little bit no initiation of spontaneous speech; output similar to Broca but excellent imitation (even of long utterances); relatively intact comprehension; lesion in the medial-frontal cortex, involving the supplementary motor area.

### **E. Linguistics Disorder**

This study researches one of the weaknesses or shortages namely language disorder. Language disorder can be developmental that could be present early childhood or they can be acquired as the result of surgery, a stroke, an accident or, old age. In certain cases this had a marked effect upon their ability to communicate in speech or writing (Field, 2006, p.43).

According to Ahlsén (2006) developmental language disorders in children have not usually been described in relation to the same frameworks as acquired language disorders in children and adults. It is, however, of considerable interest and importance to try to capture both types of

phenomena with the same types of theories. This is especially important if one applies an evolutionary perspective to brain and language. It has traditionally been considered to be “easier” to try to relate brain and language functions in adult brains than in young people developing brains. Since young brains have considerable plasticity, that is, functions can be transferred from one brain area to another if necessary and are still developing, one has to be very cautious in ascribing localization of functions to specific brain areas, (p.139-140).

According to Carroll (2010) said that there are two kinds of linguistics disorder. Those are expressive and receptive language . (p. 356-360)

#### **A. Expressive Language**

Based on Carroll (2010), expressive aphasia, was discovered by and named after the French surgeon Paul Broca. Broca studied individuals who, after a stroke or accident, were often unable to express themselves by more than a single word at a time. Although nouns and verbs were usually well preserved, they tended to omit articles, conjunctions, and grammatical inflections. This pattern of speech is referred to as agrammatism and is revealed in the following excerpt, in which a patient is attempting to explain that he came to the hospital for dental surgery : (p.356)

*Yes . . . ah . . . Monday . . . er . . . Dad and Peter H . . . (his own name), and Dad . . . er . . . hospital . . . and ah . . . Wednesday . . . Wednesday, nine o'clock . . . and oh . . . Thursday . . . ten o'clock, ah*

*doctors . . . two . . . an' doctors . . . and er . . . teeth . . . yah.* Different speech or language characteristics are observed:

Meanwhile, according to Ardila (2014) expressive language is divided into several characteristics, namely *fluency, articulation, prosody, phonological paraphasia, word selection* and *grammar*. (p.173)

### 1. Fluency

According to González (2008), language fluency is one of a variety of terms used to characterize or measure people language abilities. This can be interpreted as an indicator of fluency that refers to a people ability to use language fluently and coherently. These include the ability to manipulate various linguistic sources: vocabulary, grammatical structure, productive skills (speaking and writing), and receptive skills (listening and reading). The existence of a correlation between fluency, accuracy, and complexity, will result more user attention to fluency, the more grammatical and error sentences with the smaller complexity that he will create. (p.673)

In the same book of González (2008) added that fluency reverse relationships apply too: The more attention is given, say, the grammatical accuracy, the slower and more hesitant speakers proceed as they divert their attention from the meaning they want to express and instead focus more on how to shape their speech by correct. (p.673)

a) Stuttering

As stated by Ward (2008) described that stuttering is disruption in the fluency of verbal expression, which is characterized by involuntary, audible or silent, repetitions or prolongations in the utterance of short speech elements, namely: sounds, syllables, and words of one syllable. These disruptions usually occur frequently or are marked in character and not readily controllable. Sometimes the disruptions are accompanied by accessory activities involving the speech apparatus, related or unrelated body structures, or stereotyped speech utterances. (p.9)

b) Cluttering

From the theory of Ward (2008) described that cluttering is a disorder of fluency characterized by two strands of breakdown, those relating to motor speech and those relating to linguistic variables. It has received less coverage in the literature than stuttering, and is comparatively poorly understood. Typically, speech is characterized by fast bursts of jerky speech which may also sound slurred and misarticulated. In addition, language may be poorly organized with evidence of poor word finding together with excessive number of revised sentences, restarts and filler words and phrases. Unlike stuttering,



cluttering is characterized by a lack of concern and awareness on behalf of the speaker. (p.4)

## 2. Articulation

As stated in Ardila (2014), it is explained that verbal articulation agility refers to the ability to properly produce all original language phonemes at normal speeds. While, oral agility refers to agility to make movements with articulation organs including tongue, lips, throat that are not related to the language for example, to move the tongue in different directions, to whistles. Articulation disorders are usually seen in broca aphasia that can also be found in aphasia conduction at the onset of aphasia, or when the pathological process responsible for aphasia extends to the main motor area. The type of dysarthria most often associated with aphasia is spastic dysarthria, because the pathological process lies at the level of motor neurons over the pyramidal system. (p. 173)

## 3. Prosody

According to Ardila (2014), prosody is normal in posterior (fluent) aphasias. Prosody is abnormal in motor aphasias, due to the articulatory effort. By the same token, phonation is normal in fluent aphasias, but can be abnormal in motor aphasias, particularly when there is a subcortical extension. Frequently, no phonation is found at the aphasia onset. (p.173)

In another theory of Hirst and Cristo (1998) stated that there is no agreed number of prosodic variables. In auditory terms, the major variables are: (p.17)

- a) The pitch of the voice (varying between low and high)
- b) Length of sounds (varying between short and long)
- c) Loudness, or prominence (varying between soft and loud)
- d) Timbre (quality of sound)

In acoustic terms, these correspond reasonably closely to fundamental

- a) Frequency (measured in hertz, or cycles per second)
- b) Duration (measured in time units such as milliseconds or seconds)
- c) Intensity, or sound pressure level (measured in decibels)
- d) Spectral characteristics (distribution of energy at different parts of the audible frequency range)

#### 4. Phonological Paraphasias

As stated by Ardila (2014), frequently, phonological abnormalities (phonological paraphasias) are observed in aphasias. Phonological paraphasias are found in different aphasia subtypes, but they are particularly abundant in wernicke aphasia and conduction aphasia. They can also be found in Broca aphasia, but frequently involve phoneme omissions, particularly in complex syllables. (p.173).

In the theory of Roth and Worthington (2011) said that paraphasia is an errors in speech output characterized by the production of unintended sounds, syllables, or word. Meanwhile, phonemic paraphasias also known as literal paraphasias, consist of extraneous or transposed sounds and syllables and substitution of one correctly articulated phoneme for another. Example: When asked to name a hammock in a picture, the client may respond with one of the following: “*hammerock*,” “*hackamm*,” “*pammock*,” respectively. (p. 239)

#### 5. Word Selection (Lexicon)

In the same theory of Ardila (2014) word selection or word finding difficulties are frequent in aphasia. Word finding difficulties are quite often associated with circumlocutions and verbal paraphasias (p.173). Paraphasia is a state in which the patient speaks, but is mistaken with uncoordinated words and the patient himself does not understand what he is saying. This phenomenon appears where the word in the superior gyrus (Papathanasiou, Coppen, Portagas, 2008, p.39)

#### 6. Grammar

According to Ardila (2014) described that two major types of grammatical abnormalities are found in aphasia: (1) agrammatism, observed in broca aphasia, characterized by a reduction in the use of grammatical elements in language; and (2) paragrammatism,

observed in Wernicke aphasia, characterized by an over-use of grammatical elements, frequently wrongly selected. (p.174)

a) Agrammatism

In the theory of Roth and Worthington (2011) stated that agrammatism is syntactic deficit characterized by omission of function words and grammatical inflections. Semantic aspects of language remain intact. Speech output consists primarily of content words. For example, when someone asked to describe a picture of a picnic with someone sleeping in a hammock, the client responds ; food ... man bed ... he sleep. (p. 239)

b) Paragrammatism

According to Kleist (1914) as cited in Papathanasiou, Coppens & Portagas (2008) stated that paragrammatism the ability to create word orders is not abolished, but phrases and sentences are often wrongly chosen and thereby amalgamate and contaminate each other phrases and sentence constructions are not completed. The spoken expression is not simplified overall; instead, also conditioned by a strong over-production of word sequences, it swells to confused sentence monsters. (p.13)

## **B. Receptive Language**

Language understanding or receptive language is formally tested by first, asking the patient to point at something usually, objects, body

parts, colors, and actions. Second, receptive disorder is presenting verbal commands with increasing complexity. When asking the patient to point, different categories should be used because they can be differentially impaired in aphasia, for instance, a particular patient can have severe difficulties to point at body parts, and just mild difficulties in pointing at external objects, and no difficulty at all in pointing at colors or actions. The second strategy is used in several language understanding tests. (Ardilla, 2010, p.173)

Carroll (2008) explained that receptive language is associated with speech that is fluent but of little informational value, which is known as paragrammatic speech. Moreover, comprehension is also impaired. It is interesting to note, however, that wernicke's aphasics appear to perceive phonemes in a manner similar to normal individuals, and they also show evidence of semantic priming. This would suggest that sentence and discourse level processing deficits might figure into the comprehension problems of wernicke aphasics. (p.358)

Also Ardila (2014) added that different strategies are used to test language understanding. There is a level of language understanding required to follow a normal conversation. There are the difference characteristics in speech in receptive language those are repetition, naming, reading and writing. (p. 174)

## 1. Repetition

Frequently, a distinction is established between aphasias with impaired repetition ability or in the other name is perisylvian aphasias and aphasias with a preserved ability to repeat or extrasylvian or transcortical aphasias. When testing language repetition, it is important to include different types of items: at least, short-long verbal information then it might be a meaningful and meaningless utterances. (Ardilla, 2010, p. 174). Based on the theory of Devinsky and D'esposito (2004) said that to test the repetition of aphasia patient, ask a patient with suspected aphasia to repeat words, phrases, and sentences of increasing complexity. With aphasia, the repetition of multisyllabic, difficult-to-articulate phrases. (p.175)

## 2. Naming

In stated by Ardila (2014), naming is a very important part of aphasia testing. When testing the naming, different categories must include external objects, body parts, colors and actions. In fact, one ability experienced by the receptive language is pointing. Pointing out is the ability to understand the language in which a word is presented and the patient has to find the meaning, while the naming is the skill of searching the words and meanings presented and the patient must find the word. As mentioned above, the ability to

name or point different categories can be separated in aphasia. (p.174)

In other theory by Devinsky and D'esposito (2004) said that patient ability to give the name by listening to spontaneous speech for word-finding pauses, circumlocutions, or the use of nonspecific words, such as *it*, *thing*, and *you know*. Circumlocution is a circuitous, rambling search for the missing target word or descriptive substitution for objects, such as *hot for stove*, or functions, such as *fill my belly for eat*. For example, someone who never wears a necktie may have never heard the word *knot* used in reference to a tie. If the patient fails to name an object pointed to by the examiner but selects the correct word from a short list. The way to test confrontational naming is by pointing to objects and asking the patient to name them. Patients normally have the least difficulty with superordinate words, but may have trouble naming object parts, especially those not commonly used in everyday speech. (p.194)

### 3. Reading

Ardila (2014) traditionally two different reading abilities are tested: (1) The mechanics of reading, that is, the ability to convert visual signs into spoken language. The mechanics of reading is tested at different levels: reading letters, syllables, words, sentences, and texts. (2) Reading comprehension. Reading

comprehension can be tested using written commands ask the patient to read, and then ask questions about what the patient read and finally, matching a word or sentence with a visual representation, as included in the reading comprehension of words and sentences. (p.174)

#### 4. Writing

Testing for writing is the opposite of testing for reading. Traditionally, writing has been tested using three strategies: spontaneous writing, writing by dictation, and copying. Different levels of complexity can be used: Letters, syllables, words, sentences, and texts. In writing single words that are controlled according to frequency high, low, pseudo words, regularity, imagine ability, and grammatical category (content words, grammatical words). (Ardilla, 2014, p.175)

Based on the theory above, the writer concluded that people may have to face difficulties in expressing what they want to say when they live with mental disorders. In addition, their language is distorted. Their abnormal language can cause interference in communication. The problem may be receptive, involving language, expressive interference involving language production, or a combination of both.

The existence of these language disorders affects to the communication of aphasia sufferers. She may exhibit unusual expression because there is nerve damage in the mind of aphasic patients. In addition, this disorder can also



change the sentence structure and language selection that they use and then influence the perception of the language of the sufferer.

## **F. Cerebrovascular Accident**

Cerebrovascular accident is when blood flow to a part of your brain is stopped either by a blockage or the rupture of a blood vessel. There are important signs of a stroke that you should be aware of and watch out for. According to Roth and Worthington (2011) said that vascular disorder is a damage to brain cells due to the lack of oxygen that occurs when blood flow is impaired by blockage or rupture of an artery. This is also referred to as a stroke. (p.35)

According to Ardila (2014) it is explained that aphasia is observed in about one third of patients with a called cerebrovascular disorder or cerebrovascular accident called CVA or stroke. In the advanced stages of patients experiencing cerebrovascular accident most commonly experience global aphasia. In fact, cerebrovascular refers to a disturbance in normal brain function due to the abnormal conditions of the blood vessels in the brain, namely the vessel wall itself, accumulation of materials, changes impermeability, or rupture. Stroke can be caused either by a clot obstructing the flow of blood to the brain or by a blood vessel rupturing and preventing blood flow to the brain. (p.30)

Meanwhile Sastra (2011) described that a stroke suffered by a person, originally derived from aphasia syndrome is a type of aphasia caused due to the bleeding in the brain, either due to blockage of the arteries and arteries due to arterial rupture. The type of aphasia suffered by the sufferer varies according to the severity of the stroke he suffers, such as Broca's aphasia, Wernicke's and conduction. But cases show that Broca's aphasia sufferers most suffered after paying attention to patient speech post stroke.

#### **G. Movie**

Klarer (2005) stated the movie is predetermined by literary techniques; conversely, literary practice developed particular features under the impact of film. In spite of their differing forms and media, drama and film are often categorized under the heading performing arts because they use actors as their major means of expression.

The study of film has existed for quite some time now as an independent discipline, especially in the Anglo-American world. Since its invention a hundred years ago, film has also produced diverse cinematic genres and forms which no longer permit a classification of film as a mere by-product of drama. Because of its visual power the visual element plays only a secondary role in fiction film is hastily classified as a dramatic genre. If film is dealt with from a formalist structuralist point of view, however, its affinity to the novel often overshadows its links to the play. Typical elements of the novel varied narrative techniques, experimental structuring of the plot, foreshadowing and

flashback, the change of setting and time structure are commonly used in film. The stage offers only limited space for the realization of many of these techniques. (p.55-57)

## **H. Research Relevance**

In the title Linguistics Disorder of Aphasia in the Character Lotje of the Movie My Beautiful Broken Brain the author discusses the type of aphasia experienced by patients based on the types and symptoms experienced by patients in language, especially on the formation of language, causing linguistics disorder. The authors focused on the disorder producing the language of aphasia patients who were expressed and disrupted in the process of receiving information based on symptom on linguistics disorder of various theories. Meanwhile, to know the type of aphasia in these patients by analyzing the characteristics of aphasia based on expert theory.

The writer has tried to find the relevance research in English S1 programme. The writer finds the same title of journal in Universitas Negeri Jakarta. The title which is found: CACAT SINTAKSIS PADA PENDERITA AFASIA GLOBAL in RUMAH SAKIT UNIT DARURAT KOJA by MURNI ASIH (2125090055) 2013 and GANGGUAN FONOLOGI PADA PENYANDANG PASCA STROKE SINDROM AFASIA by FEBRIANTI NUR RAHMADANI (2125130453) 2018.

The author found some similarities in the title of thesis that existed at the State University of Jakarta that is carrying neurolinguistics as the main theme

in the analysis. Object data taken is post aphasia post stroke. The last equation is to apply qualitative method as the main method in thesis.

However, among all the equations in the title of the above thesis, the authors found some differences such as, the difference in focus on the analysis. First, the title of Murni Asih thesis focused on one field that is only a syntactic disorder in the global aphasia and Febrianti Nur Rahmadani focused on one area of phonology disorder. The authors focus on the type of linguistics disorder that is known to exist two kinds, namely expressive and receptive and know the symptom from various aspects of linguistics disorder and the type of aphasia based on the disturbance caused.

Second, the other difference is if the writer must prove that what type of aphasia held by the patient based on symptom owned, then the thesis of Murni Asih has been recognized that the patient is Global Aphasia. And belong to Febrianti Nur Rahmadani only sample of aphasia patient and not focused on one type of aphasia.

The last one, the most striking difference is the retrieval of data objects. The author makes the analysis based on the film as a data object, more precisely in the Lotje as the main character who has a type of bleeding aphasia in the brain. While the two researchers, Murni Asih and Febrianti Nur Rahmadani take the data object in the form of interviews in patients at the Hospital Emergency Hospital in Koja and Cipto Mangun Kusumo Hospital in Jakarta as the main sample.

## **CHAPTER III**

### **METHODOLOGY OF THE RESEARCH**

#### **A. Method of the Research**

##### **1. Time and Place of the Research**

The research entitled “Linguistics Disorder of Aphasia in the Main Character of the Movie *My Beautiful Broken Brain*” was started from the beginning of March 2018 to the beginning of August 2018. The references were obtained from various kinds of books in STBA JIA library, also books in other university libraries, and e-books. The research was taken place in STBA JIA library, and the source data was taken from the movie *My Beautiful Broken Brain* as a source data.

##### **2. Kind of the Research**

This research needs some steps to make an analysis. There are collecting data, analysing and interpreting information to answer the questions. This research uses qualitative method with the content analyzing of the linguistics disorder to find out aphasia in the movie *My Beautiful Broken Brain*. The data in this research is a text that requires comprehension, descriptions, and in-depth interpretation so that this research is qualitative.

Qualitative methodology refers to research that produces descriptive data which are people’s own written or spoken words and also observable behaviour (Taylor, Bogdan, & Devault, 2016, p. 7). In addition, the data of

qualitative research cannot be easily quantified and the analysis is interpretive rather than statistical. (Mackey & Gass, 2005, p.2)

In this research, the method that the writer used is descriptive qualitative method. “Descriptive studies are communicated through the data. Although researchers in descriptive studies may try to lead readers to certain conclusions by virtue of what they choose to report and how they report it, readers are free to come to their own interpretations and draw their own generalizations” (Taylor, Bogdan, & DeVault, 2016, p. 162). In addition, Moleong (2011) said that descriptive signed by the collected data which are from interviews, field notes, photographs, videotapes, personal documents, notes or memos, and other official documents. (p. 11)

This research will explore the linguistics disorder and aphasia of the types and the writer will describe it, so that the application of qualitative methods is appropriate to be used in this study. The selection of qualitative methods for this research is related to the objectives of the research that have been explained above which to find out the linguistics disorder and aphasia of each type based on the characteristics of language produced in *My Beautiful Broken Brain* movie.

## **B. Procedure of the Research**

After understanding the role of systematical and considering the arranged steps, it comes to the procedure of the research. The steps are listed as follows:

## **1. Preparation**

The several basic things during the writing are to identify the problem, to select the fixed title, to formulate and to limit the significance of the research, and to consider the advantage later. The research used books of the theories to strengthen and to prove the analysis of the research. Despite having read some books, it is important to get some advice from Advisor I and Advisor II.

## **2. Implementation**

To obtain the research well, the implementation presents analyzing sentences which can be found in My Beautiful Broken Brain movie. Moreover, the analysis is done by classifying the utterance based on its linguistics disorder and aphasia based on each characteristic.

## **3. Finishing**

### a. Composing the analyzed data

Before reporting the result to finish the research, each need to be composed after the data are given the mark and it will be gathered with other data.

### b. Discussing with the advisors

Discussing with first and second advisor has been done every time to maximize the result of the research.

### c. Revising the result

During the analysis, it is important to seek advices about how to analyze the sentence types of linguistics disorder and aphasia that found

in the movie *My Beautiful Broken Brain* from advisor I and advisor II. The advisor gave some corrections on mistakes in the material or technical in writing. Revising the mistakes in the research is important to make the research better.

d. Concluding the result

The final phase to make the research can be understood is concluding the result of all chapters. The research can be concluded with the various types of sentence that are difference in linguistics disorder and aphasia which found in the movie *My Beautiful Broken Brain*.

### C. Technique of the Data Collection

The technique of the data collection in this research can be done by using *tekniksimakbebaslibatcakap*(non-participant observation) which the researcher is only being the observer of the informant's language use. The researcher is not directly involved in the conversation. The researcher just scrutinizes the dialogue between the informants. This technique is possible to be used because the data of the research is movie. The writer watches the film from the beginning until the end of the movie. The writer took simple sentences that have different pragmatic notions. It can be seen from the respond from the hearer. The note-taking technique is also used in this research. This technique is the continuation technique of non-participant observation technique. It can be done by jotting down the data that have been obtained in a paper. (Mahsun, as cited in Muhammad, 2011, p. 218)



#### **D. Technique of the Data Analysis**

Before doing the research, the data that will be analyzed need to be understood first. After collecting data from the data source, the data need to be analyzed using the basic technique in order to obtain the accurate data. There are several steps to analyze the data; identifying the type of the sentence, outlining the data based on linguistics disorder properties and aphasia's theory, and concluding the data.

It is important to collect references and linguistic book from some sources. The data can be collected if the data match with the characterization of sentence types based on syntactic properties. The analysis uses some references which related to linguistics disorder and aphasia.

The first step to do in this research is identifying how linguistics disorder happened in spoken of the main character. The writer looks into the characteristics of language impairment in order to know what type the linguistics disorder is. The types of linguistics disorder consist of expressive language and receptive or understanding language. The writer identified the types of aphasia experienced by patients based on linguistic disorder types. The types of aphasia consist of broca aphasia, wernicke aphasia, conduction aphasia, global aphasia, anomic aphasia and transcortical aphasia.

The second step to do in this research is outlining the data based on linguistics disorder and aphasia. On linguistics disorder, the writer looked into the characteristics of spoken in language impairment. Each type of spoken has its own characteristics. Sometimes, Sometimes in one utterance it

has two or more characteristics. So, the writer must look the dominance of characteristics in aphasia. The language impairment can affect the result of the kind of aphasia that the sufferer had.

The third step to do in this research is concluding the data. After outlining the sentence, the sentence can be concluded what linguistics disorder and aphasia are in it. The spoken data appeared with effected in the type of linguistics disorder and type of aphasia.

## **E. Sources of the Primary and Secondary Data**

### **1. The Primary Data**

The primary data is simple sentence which taken from My Beautiful Broken Brain. My Beautiful Broken Brain had its world premiere at the 2014 International Documentary Film Festival Amsterdam, where it won the DOC U award. The film was initiated by its protagonist itself. According to herself, making a film about her struggles was the first linear thought she had after the stroke. She started taking video-selfies of herself while still in hospital, and two weeks later contacted documentary filmmaker Sophie Robinson to enlist her help. Funding for editing and post-production was collected via Kickstarter between November 28 and December 20, 2013. The initial goal of £30,000 was exceeded by £7340.

## **2. The Secondary Data**

The secondary data that the writer uses are based on several journal and books about linguistics disorder and aphasia which related as the writer's main focus in this research.

## CHAPTER IV

### DATA ANALYSIS

#### A. Data Description

The problem of the research will be answered in this chapter. This chapter presents the data analysis and the interpretation of the research findings. The data are taken from the movie *My Beautiful Broken Brain*. The movie which are going to be analyzed consisting of the linguistics disorder each other, there are 31 data within the duration 01:23:55.

Finding data in the movie *My Beautiful Broken Brain* are analyzed according to some steps. In the beginning step, finding the kinds of how to produce the language of aphasia in the main character based on the data provided. Second step, choosing and describing data based on the kinds of linguistics disorder that could be appear the most into the different effect. The last step, analyzing those data found by explaining kinds of aphasia based on the characteristics indicate language produced that the most appear in the main character. Those data are presented below.

**Table 4.1** Data Description

NO.	TIME	SCRIPT
1	00:08:20	Lotje : Okay, I'm alive, very bad at writing. But, I'm not ... dead
2	00:08:33	Lotje: That's a start. Very messed up, but definitely

		excited to be alive”
3	00:08:53	Lotje : It’s either gonna be a new plate ... place. Or something completely different.
4	00:10:11	Lotje : S-s-sum-summer ? Or did I already ?
5	00:10:23	Lotje : S-s-seed. (Minute :)
6	00:11:25	Lotje : K-k-kind of a clever person
7	00:11:45	Lotje : How do I say ? I can’t
8	00:11:48	Lotje : /’nɔ:vəl/, /’nɔ:vl/. This normal world ... normality
9	00:12:00	Lotje : It’s difficult to ... uh I guess I’m not making much sense. Sorry.
10	00:12:06	Lotje : I wish I could ... yeah. I’ll try
11	00:12:40	<p>Therapist : What about these photographs ? Do you ..</p> <p>Lotje : Pictures ?</p> <p>Therapist : Yeah</p> <p>Lotje : Matilda is, um, my... is ... My ... She’s ... I can’t. My ... nephew. Yeah my nephew.</p> <p>Therapist : She’s your nephew ?</p>
12	00: 12.45	<p>Lotje : And now, she’s also a ni ...</p> <p>Therapist : A nephew ?</p> <p>Lotje : /ni:f/... /ni: θ/... niece /ni:s/. I meant Niece /ni:s/</p>
13	00:13:00	Lotje : For some reason, I can't say the actual word itself. This word.

		<p>Doctor : On that shelf ?</p> <p>Lotje : Yeah.</p> <p>Doctor : A record.</p> <p>Lotje : Record, yeah. Exactly, so...</p>
14	00: 13:20	<p>Lotje : For some reason, I can say ... You say it again.</p> <p>Doctor : Record.</p> <p>Lotje : Record. Yeah Record.</p>
15	00: 13:25	<p>Lotje : I can only say it if I don't actually ... s-s-s-s if I go like that ...</p>
16	00:13:48	<p>Lotje : I can't say it now. But I can't ... You know, I can't speak or ... Not speak .. I can't ... be clever. (Swinging hand) What do you call it ?</p> <p>Um ...</p> <p>Doctor : Write ?</p> <p>Lotje : Yeah, write.</p>
17	00:14:10	<p>Lotje : I can't write at all. Or be clever or be normal. Any of that.</p>
18	00:14:17	<p>It's ... it's beyond terrifying.</p>
19	00:14:23	<p>Lotje : This could read /teɪl/ (tale) not /tɛl/ (tell).</p>
20	00:15:36	<p>Lotje : I can't believe I ... can look at, uh, some words.</p>
21	00:16:09	<p>Lotje : I refuse to believe that I ... that's happening.</p>
22	00:21:32	<p>Terapist : That's okay.</p> <p>Lotje : It's like a dream. Somebody did very good job</p>

		tidying. It's like, um, something that I've, um .. changed completely
23	00:23:30	Lotje : I haven't lived with my mother since I was 18. So, now I'm twent ... thirty ... four. So .. thirty four years old.
24	00:27:15	Lotje : I'm rec... I'm obsessed with recording everything and unable to remember anything.
25	00:28:02	Lotje : It's like, um .. You think about, um ... Umm ... You know you think about David Lynch and ... things like that a lot.
26	00:29:01	Lotje : It's like a dimen... a new dimension.
27	00:36:01	Therapist : Point your forearm then your shoulders Lotje : Forearm , then my shoulders Therapist : Mmm ... Lotje points her hand Therapist : Close
28	00:57:01	Lotje : The whole of my back, my arms, my legs, my-my .. My, um .. This. What do you call that ? Doctor : Hips ? Lotje : Yes.
29	01:00:48	Lotje : Well, I've been doing this, um, electromagnetic

		therapy thing. Uh, I forget what it ... See .. I've regressed
30	01:00:58	Lotje : I have regressed since the seizure. Um, but ... Um, but yeah, it's, um ... Yeah, some sort of ... Um, transmagnetic ..
31	01:02:35	Lotje : So, now I'm thinking .. maybe none of ... me will recover quickly ever.

## B. Data Analysis

In this data of the research, there are analyzes from *My Beautiful Broken Brain* the movie which contain linguistics disorder found through neurolinguistics approaches. The descriptions are listed in the table of the movie *My Beautiful Broken Brain* to make the interpretation of the data analysis easier.

In this part, the writer explained the characteristics of language disorder, types of language disorder are expressive and receptive language disorder. It is based on the dialog in the script. The data is taken from the movie and its script "My Beautiful Broken Brain" by Ardila and Papathanasiou, Coppens & Portagas as a main theory.



**Datum 1 : I'm alive, very bad at writing. But, I'm not ... dead**

The script :

Okay, I'm alive, very bad at writing. But, I'm not ... dead (minute : 00:08:20)

In the above case example, Lotje informs that she has just recovered from her coma. However, based on the above sentence which is very bad in writing does not correlate with the previous clause that *I am alive*. In that remark Lotje said that she could not write and had nothing to do with what sentence to say when first awakened from a coma.

Moreover, in my live speech, very bad in writing she should add the subject after the coma because the sentence in general is the subject then predicate then object or complement. And *I'm not...dead* is one example of the word fragments that Lotje has a problem with justifying the sentence structure when saying. In this case Lotje shows symptoms on the disorder in sentence structure or grammatical type of **paragrammatism**. This occurs when the aphasia patient cannot speak in accordance with the grammatical structure or sentence correctly. Paragrammatism appears in **expressive language** characteristic of linguistic disorder characteristics.

The second problem that arises in the utterance is **fluency**. There is a stop when you want to say *Dead*. Lotje has a very slow speed in saying that she has to compile all the words that are in her mind and later on. This is one of the indications of the third problem of prosody, which Lotje is unable to say at normal speed.

The way of talking that Lotje shows when speaking is the patient's characteristic speech based on the above speech can be said that Lotje has Broca's aphasia. Broca's aphasia is where the patient has difficulty in speaking in accordance with the structure of the sentence correctly. A fluency, difficulties in prosody and paragrammatism in simple and comprehensive sentences.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I'm alive, very bad at writing. But, I'm not ... dead	Grammar (Paragrammatism) , Fluency	Expressive Language	Broca Aphasia

**Table 4.2** Linguistics disorder of Broca's aphasia in language produced

From the analysis above can be concluded that the main character in the film characteristic of paragrammatism that is categorized as grammar and fluency. This raises the type of linguistics disorder that is expressive language. So these three characteristics indicate that the main character has a tendency towards Broca's aphasia.

**Datum 2 : That's a start. Very messed up, but definitely excited to be alive**

The script ::

“That's a start. Very messed up, but definitely excited to be alive” (minute : 00:08:30)

In the case above, she indicates **paragrammatism**. In the phrase *that's a start*, Lotje makes the word ambiguity is unknown and makes underestimate. In the second sentence *very messed up* also shows that Lotje is talking ambiguity. It is not known exactly what the meaning of speech aphasia sufferers. The second proof of paragrammatism occurring at Lotje is in *very messed up* utterances, it indicates that the error in grammar use when saying Lotje suffered.

In the second case the main character has **fluency**. This refers to the speed of speaking badly with Lotje. When she said these two simple sentences in a period of nine seconds, normal people will say the simple sentence is less than that. In this case, Lotje may have a disorder in articulation, but the fact can be said to be articulation of disorder when Lotje experiences organ problems that affect her speech ability.

In the sentence it should be preceded by the following subject of a verb predicate *I feel very messed up* or subject followed by a to be like *I am very messed up*, so paragrammatism is spared in this case. Then, ambiguity that will not appear in the case above. In the sentence but definitely excited to be alive does not correlate at all with the sentence previously preached. The

ambiguity referred to as the main cause of paragrammatism is because the first and second interpersonal expressions are not coherent at all and the main cause is the fault with the use of grammar.

Based on the characteristics above, Lotje has paragrammatism when she is talking can indicate that she has **expressive language**. This is because Lotje has a disorder producing language and speech. And then it is seen from the above phenomenon Lotje has a tendency to **broca aphasia**. Where the main characteristic of this type of aphasia is speech is effortful, non-fluent, consisting of short phrases or single words.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
That's a start. Very messed up, but definitely excited to be alive	Grammar (Paragrammatism), Fluency	Expressive Language	Broca Aphasia

**Table 4.3** Linguistics disorder of broca aphasia in produced a language

Based on the analysis above that the main character has paragrammatism in other mean grammar difficulties, while the main character has an expressive language when she talks also has a tendency to broca aphasia. The table above has shown and concluded the analysis.

**Datum 3 : It's either gonna be a new plate .. place. Or something completely different**

The script :

It's either gonna be a new plate .. place. Or something completely different.

(minute : 00:08:53)

In this case, Lotje said a new plate then after she stops and said *place* in the replacement of her mistake in saying. This shows that Lotje has difficulty in pronouncing the right word so that there is a condition where there is a similar pronunciation that causes Lotje's difficulty in saying according to the exact word context it is called **phonological paraphasias**. Substitution of *plate* word to *place* due to homonymy affecting Lotje said the wrong word.

In the second utterance Lotje has **paragrammatism**, it happened when the grammar structure is less precise causing questions and ambiguities. Or something completely different sentence, Lotje told that sentence with the wrong grammar. Evident from the lack of correlation between previous sentences that she said *place* but in the next speech, she said something that she regarded as something different. This phenomenon can lead to other questions because it is not clear the purpose of the utterance. This happens because speaker has impaired access to syntactic processes.

From the above case, Lotje can be proved that Lotje has a paragrammatism error in the formation of sentence structure when it is said. And the second is phonological paraphasia that is a mistake in producing

sound according to the right word. Both of these are proof that Lotje has an **expressive language**. The expressive language disorder is related to speech production as she speaks. Expressive language occurs because of an interruption while in process of talking, and its characteristics are phonological paraphasias and paragrammatism which are included in the structure of the sentence or grammar.

Based on the phenomenon above, it can be indicated that Lotje has **broca aphasia**. This is indicated because she has a non-fluent utterance type. And of course this is because the main characteristic of this type of aphasia is an error in pronouncing sounds or called phonemic paraphasia and difficulty finding words when speaking.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
It's either gonna be a new plate .. place. Or something completely different	Phonological Paraphasia, Grammar (Paragrammatism)	Expressive Language	Broca Aphasia

**Table 4.4** Linguistics disorder of broca aphasia in language produced

Based on the analysis, the main character has two characteristics: phonological paraphasias, grammar type phonological paraphasia classified in

expressive language and has a tendency towards Broca aphasia. The table above has shown and concluded the analysis

#### **Datum 4 : S-s-sum-summer ? Or did I already ?**

The script :

Therapist : I want you to say some words beginning with “s”

Lotje : Yeah

Therapist : You think you can do that ?

Lotje : Umm

Therapist : So, it could be, um, “sound” or “swing” or “sitting. So, it’s starting from .. now

Lotje : \_S-s-sum-summer ? Or did I already ?

Therapist : S... Okay

To test the ability and restore aphasia required special language-based therapy that is being done. The therapist asks Lotje to say a word beginning with the letter 'S'. Lotje understands what the therapist said, meaning there is no indication of receptive language disorder in this case. However, Lotje mentions the word *summer* by extending the sound to the word in another sense, Lotje has **stuttering** in the case above. Stuttering is a condition in which speech disorder is characterized by problems in the fluency and flow of the aphasia patient. And in this case stuttering included into the fluency and convey the information.

The second problem of the above utterance is that Lotje did not find all the words beginning with 'S' correctly. As she said after mentioning the word

*s-s-summer* with a stutter way, then she paused and asked the doctor *Or did I already?*. Meanwhile, doctor asks Lotje to say all the words that start from the letter 'S'. It is very clear that sufferers and sustain word finding difficulties or **word selection**. This phenomenon is usually followed by stuttering type of fluency because the patient is hesitant to say the right word, visible from she asked the doctor after she said the word.

Fluency of Lotje belongs to an **expressive language** in which Lotje's condition has an interruption in speaking or producing language. It can be indicated that Lotje is an anomic aphasia in which the sufferer finds the right word. However, if Lotje has an anomic aphasia, she will not have a stutter or interruption in the subtle conversation. This means that from one case above, this characteristic is a non-fluent speaking that Lotje has.

Based on the way Lotje speaks and raises some characteristics of fluency, word selection so indicated to have expressive language, has a tendency towards **Broca Aphasia**. This is because Broca aphasia has several main characteristics, one of which is fluency and word selection. So, the tendency of Lotje is broca aphasia reinforced with she is having these characteristics.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
S-s-sum-summer ? Or did I already ?	Fluency (Stuttering), Word selection	Expressive Language	Broca Aphasia

**Table 4.5** Linguistics disorder of broca aphasia in language produced



Based on the above data, those have been categorized into the table as follows. It indicates that the main character has a characteristic of stuttering type fluency and word selection. While the type of linguistics disorder expressive language. From the above characteristics, the main character has a tendency to have Broca Aphasia. The table above has shown and concluded the analysis.

### **Datum 5 : S-s-seed**

#### The script :

Lotje : S-s-seed. (Minute : 00:10:23)

Still continues from the previous case, that the therapist asked Lotje to mention the word beginning with 'S' and Lotje uttered the word stuttering. There is an extension of the sound due to the effects of speech disturbances characterized by problems in the patient's fluency and flow of speech. This condition is common in children, but because Lotje bleeds in the brain resulting a stroke and causing her to aphasia. Based on the way Lotje speaks, it can be categorized that she has characteristics of stuttering type from fluency.

Next, Lotje said the word *seed* for a long time. Apparently the bleeding in the brain of Lotje results in a left hemisphere that eventually interferes with the memory in Lotje language and raises the phenomenon of **word selection** difficulties. Word selection difficulties are usually present in the case, the

patient does not understand what she is saying, but in case of Lotje it is proven that she has long thought of finding the word beginning with 'S' and after that she cried because she realized what she was going through. In many cases, patients will complain of difficulty finding a word or even not infrequently, the difficulty identified by a neurologist in the assessment process. In both situations, the basis for a word search problem needs to be set but this is often indirect. Oral communication depends on the order of cognitive processes, and the interruption of one of these processes can affect the word search.

On the characteristics above proved that Lotje has **expressive language** disorder because it deals with cognitive and the process of saying that is disrupted. In accordance with the theory of Ardilla (2014) classified that word selection and fluency (stuttering) is part of expressive language disorder. Expressive language emerges because of the characteristics of non-fluent speaking when the main character said.

In the characteristics above, it is found that fluency is included in Broca aphasia, because the characteristic of broca aphasia is disruption of fluency problem in saying one of them fluency. Meanwhile word selection or word finding difficulties this is characteristic of anomic aphasia. It is where the patient is very difficult to find the word and do not even understand what the patient said. However, since Lotje understands what she is saying and she realizes that she cannot find the word starting from 'S', the fluency becomes dominance in the speech characteristics that Lotje utters. Thus, due to the dominant fluency, Lotje has **broca aphasia**.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
S-s-seed	Fluency (Stuttering), Word selection	Expressive Language	Broca Aphasia

**Table 4.6** Linguistics disorder of broca aphasia in language produced

Based on the data, main character has the characteristics of stuttering which is included in the category of fluency and word selection. From these characteristics can be categorized that she has expressive language. From the type of linguistics disorder that the main character possesses, it can be concluded that she has broca aphasia. The table above has shown and concluded the analysis.

**Datum 6 : K-kl-kind of a clever person**

The script :

Lotje : K-kl-kind of a clever person. And now, I'm starting from the beginning. (Minute : 00:11:25)

The most visible characteristic of Lotje's speech in this case is **stuttering** which is characterized by involuntary, audible or silent, repetitions or prolongations in the utterance of short speech elements. Repetition of sound 'k' in this kind of word that becomes the most obvious characteristic of Lotje. Stuttering has the uncontrollable nature of whatever word it will say. Although

not in every speech Lotje has stutter, the case stuttering quite often approached Lotje.

The stuttering that suffered by Lotje includes into one of the characteristics of fluency. Meanwhile, fluency is the ability to speak accurately, quickly, and with expression. Stuttering on Lotje is included in the **expressive language** because of the disturbance in producing speech and conveying information. This situation is generally due to severe head injury, progressive neurological disease, or stroke. This is further strengthened because Lotje shows that she is stuttering and has non-fluent speaking characteristics.

This kind of characteristics that Lotje has is a **broca aphasia**. It happens where Broca aphasia disturbed a part of brain which related to language process in speaking. Broca aphasia is a speech disorder caused by damage or developmental problems in the anterior region of the brain, including (but not limited to) the lower left frontal region known as broca area. In this sense, language comprehension is largely intact. And broca aphasia has the main characteristics of non-fluent speaking and included into the fluency. This is further strengthened by the analysis that she has an impediment in speech when speaking.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
K-k-kind of a clever person	Fluency (Stuttering)	Expressive Language	Broca Aphasia

**Table 4.7** Linguistics disorder of broca aphasia in language produced

Based on the way she speaks, the main character shows that she is stuttering. So this raises the type of linguistic disorder that is expressive language and has a tendency towards Broca aphasia. The table above has shown and concluded the analysis.

**Datum 7 : How do I say ? I can't ...**

The script :

Lotje : How do I say ? I can't ...

In the above case shows that Lotje has **word selection** difficulties and fluency. It is shown that Lotje cannot say the next word. In another sense, she had trouble in calling the lexicon mentality to say. In the case of Lotje's speech, it shows that because she has a fluency disorder, word selection difficulties finally appear. And she just said without understanding the meaning of the word. In contrast to Lotje, she understands what she said it is shown that Lotje uses grammar well from the previous speech that is *How do I say?* It is just that she had a trouble continuing speech afterwards.

Fluency and word selection belong to the **expressive language** class. It is where patients are often unable to express themselves by more than a single word at a time. Although nouns and verbs are usually well preserved, they are tended to omit articles, conjunctions, and grammatical inflections. A significant word selection difficulties in the presence of non – fluent and grammatical speech, good comprehension.

From the above case, Lotje actually has anomia, because the main characteristic of this type of aphasia is word finding difficulties. However, anomia is fluent in speaking but the patient does not understand what she is saying. In contrast to Lotje which has the nature of word finding difficulties that still understand the utterance it is hard to find the right words in mental lexicon. It is indicated that Lotje has **broca aphasia**.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
How do I say ? I can't ...	Word Selection	Expressive Language	Broca Aphasia

**Table 4.8** Linguistics disorder of broca aphasia in language produced

From the above utterances, based on the test of the main character, she has the characteristics of word selection. This leads to a type of linguistic disorder that is expressive language and shows the tendency that she has aphasia with the type Broca. The table above has shown and concluded the analysis.

**Datum 8** : /'nɔ:vəl/, /'nɔ:vl/

*The script :*

Lotje : /'nɔ:vəl/, /'nɔ:vl/. This normal world .. normality (minute : 00:11:48)

When Lotje wants to repeat the word she just said earlier it was "normal" (read= /'nɔ:məl / she clearly has Phonological Paraphasias because she makes a mistake in in applying the sound of it. Lotje should mention it by / 'nɔ: məl / but she said it /'nɔ:vəl/ or /'nɔ:vl/. This is one of the character of **phonological paraphasia**. In this case, Lotje has an expressive language disorder, because she has speech processing impairment correctly.

Lotje who find difficulty in finding the right sound to say "normal" it means she is in phonological paraphasia indicates that she has a disturbing process in saying **expressive language**. In this case, Lotje realizes that her speech is wrong, so she repeats her words and finds them. Expressive language occurs because the difficulties in language disclosures or say as had by Lotje who has difficulty in language processing with phonological paraphasia characteristic causing indication she has non-fluent speaking.

It indicates that Lotje has Conduction aphasia. Inappropriate with Papathanasiou, Coppens & Portagas, (2008) described that the characteristics of the conduction aphasia one of which is phonological paraphasia. Although the dominant one is repetition, phonological paraphasia is still a major predominant for non-fluent aphasia.

In accordance with Roth and Worthington (2011) that phonological paraphasia is the main character of **conduction aphasia**. Another characteristics of conduction aphasia appears to be able to understand and produce speech but have difficulty in repeating what they have heard because sound of word is the main component in repeating information correctly.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
/ˈnɔ:vəl/, /ˈnɔ:vl/	Phonological Paraphasias	Expressive Language	Conduction Aphasia

**Table 4.9** Linguistics disorder of conduction aphasia in language produced

In the above case, the main character has characteristics phonological paraphasias, it is classified in expressive language and has a tendency towards Broca aphasia. The table above has shown and concluded the analysis.

**Datum 9 : It's difficult to .. uh I guess I'm not making much sense. Sorry**

The script :

Lotje : It's difficult to .. uh I guess I'm not making much sense. Sorry  
(minute : 00:12:00)

From the level of fluency in talking Lotje in the case above, it indicates that Lotje has a disruption to the talk correctly. This is evident from Lotje is not continuing her speech for stopping after saying *It's difficult to*. And then



she continues her speaking with *uh*. This case of course showed that Lotje has a non-fluent speaking it means **fluency** is the first problem that she has.

The second disorder that Lotje has is **word selection**. It is proven from her utterance in *It's difficult to* then she stops directly that indicates she has a difficulty in calling a mental lexicon at the first. Then she continues by *uh* it means she replace the word that she cannot find. After that, she goes on her utterance with another clause without continue her utterance before by *I guess I'm not making much sense* it shows that she realized that she is on word finding difficulties zone and replaced *uh* as a complement.

The last one in the problem of Lotje is **paragrammatism**. It is proven from the utterances that are incoherent to each other. Starting from *I guess I'm not making much sense* is not correlated at all with the previous sentence *It's difficult to*. In the sentence *It's difficult to* it should be followed by an infinitive or verbal word, but Lotje continues with a new clause that does not correlate with it which *I guess I'm not making much sense*.

From the above three characteristics, we can conclude that fluency, word selection difficulties and paragrammatism are characteristics of **expressive aphasia** associated with speech formation process. In accordance with the characteristics of the cases above that is speech is effortful, non-fluent and pattern of grammatical that really evident in this case, it indicates that Lotje has **broca aphasia** for this case.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
It's difficult to .. uh I guess I'm not making much sense. Sorry	Fluency, Word Selection , Grammar (Paragrammatism)	Expressive Language	Broca Aphasia

**Table 4.10** Linguistics disorder of broca aphasia in language produced

From the data above shows that the main character has the speech characteristics of fluency, word selection and paragrammatism classified as grammar. Based on the data three characteristics, the main character raises the type of linguistic disorder is expressive language. And of all the characteristics that appear indicates that the main character has broca aphasia. These characteristics have been grouped into the table above and it has shown and concluded the analysis.

**Datum 10 : I wish I could ... yeah. I'll try**

The script :

Lotje : I wish I could ... yeah. I'll try (Minute : 00:12:06)

Lotje in saying something in this case still seems to indicate a speech impediment that makes the word structure less precise. In the sentence that Lotje proclaims, she said that *I wish I could* after that there is no continuation of the word. She just paused then she just said yeah. The word *yeah* in

grammar structure and function is clearly wrong in its use. As if to be a substitute word because previously she did not continue the sentence, the use of grammar structure in speech should *I wish I could* she followed by a verb. So, Lotje has **agrammatism** in speaking.

After discussing about the structure and function of the next case owned Lotje is **word Selection**. This is shown when she speaks *I wish I could*, she paused, from the visuals she showed, she showed that she was thinking to find the next right word. And finally she just found a replacement yeah as complement, then she found *I'll try*. In this case, Lotje still understands what she is saying, unlike the word selection of anomic aphasia, the patient does not understand what she said.

There are two characteristics of linguistics disorder shown by Lotje. The first is agrammatism which when the utterance of patient is not concern about the function of the word in speech, the second Lotje has word selection difficulties. Both of these characteristics indicate that Lotje has broca aphasia. Because of the main characteristics is agrammatism and speech effortful so it becomes a non-fluent aphasia. It means Lotje has Broca Aphasia

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I wish I could ... yeah. I'll try	Agrammatism, Word selection	Expressive Language	Broca Aphasia

**Table 4.11** Linguistics disorder of broca aphasia in language produced

The data above shows that the main character has its speech characteristics is agrammatism and word selection so it shows that she has expressive language. These three things indicate that she suffer broca aphasia. The table above has shown and concluded the analysis.

**Datum 11 : Matilda is, um, my... is .. My .. She's .. I can't. My nephew**

The script :

Terapist : What about these photographs ? Do you ..

Lotje : Pictures ?

Terapist : Yeah

Lotje : Matilda is, um, my... is .. My .. She's .. I can't. My .. nephew. Yeah  
my nephew.

Terapist : She's your nephew ?

(minute : 00:12:40)

In the above case, Lotje has two characteristics, one of which is **naming**. This is evident when Lotje wants to mention Matilda is my nephew she has lost the mental lexicon for what speech will be spoken. In her speech, she uttered several sentences she had pronounced like *is* and *my*. After that Lotje then find the right words. This refers to Lotje has a search circumlocution by saying words or phrases that are long-winded, long-winded for the missing target word. So it is indicated that Lotje has naming disorder when saying.

The second problem Lotje has is **fluency**. In fact, the fluency here is the impact of Lotje's naming disorder. When she said Matilda is my then she

pauses by saying umm then goes on with *my ... is .. My .. She's ..* and she does four stops in once said simple sentence. Next she said *I can't* as she can not continue her speech. Then she found the word that is my nephew with hesitation. Actually, there is repetition in the above speech. It's just that the existing repetition in the above case is not a repetition of the receptive language characteristics. It happens because of the effect of naming that Lotje is finding the right target word.

From the case above based on Lotje way of producing the language, Lotje has two characteristic that is naming and fluency, Lotje also has two characteristics of language disorder that is naming characteristic of receptive language while fluency is characteristic of expressive language. However, when viewed from the main characteristics of the above speech, Lotje does experience fluency, but fluency is only the effect of naming that does have a long-winded nature when it said to bring back the missing target word. So, from the above explanation, Lotje has **receptive language**.

Lotje which has receptive language characteristic in its speech, Lotje is known to have the characteristic of **anomic aphasia**. Because anomic aphasia has a major characteristic that is difficulty in naming. This is because naming becomes a major indication of Lotje in having receptive language characteristics. And one indication that supports this analysis is the anomia patient refers to the patient inability to find names of people or objects.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
Matilda is, um, my... is .. My .. She's .. I can't. My nephew	Naming, Fluency	Receptive Language	Anomic Aphasia

**Table 4.12** Linguistics disorder of anomic aphasia in language produced

From the above analysis, it can be concluded that the main character has the characteristics of naming and fluency. This becomes the main trigger she has type of linguistics disorder that is receptive language. And indicated she sustains an anomic aphasia. As has been analyzed and explained before, these characteristics have been grouped into the table above.

**Datum 12 : a ni .. neef .. niece.**

The script :

Lotje : And now, she's also a ni ..

Terapist : A nephew ?

Lotje : /ni:f/.. /ni:θ/.. niece /ni:s/. I meant niece /ni:s/ (minute : 00: 12.45)

To inform something speaker needs to have a good phoneme so the listener can understand what speaker means. Same with this case, Lotje wants to say *niece* but she said in different phoneme by mentioning /ni:f/ or /ni: θ/. Lotje finally fixes the phoneme niece so it becomes /ni:s/. Lotje's error in mentioning phoneme is repeatedly referred to as **phonological paraphasias**.

Patients with this disorder are characterized by difficulty in finding the right words to say.

In the second problem of speech that Lotje has is **fluency**. It is proven when she said *and also a niece*, she said in intermittently and it becomes *she's also a ni .. neef* in read /ni:f/. This case shows us that the fluency of talking Lotje is very bad. In this case, this fluency is not a type of stuttering because there is no sound prolongation at the beginning of the word. Only, Lotje said it with the addition of syllables at the beginning of the word.

In accordance with the above problems, Lotje has two characteristics in a single word that has phonological paraphasia in which the patient has an error in the sound when she said, and fluency or smoothness when speaking. The problem above indicates that Lotje has **expressive language**. This occurs when the patient experiences an interruption while producing language and has problems with speech. The main characteristics of speech impairment or expressive language are phonological paraphasias and fluency.

Thus, based on the way Lotje produces the language in aphasia and the type of linguistics disorder it encounters, Lotje has a **broca aphasia**. This is because Lotje has two characteristics language produced disorder. If Lotje just has a phonological disorder without any fluency disorder, Lotje will have conduction disorder that relatively fluent speech. But this fluency becomes a support of the main characteristics that became the main pioneer so Lotje was

indicated to have non-fluent aphasia, it turns into the characteristics of Broca aphasia.

Datum	Characteristics of Linguistics Disorder	Type of Linguistics Disorder	Kinds of Aphasia
And now, she's also a ni .. neef .. niece. I meant Niece	Phonological Paraphasias, Fluency	Expressive Language	Broca Aphasia

**Table 4.13** Linguistics disorder of Broca aphasia in language produced

From the above conversations, the main character indicates that she when she said phonological paraphasia and fluency. Both of these show that she has expressive language. So, all these characteristics indicate her that the main character has a tendency towards Broca aphasia. All of these characteristics have been grouped into the following table above.

**Datum 13 : For some reason, I can't say the actual word itself. This word.**

*The script :*

Lotje : For some reason, I can't say the actual word itself. This word.

Doctor : On that shelf ?

Lotje : Yeah.

Doctor : A record.

Lotje : Record, yeah. Exactly, so...

(minute : 00:13:00)



In the above case, Lotje is indicated to have the **naming** characteristics of the utterance. This is evidenced when Lotje can not find the target word that she meant. When she said I can not say the actual word itself she is trying to find the right words and finally ask the therapist with this word. She pointed something with her finger in the case that turned out to be pointing at the shelf. This turns out what she meant was a record. Then she repeats the speech by saying again by mentioning the record.

In this case, the indicated she has naming difficulties in the utterance and has the characteristics of a **receptive language**. This is because there is no problem about her utterance in another sense, she in the use of grammar and there is no mention of any mention of the word in the above case. This means that the characteristics Lotje possesses when producing language have a tendency to receptive language because their main characteristics are difficulties in patient to point at something usually, objects, body parts, colors, and actions.

Based on the way Lotje produces language and information delivery to a therapist who has receptive language, Lotje tends to have characteristics of anomic aphasia. This is because Lotje has the fluent language characteristics of the above case, which means that in spell she has no problem. Thus, **anomic aphasia** is an indication that Lotje has in the above case.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
For some reason, I can't say the actual word itself. This word.	Naming	Receptive Language	Anomic Aphasia

**Table 4.14** Linguistics disorder of anomic aphasia in language produced

Based on the cases above, it can be concluded that the main character experienced naming disorder. It raises the type of linguistics disorder that is receptive language or understanding language. So this indicates that the main character suffers anomic aphasia. In accordance with the above utterances can be grouped into the table above.

**Datum 14 : I can say ... You say it again**

The script :

Lotje : For some reason, I can say ... You say it again.

Doctor : Record.

Lotje : Record. Yeah Record. (minute : 00: 13:20)

In the above case, Lotje has difficulty in finding the right words for speech. When she said *I can say* and after that Lotje stops. And then she asked the therapist to say *Record* again. Here it is seen that Lotje has trouble finding the right words. In the previous speech, Lotje said the same thing, where she

could not find the name of an object. In this case Lotje is said to have **word selection** difficulties because previously the therapist has mentioned the word Lotje intends, then she repeats after the therapist. However, when she wanted to mention it again, she found it difficult to find the word she meant. In this case, word selection difficulties have indicated Lotje while talking in this minute.

In the second problem that Lotje has is fluency. This is proven by her saying *I can say ... You say it again* indicates that Lotje's language skills are weak. According to González (2008) that indicators of fluency is when someone uses the language fluently and coherently. A fluent speaker is usually measured by both the production and reception of speech, as a fluent speaker must be able to understand and respond to others in the conversation. It indicates that Lotje has a **fluency** disorder in speaking.

In this case, Lotje has expressive language. It happens when the aphasia patient has a disorder when expressing the language. Fluency is the main trigger and becomes the main case indicating that Lotje has **expressive language**. As for the case, Lotje has two problems in a word, namely word selection where Lotje finds it difficult to recall the mental lexicon, and the fluency in which Lotje speaks in stops and falters. Both of these denote that Lotje has **Broca Aphasia**. The patient has the characteristics of word finding difficulties and the use of language that is not good or less of fluency.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
For some reason, I can say... You say it again.	Word Selection, Fluency	Expressive Language	Broca Aphasia

**Table 4.15** Linguistics disorder of broca aphasia in language produced

From the data above shows that the main character has the speech characteristics of fluency, word selection. Based on the data three characteristics, the main character raises the type of linguistic disorder is expressive language. And of all the characteristics that appear indicates that the main character has broca aphasia. These characteristics have been grouped into the table above.

**Datum 15 : I can only say it if I don't actually .. s-s-s-s if I go like that ..**

The script :

Lotje : I can only say it if I don't actually .. s-s-s-s if I go like that ..

(minute : 00: 13:25)

In the case above, Lotje uttered a sentence, it meant Lotje had two problems in a single word. The first problem is the **paragrammatism** in which Lotje has problems with grammar. This proves to be incomplete grammatical when pronouncing *I can only say it if I don't actually* and she stopped then continued her speech with another sentence. In the grammar when speaking there is a clause *if I don't actually* Lotje should continue with

an infinitive or verbal sentence, but she continues with a new supposition *if I go like that*. And the use of the word *if* judged does not match the grammar structure when speaking. This results in word wastage that are not a pronoun.

The second problem Lotje has is **fluency**. It is said that fluency is because Lotje said it by stopping in the middle of speech. It proved from she saying I can only say it *if I don't actually* Lotje stop then she emits a sss sound with a long voice. It's like Lotje is about to say something with the prefix S but then she pauses, and resumes it with another clause. This characteristics indicates that Lotje has not been so reliable in controlling her speech fluently.

In accordance with the way Lotje produces a language or speech that is inconsistent with grammatical and disrupted fluency when speaking, Lotje has characteristics of **expressive language**. That is when the aphasia patient has an interruption in producing language or speech disorder. In the use of grammatical as well as from the way they mention the phoneme conformity.

Lotje indicated to have expressive language, as well as the characteristics of Lotje's language production are non-fluent language, Broca aphasia possesses these characteristics. Lotje has **broca aphasia** because of poor grammatical use and this type of aphasia is a non-fluent in speaking aphasia. Broca aphasia has the characteristics of speech is effortful, non-fluent, consisting of short phrases or single words.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I can only say it if I don't actually .. s-s-s- s if I go like that ..	Grammar (Paragrammatism), Fluency	Expressive Language	Broca Aphasia

**Table 4.16** Linguistics disorder of broca aphasia in language produced

From the above utterances, the main character indicates that she has a disorder saying that is paragrammatism and fluency. This raises an indication that she has a type of expressive language disorder, as well as indicating that the main character has broca aphasia. All characteristics have been grouped into the table above.

**Datum 16 : I can't say it now. But I can't .. You know, I can't speak or ..**

**Not speak .. I can't .. be clever. (Swinging hand) What do you call it ? Um ..**

*The script :*

Lotje : I can't say it now. But I can't .. You know, I can't speak or .. Not speak .. I can't .. be clever. (Swinging hand) What do you call it ? Um ..

Doctor : Write ?

Lotje : Yeah, write. (minute : 00:13:48)

In the above case, Lotje has three characteristics, one of which is **naming**. Naming is a difficulty in naming the target word in question. Lotje

when she wants to say something, there is a repetition of her speech, it is because she is trying to find the target of the word she meant. The first indication that Lotje uses the word long-winded to get the target word. Unlike word finding difficulties, naming the Lotje naturally tends not to find the right words to say and use the word long-winded and does not try to look for clue in its utterance. When she said *I can't* .. be clever then after that she swung her hand like she was doing something related to the word she meant. The second indication of she experiencing naming disorder is when she said *what do you call it? Um* .. she asks the therapist what activities are related to her hand display. And the therapist replied the write turned out that Lotje intent is writing.

The second problem Lotje has is **repetition**. This is evidenced by when Lotje repeatedly said the same word. In one word, there are four repetitions Lotje said. The first she repeats *I can't* four times, and then repeats the speak once in a single word. In addition, she repeats with no correlation between sentences. Repetition in aphasia patients this one is indicated that she is waiting for the intended target word to appear in the mental lexicon.

The last problem Lotje has in this case is fluency. Wickedness when speaking Lotje in this case is very bad, as evidenced by the amount of healing that she did in her speech. There were five stops when she spoke. Lotje seemed to be thinking and trying to improve what she said. In the case of repetition and dismissal when speaking which Lotje does when speaking this strongly indicates that she has a **fluency** disorder.

In the above characteristics as before, Lotje has two types of characteristics of the language disorder type. Naming and repetition comes from receptive language characteristics while fluency comes from expressive language characteristics. However, based on the way Lotje produces the language, it is known that fluency is only the impact of naming and repetition which is very dominant. This is because the above mentioned fluency is the effect of the Lotje process to summon the mental lexicon to bring up the target word. So, based on the above analysis Lotje experience language disorder in type of **receptive language**.

Based on the above characteristics, Lotje has characteristics of language disorder naming, repetition, fluency and tend to have receptive language, Lotje is indicated to have characteristics of **Anomic Aphasia**. This is because anomic aphasia has the main characteristic of naming. While repetition is only the effect of the haltingly sentence because the process for Lotje while calling the mental lexicon.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I can't say it now. But I can't .. You know, I can't speak or .. Not speak .. I can't .. be clever. (Swinging hand) What do you call it ? Um ..	Naming, Repetition, Fluency	Receptive Language	Anomic Aphasia

**Table 4.17** Linguistics disorder of anomic aphasia in language produced



Based on the above analysis, it has been concluded that the main character has characteristics in the processing of language naming, repetition and fluency. These three things become evidence that the receptive language becomes dominant in the linguistic disorder. So this shows that she sustains the anomic aphasia. Based on the analysis of the characteristics, has been categorized into the table above.

### **Datum 17 : I can't write at all**

#### The script :

Lotje : I can't write at all. Or be clever or be normal. Any of that (minute : 00:14:10)

This aphasia patient Lotje that indicated to have difficulty in **writing**. This is proved in what she said because it is the fact that she has trouble writing. In this minute, Lotje admitted that she had difficulty writing and at the minute 00:14:13 Lotje practiced her writing, and as a result she was having trouble writing. Although writing is not related to language acquisition, writing is still closely related to the process of producing language.

In this case, Lotje who suffers from a writing disorder influenced by a problematic mental lexicon, is indicated to have a linguistic disorder of receptive language. Because, in this case, to write the cognitive needs of the acceptance of language or understanding in the language when want express the spoken and written language. So, because of this Lotje is indicated to have a **receptive language**.

Lotje who has difficulty in writing, is indicated to have characteristics of transcortical aphasia. Because transcortical aphasia has the main characteristics of reading aloud and writing are impaired, and phonemic paraphasias are observed in some cases. In addition, in the above speech, Lotje has no problem with expressive language which means she has fluent language.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I can't write at all	Writing	Receptive Language	Transcortical Aphasia

**Table 4.18** Linguistics disorder of transcortical aphasia in language produced

The above analysis shows that the main character has the characteristics of difficulties in writing. This gives rise to linguistics disorder with a receptive language type. So these two things cause a tendency that the main character has transcortical aphasia. As described above, these characteristics have been categorized into a table above.

**Datum 18 : It's ... it's beyond terrifying**

The script :

Lotje : It's ... it's beyond terrifying. (minute : 00:14:17)

**Repetition** is the one of the indications that Lotje is currently having. This is evident from the way she speaks by repeating the same word in a single word. When she pronounces *It's* then she stops for a while then repeats

the same word *it's* and goes on to say by saying *it's beyond terrifying*. In this case repetition occurs only once on a simple speech. There is an indication of fluency in the above case, only the fluency in Lotje's speech is the effect of repetition it has.

Repetition of Lotje has is the one of the characteristics of **receptive language**. It said receptive language because Lotje has no problem with speech when speaking, it's just that there is a problem with fluency which is the effect of repetition Lotje has. So, in this case Lotje has an indication that the repetition is because of the cognitive or the interpreted language that is disturbed.

Based on the above case, Lotje is indicated has a characteristics of **transcortical aphasia**. This is because she experiences the non-fluent nature of her speech and its salient feature is the preserved repetition of words and sentences. The echoing of everything heard is one of the main characteristics of transcortical aphasia.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
It's ... it's beyond terrifying	Repetition	Receptive Language	Transcortical Aphasia

**Table 4.19** Linguistics disorder of transcortical aphasia in language produced

Based on the analysis above, it shows that the main character has the characteristics of difficulties in repetition. This gives rise to linguistics

disorder with a receptive language type. So these two things cause a tendency that the main character has transcortical aphasia. As described above, these characteristics have been categorized into a table.

**Datum 19 : read /teɪl/ (tale) not /tɛl/ (tell)**

The script :

Lotje : This could read /teɪl/ (tale) not /tɛl/ (tell). (minute : 00:14:23)

In Lotje's 14<sup>th</sup> minute speech, she indicates that she has **phonological paraphasias**. This is evidenced from when she mentions the word *tale* /teɪl/ with the sound /tɛl/ conscious Lotje is wrong in saying the word, then she changes the mention into /teɪl /. The changing of the word that Lotje said certainly changed the word she would say. When she said /tɛl/ the word is *tell* while Lotje intends is *tale* with the mention /teɪl/. It is said to be phonological paraphasia because Lotje is aware of the error in the phoneme that she utters, then she changes it. If the articulation disorder, the patient is not aware that she made a sound error when mentioning the word in question.

Characteristics of the way of Lotje for producing the language above refers to **expressive language**. Expressive language occurs because patients in producing language are very weak. In this case, Lotje is indicated that she has a **conduction Aphasia**. This becomes a benchmark because the conduction of aphasia in its main characteristics is one of them phonemic paraphasia. This is because the conduction aphasia has the main characteristics of phonological

paraphasia or relatively fluent speech; frequent phonemic paraphasias; marked difficulty with imitation.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
/teɪl/ (tale) not /tɛl/ (tell)	Phonological Paraphasias	Expressive Language	Conduction Aphasia

**Table 4.20** Linguistics disorder of conduction aphasia in language produced

In the above case, the main character indicates the characteristic of phonological paraphasia in speech. This brings out the characteristics of expressive language disorder types. So, both of these things indicate that she has Broca aphasia. All characteristics have been grouped into a table above.

**Datum 20 : I can't believe I ... can look at, uh, some words.**

*The script :*

Lotje : I can't believe I ... can look at, uh, some words. (minute : 00:15:36)

The first problem Lotje has is **fluency**. It is said to be fluency because when Lotje said one simple sentence, she often stops, then goes on hesitantly. Evident from she said *I can not believe I* and stopps, then it continues by *can look at* stop again, and last she *uh* utterance followed by *some words*. This indicates that Lotje has no problem with grammar, it is just that she has trouble with speech delivery fluency.

Fluency that owned by Lotje is not a type of stuttering where there is the addition of sound at the beginning of the word or cluttering speak quickly without pause. Lotje is just not smooth and lots of stops in the middle of speech. This indicates that Lotje has **expressive language**. Language disorder of this type is indicated when the patient has problems with discussed by Ardila (2014) one of the characteristics of language expressive is fluency.

When Lotje speaks she has a fluency disorder, then this becomes one of the characteristics of **broca aphasia**. Broca aphasia has a characteristic of non-fluency speech in long or short phrase utterance and poor grammatical use when saying. And one key to broca aphasia being the aphasia that Lotje has in this case is the expressive language which shows she has non-fluency speech.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I can't believe I ... can look at, uh, some words	Fluency	Expressive Language	Broca Aphasia

**Table 4.21** Linguistics disorder of broca aphasia in language produced

In the above speech, the main character shows the characteristic of fluency causing the type of linguistics disorder that is expressive language. Of these two main characters have a tendency towards broca aphasia. All of the above characteristics have been grouped into the table.

**Datum 21 : I refuse to believe that I ... that's happening**

The script :

Lotje : I refuse to believe that I ... that's happening. (minute : 00:16:09)

Based on the way the aphasia patient said, in the case above Lotje had the first two characteristics, **word selection**. This is evidenced when Lotje will say I refuse to believe that then she could stop because she wanted to continue her words. In other words, she is trying to find the right clue for the next word. Then she said that it's happening. In the word before she stops, the word that indicates that the word she will say is a verb or not a v(ing) because that word does not use to be. Then she changed the structure of the sentence into *that's* it means Lotje has no problem with grammar and automatically the next word she said is v(ing).

The second problem Lotje has **fluency**. This is because when she speaks she paused to find the right words. This is indeed indicated as word selection, but the difference is that Lotje actually stops her words after saying that *I* and after that Lotje replaces *I* is not in the next sentence. It is indicated that Lotje has problems in fluency when finding words.

In this case, Lotje experiencing word selection difficulties which, when speaking requires clue to find the right words and experience fluency that stops talking, is indicated as **expressive language** disorder. Expressive language disorder occurs when a person experiences interference while talking. Expressive language disorder on the characteristics that Lotje is a natural word selection and fluency.

Non-fluent aphasia is indicated as the type of aphasia that Lotje has. It is indicated that Lotje is not fluent in saying because there is a fluency disorder in the case above. So these characteristics give rise to the characteristics of **broca aphasia**. Based on the main characteristics of broca aphasia who had problems with fluency and word selection difficulties has by Lotje in the above case.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I refuse to believe that I ... that's happening	Word Selection	Expressive Language	Broca Aphasia

**Table 4.22** Linguistics disorder of broca aphasia in language produced

Based on the above analysis explains that the main character of this film shows she has the characteristics of word selection difficulties. This gives an indication that she has expressive language when she said. So these two things give rise to an indication that she has a tendency towards broca aphasia. As described and analyzed, these characteristics have been grouped into the table above.



**Datum 22 : It's like, um, something that I've, um .. changed completely**

The script :

Terapist : That's okay.

Lotje : It's like a dream. Somebody did very good job tidying. It's like, um, something that I've, um .. changed completely (minute : 00:21:32)

To convey information requires the use of a good language, in terms of the right phonemes and speaking fluency. This is what Lotje interferes with when speaking, that is **fluency**. This is evident from when Lotje said *It's like* after that followed by a murmur of *um*. Then she goes on to say *something that I've* followed with *um* again and continues the sentence with *changed completely*. Basically, although Lotje's intermittent Lotje remarks still use grammatical structures well in case. Lotje merely is still very bad in speaking fluently. When she said the whole sentence Lotje twice stops and twice also mumbles um in the middle of speech.

Lotje has a fluency interruption while speaking indicating that Lotje has characteristics of **expressive language** disorder. Expressive language is said when patients post-stroke are often unable to express what they want to convey. It could be in terms of the sound of letters, grammatical or fluency that is often encountered.

The way of Lotje when producing the most dominant language is fluency, it also dominates the characteristics of **broca aphasia** patients. Broca aphasia is said because Lotje has a non-fluent speaking nature of this which

raises the patient effortful in delivering the speech. This difficulty can be either complex sentences or simple sentences as Lotje conveys in this case.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
It's like, um, something that I've, um .. changed completely	Fluency	Expressive Language	Broca Aphasia

**Table 4.23** Linguistics disorder of broca aphasia in language produced

In the speech above, there are characteristics of expressive language that is fluency. So it indicates that the main character has broca aphasia. These characteristics have been grouped into the table.

**Datum 23 : So, now I'm twent ... thirty ... four**

The script :

Lotje : I haven't lived with my mother since I was 18. So, now I'm twent ... thirty ... four. So .. thirty four years old. (minute : 00:23: 30)

When the people speak, language selection is very important in conveying information. Like Lotje when talking, she has two problems in one sentence, one of which is word selection. Because Lotje when she said her age, she had not found numbers by mentioning *twent* ... it means twenty. This word is disconnected because she does not mean to say twenty, then Lotje proceeds by fixing the word in question *thirty*.

The second problem Lotje has is **fluency**. It is said that fluency is when Lotje said one sentence above, there are several stops in the middle of she speaks. So, now *I'm twent..* she stopped because it is not the word in question, then she goes on with the word because it's not the word in question, then she goes on with the word *thirty* after it stops and resumes with the word *four*.

Lotje who has word selection difficulties in finding the right words to say and fluency difficulties in saying correctly indicates that Lotje process in producing language based on the above case raises a new characteristic which is **expressive language**. It happens when this post stroke patient said something with fluency and word selection. So, the process of the formation of language is disturbed.

Based on the way Lotje produces the language and type of language disorder she has, Lotje has **broca aphasia**. This is because both of these are characteristics of the aphasia. Actually, Anomic Aphasia has this word selection properties too, but considering Lotje has a non-fluent speech-type disorder whereas anomic aphasia is fluent speech, so it can be concluded that word selection on broca aphasia becomes the type of aphasia that Lotje has.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
So, now I'm twent ... thirty ... four	Word selection. Fluency	Expressive Language	Broca Aphasia

**Table 4.24** Linguistics disorder of broca aphasia in language produced

In the case above, in accordance with its utterance the main character brings out the characteristics of expressive language that is word selection and fluency. So this indicates she has a tendency towards Broca's aphasia. As described, these characteristics are grouped into the table above.

**Datum 24 :** I'm rec... I'm obsessed

The script :

Lotje : I'm rec... I'm obsessed with recording everything and unable to remember anything. (minute : 00:27:15)

To convey information, speakers must have the skills in choosing the right sentence to be uttered. Just as Lotje has **word selection** difficulties when saying *I'm rec ...* Lotje paused and then replaced the word by saying *I'm obsessed*. At a glance there is a repetition of the utterance. However, Lotje changed the sentence because it was trying to find the right words to be said. It can be said that repetition is when the patient repeats her speech but she does not understand it even does not improve the utterance.

Word selection difficulties have an effect on producing the language, resulting in Lotje having non-fluent speaking characteristics. From these properties can be categorized that Lotje experience expressive language disorder. Expressive language occurs where one of its characteristics finds it difficult to find the right word to say. And this is still closely related to the nature of non-fluent speaking.

Lotje has the nature of word selection difficulties and non-fluent speaking. It is indicated that Lotje has characteristics of **Broca Aphasia**. Based on its characteristics, Broca aphasia has the basic nature of word finding difficulties or difficulty in the selection of words to be uttered. Although anomic aphasia has the same properties, but anomic aphasia has fluent speaking properties.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I'm rec... I'm obsessed	Word Selection	Expressive Language	Broca Aphasia

**Table 4.25** Linguistics disorder of broca aphasia in language produced

In the case above, the main character in this film shows that she has word selection difficulties. This raises an indication that she has characteristics of the type of linguistics disorder that is expressive language. So the main character has a tendency towards broca aphasia. All of these characteristics have been categorized into the table above.

**Datum 25 : It's like, um .. You think about, um .. Umm .. You know you think about David Lynch and .. things like that a lot.**

*The script :*

Lotje : It's like, um .. You think about, um .. Umm .. You know you think about David Lynch and .. things like that a lot. (minute : 00:28:02)

In this case, Lotje has speech characteristics based on the way she produced the first language is **paragrammatism**. When Lotje pronounces It's like she got stuck and then proceeded to a new clause that should have a word connection from the sentence in the form of noun or noun phrase. Sentence You think about being judged to mean nothing in Lotje's speech can even be said to be word-wasting. Then, next Lotje said the same thing with the previous speech, it's just that she added You know like giving emphasis to the therapist then resumed by saying you think about David Lynch.

Lotje that has the characteristics of paragrammatism can not be separated from the process of selecting a bad word. Just as in the second problem Lotje has is **word selection**. This is evident from Lotje who had repeated her words when she said You think about and then resumed with You know you think about David Lynch. There is a case of repetition in the case of this utterance. However, repetition in this case due to word selection difficulties has Lotje. Due to the difficulty of finding the right words to be said so she repeats the word to 'mentally' mentally lexicon. And after Lotje repeats to provoke her lexicon mentally out, she finally finds the right word despite a bad fluency.

The third problem of her utterance is **fluency**. It is proven when Lotje uttered, there were two times saying *umm* and four stops. The first, when it said *It's like* then she stops. Then Lotje continued with another sentence *You think about* Lotje mumbling again *umm* this time with a longer pause than before. And again Lotje continued her speech by saying *you know you think about David Lynch and* this time after saying that sentence she paused with a shorter pause and no murmur by saying *things like that a lot*. In fact, the fluency that Lotje has hasin this case is because Lotje has paragrammatism and word selection in her speech. So, this fluency is the effect of the two disorders that Lotje has.

Based on the above case, Lotje has three cases in a single word. The first is paragrammatism when Lotje said something without any grammar and coherence between sentences, word selection when she has difficulty in choosing the right words to say and the last of fluency when Lotje struggles in eloquence when she said that Lotje has the characteristics of **expressive language**. Expressive language occurs when the aphasia patient is unable to produce the language well more precisely when it said.

In accordance by the characteristics above, Lotje has a **Broca aphasia**. It is said Broca Aphasia because Lotje has three characteristic that refer to her ability to produce a language. Fluency and paragrammatism are the main point to become a sign of non-fluent aphasia. Non-fluent aphasia occurs when the aphasia patient is unable to produce smoothly more precisely the problem with fluency in speaking. So Lotje is indicated as a patient with Broca aphasia.

Datum	Characteristics of Linguistics Disorder	Type of Linguistics Disorder	Kinds of Aphasia
It's like, um .. You think about, um .. Umm .. You know you think about David Lynch and .. things like that a lot.	Paragrammatism, Word selection, Fluency.	Expressive Language	Broca Aphasia

**Table 4.26** Linguistics disorder of broca aphasia in language produced

The main characters that utter long sentences are indicated to have paragrammatism, word selection and fluency. When this characteristic raises the type of linguistics disorder is expressive language. So, all the characteristics lead to a tendency towards broca aphasia. All of these is grouped into the table above.

#### **Datum 26 : It's like a dimen... a new dimension**

##### The script :

Lotje : It's like a dimen... a new dimension. (minute : 00:29:01)

Lotje in the above case has one indication that is **fluency**. This is evidenced from when Lotje said *dimen* then stopped, she did not continue her speech. In the next expression, she adds a new and then she continues the utterly interrupted utterance of dimension. So the word in question is It's like a new dimension. She said it with clue a *dimension* then continue her speech in a new dimension. This is one indication that Lotje had a fluency, but because she found the right clue, she could continue her utterance in its entirety. It



indicates Lotje has no indicate in word selection difficulties because she has found the word just she needs to say it in fluency as well.

For the above characteristics Lotje has fluency difficulties. It happens when someone who has the characteristics of this language production is difficult to talk as well. So that speech sometimes interrupted or had stopped for a moment to think about clue to be used. In this case, Lotje has the characteristics of **expressive language disorder**. Patients with aphasia who has it will be difficult with the speech process one of which is the fluency.

In this case, based on the way Lotje produces the language as well as the type of language disorder it has, Lotje is indicated to have **broca aphasia**. Because based on the main characteristics of fluency difficulties. In the above case, Lotje has no problem with word selection while speaking, this means that Lotje aphasia has a type of non – fluent aphasia. It is just that she has a fluency followed by clue and managed to find the word in her mind so that this is an indication that Lotje has broca aphasia.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
It's like a dimen... a new dimension	Fluency	Expressive Language	Broca Aphasia

**Table 4.27** Linguistics disorder of broca aphasia in language produced

Based on the above analysis, it has been concluded that the characteristics of expressive language is word selection indicating that she has

a tendency towards anomic aphasia. As has been analyzed datum, it has been grouped into the table above.

### **Datum 27**

*The script :*

Therapist : Point your forearm then your shoulders

Lotje : Forearm , then my shoulders

Therapist : Mmm ...

Lotje points her hand

Therapist : Close. (minute : 00:36:01)

In the above case, Lotje has difficulty in **naming**. This is evidenced from the way therapist ask for point her forearm and shoulders she paused for a moment. When she points to the forearm she finds the body part in question exactly. But after that when she wanted to find the shoulder, Lotje had difficulty in finding the body part in question. However, she finds the shoulder at the request of the therapist with a little clue delivered by the therapist. With Lotje having difficulty finding the body part in question, of course, Lotje's speech is indicated that she has naming difficulties.

It points to Lotje which has the characteristics of **receptive language**. Based on the way Lotje processes the language that Lotje has problems with understanding or naming processing in her brain. And when she repeats the same sentence, there is no problem in sentence structure or speech that is

broken into Lotje's point of view has understanding disorder or receptive language.

Meanwhile, Lotje who has difficulty in naming and receptive language disorder is indicated that she has characteristics of **anomic aphasia**. Because anomic aphasia has the main characteristic of anomia refers to the patient inability to find names of people or objects. The patient, although aware of the nature of an object is unable to name it upon request.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
Terapist : Point your forearm then your shoulders Lotje : Forearm , then my shoulders Terapist : Mmm ... Lotje points her hand Terapist : Close.	Naming	Receptive Language	Anomic Aphasia

**Table 4.28** Linguistics disorder of anomic aphasia in language produced

From the analysis above, it can be concluded that she has the characteristic naming difficulties to the target word. This raises the type of linguistics disorder of the receptive language type. Thus, the main character raises an indication that she suffers the anomic aphasia. As has been analyzed, these characteristics have been grouped into the table above.

**Datum 28 : The whole of my back, my arms, my legs, my-my .. My, um ..**

**This. What do you call that ?**

The script :

Lotje : The whole of my back, my arms, my legs, my-my .. My, um .. This.

What do you call that ?

Doctor : Hips ?

Lotje : Yes. (minute : 00:57:01)

Based on the way Lotje speaks, she has two characteristics that first is **naming**. At the time she conveyed the information, she had difficulty naming the body part she meant. When she wants to say hips, she asks first with the therapist by saying the same thing as the previous case What do you call it? while saying this and pointing to the body part she meant. Then, the doctor answered the hips and it turns out that it meant hips.

The second problem she has is **fluency**. This proved when she got stuck in her words by saying *my back, my arms, my legs, my-my ..* and she stops after saying *my* twice. This is because the impact of naming she cannot find the right target word for the name of the part of the body that she means so that the word stops and does not eloquently appear and affect the fluency when she said. So, from the word long-winded into the naming, this is still classified into the fluency.

From the above case, Lotje is having difficulty in naming, that is difficulty in finding the target word so having to ask the therapist and impact on fluency when she speaks indicated that she has tendency towards **anomic**

**aphasia.** Based on the characteristics of the utterances produced by Lotje she has fluent speaking due to fluency disorder is only the effect of naming. This also becomes a strong indication that Lotje has anomic aphasia which has the main characteristic that is difficulty in naming.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
The whole of my back, my arms, my legs, my-my .. My, um .. This. What do you call that ?	Naming	Receptive Language	Anomic Aphasia

**Table 4.28** Linguistics disorder of anomic aphasia in language produced

From the above analysis, it can be concluded that she has the characteristic naming difficulties and fluency to the target word. This raises the type of linguistics disorder of the receptive language type. Thus, the main character raises an indication that she suffers the anomic aphasia. As has been analyzed, these characteristics have been grouped into the table above.

**Datum 29 : I've been doing this, um, electromagnetic therapy thing. Uh, I forget what it ... See .. I've regressed**

*The script :*

Lotje : Well, I've been doing this, um, electromagnetic therapy thing. Uh, I forget what it ... See .. I've regressed ( minute : 01:00:48 )

In the above case, Lotje has two characteristics based on her way of producing the language, one of which is **paragrammatism**. This is said

paragrammatism is a patient who has difficulty on the use of sentence structure when speaking. This is evidenced when Lotje said I forget what it she should use the word forget as past tense because it states past. The second thing that states Lotje suffers from paragrammatism is when Lotje said *what it is* then proceed with *see*. Grammatically the sentence of *what it is* is unacceptable. Because what sentence should be followed by is so that it becomes *what is it*.

The second is **fluency**, it can be said fluency because Lotje while talking, in her speech she often mumble *uh, umm* and often stalled. When she said I've been doing this then she stops with *umm* then resumes by *electromagnetic therapy thing*. Afterwards, she resumed her words and Lotje mumbled again with the *uh*. Then there are two stops on *I forget what it ... See .. I've regressed*. And these three things are the point Lotje have difficulty in fluency.

Lotje's way of producing the language in the above case has given birth to two characteristics, namely paragrammatism when the patient has difficulty in using grammar structure in speech and fluency where the patient is not fluent in spelling out something. This shows that Lotje has **expressive disorder**. Patients with this type of disorder exhibit characteristics that the patient is unable to produce speech properly.

In the above characteristics, Lotje has another characteristic of non-fluent aphasia, where this type of aphasia is not capable of producing the language well, so the delivery of information is difficult to be accepted by the

listener. Based on this type of characteristic, Lotje is indicated that she has **Broca Aphasia**. It is said Broca Aphasia because this type of aphasia has basic properties, two of which is paragrammatism and fluency.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
I've been doing this, um, electromagnetic therapy thing. Uh, I forget what it ... See .. I've regressed	Paragrammatism, Fluency	Expressive Language	Broca Aphasia

**Table 4.30** Linguistics disorder of broca aphasia in language produced

From the above case, the main character is indicated to have characteristics of paragrammatism included in grammar and fluency. Both of these are included in the characteristics of the expressive language disorder. So the main character is indicated to have a tendency towards broca aphasia. As described from the analysis, these characteristics have been grouped in the table above.

**Datum 30 : I have regressed since the seizure. Um, but ... Um, but yeah, it's, um ... Yeah, some sort of ... Um, transmagnetic ..**

The script :

Lotje : I have regressed since the seizure. Um, but ... Um, but yeah, it's, um ... Yeah, some sort of ... Um, transmagnetic .. (minute : 01:00:58)

In this case, Lotje has two characteristics based on her way of producing the first language is **fluency**. Fluency as the main characteristic as this is evident from the way it speaks there are several stops. When Lotje said *I have regressed since the seizure* she goes on to say with *umm*, then afterwards Lotje just said *but ... Um, but yeah, it's, um ... Yeah, some sort of ... Um transmagnetic*. From Lotje's speech above, it is evident that she has difficulty in fluency when speaking. Judging from the way it speaks in once said, there are three stops and three times muted *umm*. This is sufficient to prove that Lotje has one of the characteristics of fluency in this case.

The second problem Lotje has is **word selection**. This is evident from when Lotje said *transmagnetic*, she said it very difficult when finding the word. There is the *word but ... Um, but yeah, it's, um ... Yeah, some sort of* and then mumble and then only then she finds the word. Lotje passed all the murmurs just to find one word. It is where almost get the word she instead replace the word with *yeah, some sort of* then she just actually find the right word. This means that at the beginning of speech she knows if the word is a noun. Because before that, she pronounces *it's* or *it is* meaning the next word is not a verb.



Of the two characteristics of speech that Lotje has pointed to the fluency is a disturbance in fluency in speech or convey information and word selection is a disturbance in choosing the right words in speaking. Both of these indicate that Lotje has characteristics of **expressive language**. Expressive language occurs when a person has a disruption in conveying information in this case fluency and word selection.

Based on the characteristics that have been analyzed, Lotje is indicated to have **broca aphasia**. Basically word selection and fluency are the main indications of broca aphasia. This is because broca has the main characteristic of non-fluent aphasia where speech is very difficult that is being expressed to the other person.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
Um, but ... Um, but yeah, it's, um ... Yeah, some sort of ... Um, transmagnetic ..	Fluency, Word selection	Expressive Language	Broca Aphasia

**Table 4.31** Linguistics disorder of broca aphasia in language produced

In the above case, Lotje is indicated to have fluency and word selection characteristics. This raises the type of linguistics disorder that is expressive language disorder. So based on the above indication, the main character has a tendency towards broca aphasia. As mentioned before, these characteristics have been grouped into a table above.

**Datum 31 : So, now I'm thinking .. maybe none of ... me will recover quickly ever**

The script :

Lotje : So, now I'm thinking .. maybe none of ... me will recover quickly ever.

(minute : 01:02:35)

In this case, based on the way Lotje speaks she is indicated that she has **fluency**. This is evidenced from she said now *I'm thinking* then she stops then she continues it again by *maybe none of Lotje* stops again and after that the last one she returns with her speech by saying me will recover quickly ever. In this case Lotje has stopped twice by saying a simple sentence.

Lotje that has a fluency that occurs when the patient has a disruption in fluency when speaking is indicated to have characteristics of **expressive language**. Expressive language occurs because the language sufferers of this type have a disturbance in the process of speech or output of the lexicon. In addition, expressive language becomes one characteristic of aphasia that is non-fluent aphasia.

Non-fluent aphasia is a type of aphasia that has a disorder that is a disturbance in conveying information one of them fluency. In the case of Lotje having non-fluent it is indicated that Lotje has **Broca Aphasia**. The main reason Lotje has Broca Aphasia is because Lotje has fluency as a characteristics.

<b>Datum</b>	<b>Characteristics of Linguistics Disorder</b>	<b>Type of Linguistics Disorder</b>	<b>Kinds of Aphasia</b>
So, now I'm thinking .. maybe none of ... me	Fluency	Expressive Language	Broca Aphasia

**Table 4.32** Linguistics disorder of broca aphasia in language produced

From the above analysis, it has been concluded that the main character has the characteristics of fluency. This raises the type of linguistics disorder based on the way she produces a language that is expressive language. Thus, this gives an indication that she has a tendency towards Broca aphasia. As has been analyzed, all the characteristics have been categorized in the table above.

### **C. Interpretations of the Research Findings**

According to data analysis which have been analyzed in the movie *My Beautiful Broken Brain* which contain phenomenon of Aphasia found mostly in the movie there are 01:23:55 that appear linguistics disorder and aphasia classification by characteristics. The movie of *My Beautiful Broken Brain* contain types of linguistics disorder follows the aphasia classification. Within the duration of the movie, the writer found 31 samples of the data. The interpretations of the data are formed in the following tables:

NO.	TYPE OF APHASIA	TYPES OF LINGUISTICS DISORDER		TOTAL	PERCENTAGE
		EXPRESSIVE	RECEPTIVE		
1.	Broca Aphasia	22	x	22	71 %
2.	Conduction Aphasia	2	x	2	6.45 %
3.	Anomic Aphasia	x	5	5	16.12 %
4.	Transcortical Aphasia	x	2	2	6.45 %
Total				31	100%

**Table C.4.33** Interpretations of the Research Findings

This object data My Beautiful Broken Brain movie consist 31 data. In this movie there are 24 expressive language cases and 7 receptive language cases divided into each sub-material. Expressive language has 20 cases of fluency which is more precisely the most dominating stuttering in fluency, 4 phonological paraphasias, 11 word selection, and 10 grammar which are divided into 9 cases of paragrammatism and 1 case of agrammatism. Meanwhile, the receptive language is divided into 4 parts, namely 2 cases of repetition, 4 cases of naming and 1 case of writing. So, the number of characteristics possessed by the expressive language is 44 characteristics, while the number of receptive languages is 6 characteristics. The number differentiation is influenced by the existence of 1 data that has 2 or more characteristics of the linguistics disorder. However, this can facilitate aphasia classification in patients. In the case of broca aphasia had 22 (71%) indications, anomic aphasia had 5 (16.12%) indications, transcortical had 2

(6.45%) indications and aphasia conduction had 2 (6.45%) indications. From the data above, it can be seen based on the presentage produced by expressive language to be dominant in linguistic disorder cases. Whereas in the case of aphasia, broca aphasia was the highest presentation at 71% and the lowest percentage was 6.45% in transcortical aphasia and aphasia conduction

## CHAPTER V

### CONCLUSION AND SUGGESTION

#### A. CONCLUSIONS

After analyzing the data in the previous chapters, it can be concluded that there are two types of linguistics disorder and have a tendency towards four of the six types of aphasia based on how to produce the language in the movie my beautiful broken brain. The conclusion addresses three questions of the study. It can be listed as follow:

1. Kinds of linguistics disorders are expressive language and receptive language. These linguistics disorder are used to get the main indicator to find out the language produced. These indicators will deliver to find out the aphasia.
2. From linguistics disorder data which is divided into two types, there is a division of types of aphasia produced by Lotje based on linguistic disorder types and the way she speaks. Of the 31 data, there were 22 (71%) data that had a tendency towards broca aphasia, 2 (6.45%) data on the tendency to conduction aphasia, 5 (16.12%) trends towards anomic aphasia and 2 (6.45%) data that had a tendency towards transcortical aphasia.
3. Most of the main characters in the movie are linguistic disorders with expressive aphasia. However, not a few of her difficulties in understanding when saying. Especially in naming things. The most

common cases that have receptive language on the characters above are naming, namely the difficulty in naming the target word. Whereas the most dominating expressive language of the above cases is fluency and paragrammatism, namely difficulties in fluency when speaking and difficulties in using sentence structure correctly when speaking.

4. In this case, the main character Lotje dominates broca aphasia as many as 22 cases, but the anomic aphasia becomes the second dominance after broca which is 7 cases. From here, it can be concluded that Lotje has a tendency towards broca aphasia based on the above case.

## **B. SUGGESTIONS**

Aphasia is not easy to detect, therefore to detect it there needs to be another component in achieving the target, and in this case linguistics disorder grouping is very helpful in classifying the types of aphasia in the film, thus the detection of aphasia can be easily accepted by the reader. Based on the analysis of the conclusion data, researcher gives some suggestion as follows:

### **1. The Readers**

Researcher hopes that research will help the readers know that aphasia is a post-stroke disease with this type of bleeding in the brain that can be detected early based on the way the patient produces language. This can be a deterrent to aphasia and the handling of these patients appropriately namely speech therapy. It can be found in the novel, movie or other.

## 2. The Writer

This research gives more information and knowledge for the writer about linguistics disorder and aphasia as well and handling the disorder person.

## 3. The Next Researchers

The researcher who wants to do the same researchers, neurolinguistics is very interesting field to be observed. There are many aspects that can be discovered by widen scope of the study. This research hopefully can provide information on the references for the next researchers with same topics.



## BIBLIOGRAPHY

- Ahlsén, Elisabeth. 2006. *Introduction to Neurolinguistics*. Amsterdam; Philadelphia : John Benjamins Publishing Company
- Ardila, Alfredo. 2014. *Aphasia Handbook*. Miami, Florida, USA : Florida International University
- Carey, William B., Crocker, Allen C., and Lord, Coleman, William. 2009. *Developmental-Behavioral Pediatrics, 4th Edition*. Philadelphia: Saunders Elsevier.
- Caplan, David. 1998. *Neurolinguistics and linguistic aphasiology: An introduction*. Cambridge : Press Syndicate of the University of Cambridge
- Carroll, David W. 2008. *Psychology of Language, 5th Edition*. United States of America: Thomson Wadsworth.
- Devinsky, Orrin., and D'esposito, Mark. 2004. *Neurology of Cognitive and Behavioral Disorders*. United States of America: Oxford University Press.
- Field, John. 2003. *Psycholinguistics*. London and New York: Routledge, Taylor & Francis Group.
- Fromkin, Victoria., Rodman, Robert & Hyams Nina. 2011. *An Introduction to Language, 9th Edition*. Canada: Wadsworth Cengage Learning.

- González, Josué M. 2008. *Encyclopedia Of Education Bilingual*. United States of America: Sage Publication.
- Hudson, Grover. 2000. *Essential Introductory Linguistics*. United States of America: Blackwell Publisher.
- Hirst, Daniel and Di Cristo.1998. *Intonation Systems A Survey of Twenty Languages*. United Kingdom: Cambridge University Press.
- Ingram, John C.L. 2007. *Neurolinguistics; An Introduction to Spoken Language Processing and its Disorders*. United Kingdom: Cambridge University Press.
- Miller, Carrol A. 2006. *Developmental Relationship Between Language and Theory of Mind; American Journal of Speech-Language Pathology*. Pennsylvania : ASHAwire Publication.
- Papathanasiou, Ilias., Coppens, Patrick and Portagas, Constantin. 2013. *Aphasia; and Related Neurogenic Communication Disorders*. United States of America: Jones & Bartlett Learning.
- Plontke, Ronny. 2003. *Language and Brain: Proseminars Paper, Linguistically Relevant Films*. Chemnitz: Chemnitz University of Technology.
- Rogers, Kara. 2011. *The Brain and The Nervous System*. New York: Britannica Educational Publishing.
- Roth, Froma. R., and Worthington, Colleen K. 2010. *Treatment Resource Manual ; For Speech-Language Pathology; 4th Edition*. New York : Delmar Cengage Learning.

Sastra, Gusdi. 2011. *Neurolinguistik; Suatu Pengantar*. Bandung: Alfabeta.

Steinberg, Danny D., Hiroshi Nagata & David P. Aline. 2001. *Psycholinguistics: Language, Mind, and World. 2nd Edition*. New York: Longman Linguistics Library.

Ward, David. 2008. *Stuttering and Cluttering; Frameworks for understanding and treatment*. Madison Avenue, New York : Psychology Press

Yule, George. 2010. *The Study of Language. 4th Edition*. United States of America, New York : Cambridge University Press.

## **BIOGRAPHY**



The writer was born in Bekasi on May 2<sup>th</sup>, 1996, father is Ahmad Sri Adi Prasetyo and her mother is Layani Hati Zagoto. She is the oldest child of two children and educated at SDN Bojong Menteng IV 2001. She continued studying to MTsN. Tarbiyatul Falah in 2007. The writer took the studying in SMK Negeri 8 Kota Bekasi in 2010.

After finished study, she worked as a design graphics for 3 years in PT. Ceade, while the writer decided to continue her study and join in the School of Foreign Language – JIA Bekasi at English Literature in 2014. Besides his formal education, the writer took another workplace as an editor corporations for 1 year. After that, she was accepted as a designer graphics in SMK Negeri 8 Kota Bekasi.

The writer loves reading a knowledge books, and she has pleasure in watching anime so much while she sometimes spend his time to sketch a character of person.