BROCA APHASIC LANGUAGE IMPAIRMENT OF SARAH SCOTT IN SymphUK YOUTUBE CHANNEL

THESIS

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DEPARTMENT OF ENGLISH LITERATURE FACULTY OF HUMANITIES UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM MALANG 2021

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STATEMENT OF AUTHORSHIP

I state that the thesis entitled "Broca Aphasic Language Impairment of Sarah Scott in SymphUK YouTube Channel" is my original work. I do not include any materials preiously written of published by another person, except those ones that are cited as references and written in the bibliography. Hereby, if there is an objection or claim, I am the only person who is responsible for that.

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MOTTO

"The best of people are those who that bring the most benefit to the rest of mankind."

(HR. Ahmad, Tharbani, Daruqutni)

DEDICATION

The thesis cannot be finished without any support and love. I thank to lots of people who give affection and make believe that nothing impossible. My praises belong to Allah SWT, the Most Merciful, who has provided guidance and blessing to do my thesis. My endless love for some special people who give me fascinating support and lots of pray is my beloved parents, my father Didik Sumawis, and my mother, Minuk Yuniarti. Also, my honourable advisor Dr. Hj. Rohmani Nur Indah, M. Pd.

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All my praise is to Allah, the Lord of the world, the Master and the Creator of everything in the universe, the Destroyer of all oppressors, and the Hope of all oppressed. Shalawat and Salam are also delivered to Muhammad SAW, the prophet of the ummah who has inherited Islam as peace and blessing to the entire universe. Due to the mercy, He gives through His chosen prophet. I can finally accomplish this thesis.

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Finally, I do realize that there are some imperfections and weaknesses in this thesis. Therefore, the criticism and suggestions are welcome to make it better. May this thesis be useful for all readers in order to deepen understanding about aphasia's language impairment to conduct similar research which fulfilled the gaps.

The researcher

Arswenda Dini Mulia

ABSTRACT

Mulia, A. D. 2021. *Broca Aphasic Language Impairment of Sarah Scott in SymphUK YouTube Channel*. Minor Thesis. Linguistics, English Literature Department, Faculty of Humanity, Universitas Islam Negeri Maulana Malik Ibrahim Malang,

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Key Words: Aphasia, Language Impairment, SymphUK

Aphasia is a language disorder caused by brain damage and makes the patient lose or impair language skills. One of the diseases which often cause people to experience aphasia is stroke. The type of aphasia was differentiated by the disruption of the brain's language function. In this study, the researcher observed the Broca-type aphasia, which the location of the disruption in the Broca's area. This study aims to analyze the characteristics of Broca's aphasia on Sarah Scott in the *SymphUK* YouTube channel. Through the characteristics of Broca's aphasia, the researcher also can observe the levels of language impairment in Sarah Scott as people with Broca's aphasia.

Furthermore, the researcher used the qualitative descriptive method because the data are in the form of utterances produce by Sarah Scott in *SymphUK* YouTube channel as the object of the study. In collecting the data, the researcher watched and transcript the video related to Broca's aphasia's characteristics. The researcher also used the theory proposed by Hallowel (2017) about the characteristics of Broca's aphasia and Ardila (2014) about the linguistics defects in aphasia.

The study results showed that there are twenty-six of Sarah Scott's utterances which represented several characteristics of Broca's aphasia. The most dominant characteristics that had by Sarah Scott was *dysnomia*, *literal* (*phonemic*) *paraphasia*, and *agrammatism*. Then, the other characteristics that rarely appear are *disfluent*, *repetition*, and *telegraphic speech*. Furthermore, the levels of language-impaired in Sarah Scott are *morphemic*, *morphosyntactic*, and *phonetic*, which have been the same as Ardila (2014) was explained. Thus, the researcher suggests for the following researchers and the lecturer to make this research as the reference for the understanding in the field of language impairment, especially the knowledge of the characteristics of Broca's aphasia.

ABSTRAK

Mulia, A. D. 2021. *Broca Aphasic Language Impairment of Sarah Scott in SymphUK YouTube Channel*. Skripsi. Linguistik, Jurusan Sastra Inggris, Fakultas Humaniora, Universitas Islam Negeri Maulana Malik Ibrahim Malang,

Pembimbing: Dr. Hj. Rohmani Nur Indah, M. Pd.

Kata Kunci : Afasia, Gangguan Bahasa, SymphUK

Afasia adalah gangguan bahasa yang disebabkan oleh kerusakan pada otak dan membuat para penderitanya kehilangan kemampuan dalam berbahasa. Salah satu penyakit yang sering menyebabkan seseorang mengalami afasia adalah stroke. Beberapa macam jenis afasia dapat dibedakan dari lokasi terganggunya fungsi bahasa pada otak. Pada penelitian ini, peneliti meneliti jenis Broka afasia yang mana kerusakan terletak pada area Broka. Penelitian ini bertujuan untuk menganalisis karakteristik Broka afasia yang ada pada Sarah Scott dalam kanal YouTube yang bernama *SymphUK*. Melalui karakteristik Broka aphasia, peneliti juga bisa meneliti tingkat gangguan bahasa yang ada pada Sarah Scott yang mana dia adalah seseorang yang menderita Broka afasia.

Selanjutnya, peneliti menggunakan pendekatan descriptif qualitatif karena data yang diteliti berasal dari ujaran yang diproduksi oleh Sarah Scott dalam kanal YouTube *SymphUK* sebagai objek penelitian. Dalam mengumpulkan data, peneliti melihat dan menraskrip video yang berkaitan dengan karakteristik Broka afasia. Peneliti juga menggunakan teori yang diajukan oleh Hallowell (2017) tentang karakteristik Broka afasia dan teori dari Ardila (2014) tentang gangguan lingusitik pada afasia.

Hasil dari penelitian menunjukkan bahwa ada dua puluh enam ujaran Sarah Scott yang merepresentasikan beberapa karakterisitik dari Broka afasia. karakteristik yang paling sering muncul pada Sarah Scott adalah *dysnomia*, *literal* (*phonemic*) *paraphasia*, dan *agrammatism*. Kemudian, karakteristik lain yang muncul adalah *disfluent*, *repetition*, dan *telegraphic speech*. Selanjutnya, tingkat gangguan bahasa yang ada pada Sarah Scott adalah *morphemic*, *morphosyntactic*, dan *phonetic*, yang mana sama dengan apa yang dijelaskan oleh Ardila (2014). Maka dari itu, peneliti menyarankan kepada peneliti selanjutnya dan para pengajar untuk menggunakan penelitian ini sebegai rujukan untuk memahami bidang gangguan bahasa, khususnya pengetahuan tentang katakteristik Broka afasia.

مستخلص البحث

موليا، أ. د. ۲۰۲۱. بروجا أفاسيح (Broca Aphasic) قراسد فعض تحفظا كالله مسق SymphUK بوتوي قاتق يف توكسد. البحث العلمي. المايوخللا بدلاً مسق الميزيلجنلاً الميناسنلاً مولعلا قيلك قيملاسلاً المعماج الحكومية ميهاربا كلام انلاوم جنلاام.

المشرفروتكدلا: ة رحماني نور أنداه

تاملكا المفتاحية :أفاسيا (Afasia)، تعللا تابار طضا، SymphUK

أفاسيا هي اضطراب لغوي ناتج عن تلف في الدماغ ويفقد المصابين به القدرة على التحدث باللغة. السكتة الدماغية هي أحد الأمراض التي غالبًا ما تؤدي إلى فقدان القدرة على الكلام. يمكن تمييز عدة أنواع من أفاسيا عن طريق موقع اضطراب وظيفة اللغة في الدماغ. في هذه الدراسة، فحص الباحثون نوع أفاسيا بروجا التي وقع فيها الضرر في منطقة بروجا. تهدف هذه الدراسة إلى تحليل خصائص أفاسيا بروجا في سارة سكوت على قناة يوتوب تسمى SymphUK. من خلال خصائص أفاسيا بروجا، يمكن للباحثين أيضًا فحص مستوى اضطراب اللغة الموجود في سارة سكوت، وهي شخص يعانى من أفاسيا بروجا.

وبعد ذلك، استخدم الباحث المنهج الوصفي النوعي لأن البيانات التي تمت دراستها جاءت من الأقوال التي أصدرتها سارة سكوت على قناة SymphUK على يوتوب كموضوع للبحث. عند جمع البيانات، شاهد الباحثون ونسخوا مقاطع فيديو ذات صلة بخصائص أفاسيا بروجا. استخدم الباحثون أيضًا النظرية التي اقترحها هالوويل (٢٠١٧) حول خصائص بروجا أفاسيا والنظرية من أردلا (٢٠١٤) حول الاضطرابات اللغوية في أفاسيا.

وأظهرت نتائج الدراسة أن هناك ستة وعشرون كلامًا لسارة سكوت تمثل بعض خصائص أفاسيا بروجا. الخصائص الأكثر شيوعًا لسارة سكوت هي خلل النطق الحرفي صوتي (Paraphasia) و أغراماتيسية (Agramatisme). ثم، من الخصائص الأخرى التي تظهر هي عدم الطلاقة، والتكرار، والخطاب التلغرافي. ثم على ذلك، فإن مستوى الاضطرابات اللغوية الموجودة في سارة سكوت هو الشكل الصرفي والتشكيلي والصوتي، وهو نفس المستوى الذي وصفه أردلا (٢٠١٤). لذلك، يقترح الباحثون على الباحثين والمعلمين المستقبليين استخدام هذه الدراسة كمرجع لفهم مجال اضطرابات اللغة، وخاصة معرفة علامات بروجا للأفاسيا ال كلامية.

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CHAPTER I

INTRODUCTION

This section discusses the introduction, which contains background, objective, significance, scope and limitation, the definition of key terms, and the research method conducted in the study.

A. Background of the Study

Anyone can experience a language disorder. People with speech disorders are caused by bleeding in the brain, stroke, and even genetically derived. As a result, people who suffer from speech disorders will experience some difficulties, especially in producing or understanding a language. Medically this language disorder is called aphasia. Aphasia is brain damage that caused the patient loss or impairment of language skills. Consequently, it has linguistic and neurological dimension (Ardila 8& Benson, 1999 in Ardila, 2014, p. 11 - 46)

In the late 1800s, the appearance of aphasia traditionally from the damage of the left hemisphere, which are classified into classic types, namely fluent or non-fluent (Code, 2019, p. 323). Hallowell also considered aphasia in simple subtypes: a dichotomy of fluent or non-fluent, anterior or posterior, and expressive or receptive aphasias (Hallowell, 2017, p. 154). Meanwhile, according to Ardila (2010), there are two significant types of aphasia syndromes: Wernicke and Broca Aphasia (Ardila, 2013, p. 4). Goodglass and Kaplan (1983) define, patients with Wernicke

aphasia are characterized by a limited understanding of what other people say, a high level of paraphasias, and classified as fluent speech (in Jordan & Keiser, 1996, p. 40).

Another type of aphasia which is causes sufferers to have problems in producing the language is Broca-type aphasia. Broca's aphasia is often referred to as expressive or non-fluent aphasia. People with Broca's aphasia can understand speech or conversation but have a problem in speaking, writing, and reading (Indah & Abdurrahman, 2008). Furthermore, the loss of ability makes Broca's aphasia sufferers have difficulty communicating, characterized as speech output exhibiting poorly articulated words missing, added or transposed sounds, initiating speech, and reduced vocabulary (Withaker, 2007, p. 10). On the other hand, another problem experienced by people with aphasia syndrome is damage to linguistics aspects, including phonetics, morphemic, morphosyntactic, semantic, and pragmatic (Ardila, 2014, p. 46).

Those difficulties can be seen in the young aphasia survivor, Sarah Scott. Unlike stroke sufferers in general, which adults predominantly suffer. Sarah Scott was convicted of suffering from expressive Aphasia or Broca's aphasia at 18th years old. It causes her language abilities lost. Sarah Scott recounts her condition and updates her speech therapist on her own YouTube channel, namely *SymphUK*. In telling her story, Sarah Scott seems too hard to convey her idea. She tells stories with short sentences, uses gestures, and remembers numbers, which is her significant problem.

Several researchers did some previous studies about aphasia. One of them is Septianto (2020). His research found that people with Broca's aphasia have several characteristics: agrammatism, non-fluent, repetition, naming, phonetic deviation, phonological literal paraphasia, and verbal paraphasia. On the other hand, in Syarifah (2020) research, people with aphasia are experiencing some difficulties that affect the linguistics elements: lexical error, morphological error, and phonological error. Furthermore, the syntactic structure also becomes a significant problem for people with aphasia analyzed by Yulia (2018). In her study, Yulia found several syntactic structure types in Broca aphasic patients before speech therapists: telegraphic speech, a short sentence, two words, and holophrastic.

Unlike the previous studies, this study analyzes Broca's aphasia's characteristics and the levels of linguistics impairment on the patient. The object investigated in this study is an individual with Broca's aphasia named Sarah Scott in the *ShympUK* YouTube channel. The researcher used this YouTube channel for this study: first, this YouTube channel has many viewers. This channel is purposely created to show how people with language disorder can recover after brain damage. Second, this channel consists of several videos, so that the researcher can find many characteristics of Broca's aphasia and the levels of language impairments phenomenon on the patient. To analyze the data, the researcher used the theory proposed by Hallowell (2017) and Ardila (2014) about the characteristic of aphasia and Ardila (2014) theory about the linguistics defects in aphasia.

B. Research Question

Based on the description in the background, the questions to be solved in the study can be formulated as follows:

- 1. What are the characteristics of Broca's aphasia that Sarah Scott suffers in the SymphUK YouTube channel?
- 2. How do the levels of language impairment in Broca's aphasia affect the speaking ability of Sarah Scott in the *SymphUk* YouTube channel?

C. Objectives of the Study

After formulating the research questions above, the objectives of the study are set out as followings:

- 1. To describe the characteristics of Broca's aphasia experienced by Sarah Scott.
- To show and explain the levels of language impairments experienced by Sarah Scott.

D. Significance of the Study

This study analyzes Broca's aphasia's characteristic and how the levels of language impairments affect the speaking ability in a patient with aphasia. This study also discusses the theory about the characteristic of aphasia and linguistics defect in aphasia, which can enrich the other researcher's reference in academic society. Practically, this research finding is expected to give information about psycholinguistics fields that deal with a language disorder or speech ability,

particularly in aphasia. Furthermore, this research is also likely to be helpful for the student or the reader to discover language disorder, especially in aphasia, and help understand the brain and language impairment.

E. Scope and Limitation

In this study, the researcher analyzes the characteristics and the levels of language impairments that affect Sarah Scott as people with Broca's aphasia. To analyze the data, the researcher uses the theory purposes by Hallowell (2017), Ardila (2014), which is a theory about the characteristic of Aphasia and Ardila (2014) theory about the linguistics defects in aphasia. The researcher chooses the study's object from the YouTube videos named *SymphUK* channel, which tells about Sarah Scott, who sufferers from the young post-stroke of Broca aphasia. Because of the stroke, Sarah Scott lost her language skills ability, especially in producing the language.

F. Definition of Key Terms

- Language impairment is a communication disorder experience by Sarah Scott. People who suffer from this problem will have linguistics deviation (phonology, morphology, syntactic structure, and pragmatic).
- Aphasia is a language disorder caused by brain damage such as stroke.
 Because of stroke, Sarah Scott was convicted as Broca aphasic patient and made her language skills lost, especially in speaking ability.
- 3. **SymphUK** is a YouTube channel made by Sarah Scott. She is a young person with Broca's aphasia. Through this channel, she told her condition

and show that people with language disorder can recover after brain injury.

G. Previous Study

In this section, some previous studies are discussed to observe the research of aphasia. The previous studies help the researcher extend the information in conducting the study and understand some linguistics deviation on the object. The researcher has mentioned several journal articles to compare and empirical bases theory of the study's topics.

The first study on aphasia was done by Septianto (2020). His research aimed to analyze the characteristics of aphasia and its phonological error of Edwyn Collins as aphasia patients and the main character in The Possibilities are Endless movie. His study uses the aphasia theory described by Ardila (2010 & 2014) and the phonological error theory described by Lass (1984). The results of the study Brocatype aphasia is the most dominant characteristic found within Edwyn. It is characterized by repetition, naming, phonetic deviation, phonological literal paraphasia, verbal paraphasia, agrammatism, and non-fluent. Meanwhile, the data consist of phonological error issues, namely assimilation, dissimilation, deletion, and insertion.

The second study was carried out by Syarifah (2020) discusses some difficulties of Broca's aphasia sufferer experienced by Sodderland as the main character of the movie and how she interacts with other people. She used Reason's

(2002) theory to identify the model of speech production and its problem in people with brain injury and Gall's (2010) theory to determine the location of language in the brain. Some problems which the author found within the patient are lexical selection error, malapropism, substitution, shift, and omission. Furthermore, the brain damage experienced by Sodderland is in the Broca area that affects the disruption of language function that dominant in language production.

The third study on aphasia was conducted by Yulia et al. (2018), which analyzed the syntactic structures in patients with Broca's aphasia before and after therapy speech ability. Yulia used language acquisition theory regarding language acquisition classification by Hutauruk, (2015). The data used in the analysis came from the YouTube video in person with Broca aphasia which tells about their influence before and after speech therapy. Her study shows that the ability to utter three post-stroke patients before speaking treatment of the type of syntactic structure, namely, telegraphic speech, a short sentence, two words, and holophrastic.

The fourth study was carried out by Aydin (2019), which analyzed the lexical-semantic and phonological processes experienced in patients with Wernicke's aphasia. His research used the theory of Dokur (2013) and tested a group of Wernicke's aphasia with three different linguistics tests. The results of his study show that a person with Wernicke's aphasia experienced the deficit to retrieve a name associated with a picture, they are capable of dealing with lexical-semantic processing and semantic judgment, and they have performed significantly lower

accuracy than controls on the phonological test and performed comparably on the semantic.

The subsequent research discussed the lexical ambiguity processes in aphasia carried out by Azad (2020). In his study, he used Milberg (1987) theoretical framework to investigate the lexical ambiguity processes in person with Wernicke and Broca aphasia in the Persian setting. Azad concluded that the person with Wernicke's aphasia committed more errors and answered more slowly compared with the Broca aphasia patients. The patients with Wernicke's Aphasia exhibited selected access to different meanings of ambiguous words as the healthy controls, whereas the patient with Broca's aphasia was not observed the semantic facilitation.

The study by Kuzmina et al. (2016) investigated cognitive control impact language abilities in different types of aphasia. The object of the study is a patient with Wernicke and Broca aphasia and compare them use non-verbal Flanker task, Stroop task, and language comprehension tasks. The study results show that all persons with aphasia non-verbal cognitive control indexed by Flanker interference scores were related to language comprehension. In contrast, verbal cognitive control was related to picture naming.

The last is a study by Thye et al. (2018), which investigated the language deficit from lesion location uses Lesion-Symptom Mapping (LSM). His research analyzed 128 participants who completed a detailed battery of psycholinguistic tests and underwent structural neuroimaging (MRI or CT) to determine lesion location.

The result shows that the lesion size and location within neurally-localized cognitive systems are more accurate for deficits than broad functional deficits.

After exploring some research findings of aphasia, the author assumed that this research is different from the previous studies. It focuses on linguistics fields, especially in psycholinguistics in finding the characteristics of Broca's aphasia of Sarah Scott in the video of *SymphUK* YouTube channel. It used Hallowell (2017) theory about the characteristic of Broca aphasia and Ardila (2014) theory to analyze the language impairments in person with aphasia.

H. Research Method

In this section, the researcher discusses the method and steps in collecting and analyzing the data. The study aims to analyze Broca aphasia's characteristics and the language impairments found in the patient based on theory by Hallowell (2017) and Ardila (2014).

1. Research Design

This study uses a descriptive qualitative method because the data are in the form of sentences produced by Sarah Scott, the young sufferer of Broca's aphasia. According to Hancock (1998), qualitative research is concerned with developing social phenomena. The purpose of the study is to understand the reality of phenomena in depth and detail. As Bodgan and Biklen (1982) stated, qualitative research is descriptive in which the number did not collect the data, but the data are in the form of words or pictures. In the present study, the researcher uses the descriptive

qualitative method, which is the research method that tries to describe and interpret the objects which approve of reality. The descriptive qualitative approach also tends to be used in language research (Yulia et al., 2018, p. 425). Intentionally, descriptive analysis is to make factual and accurate information about the data. In this study, the researcher collects the data are in the form of utterances produces by Sarah Scott as the patient of Broca's aphasia on the YouTube Channel, namely *SymphUK*. The descriptive method describes the phenomenon of aphasia. The researcher analyzes it using the theory by Hallowell (2017) about the characteristic of Broca aphasia and Ardila (2014) theory about the linguistics defects in aphasia.

2. Research Instrument

The instrument which is used in this study is the researcher herself. The researcher identifies and analyzes the data by herself to describe the data in detail and easy to understand. The researcher has to explore the information about the characteristic of people with aphasia, especially people with Broca's aphasia, and find the levels of language impairments of Sarah Scott. The study's result is the description of Broca's aphasia experienced by Sarah Scott when she was producing words and her levels of language impairments.

3. Data Source

The research data came from the documentation, and it is in the form of utterances produced by Sarah Scott as people with Broca's aphasia. The data source of the research are the videos from YouTube channel, namely *SymphUK*. This

YouTube channel tells about Sarah Scott, who experienced expressive aphasia when she was 18th years old. She updates the video on her YouTube channel to tell her therapy's influence on aphasia once a year. The videos support the material to identify the problem of the study as the difficulties of Sarah Scott showed the characteristic of Broca's aphasia and her levels of language impairment.

4. Data Collection

In collecting the data, several processes were taken by the researcher. The first process is that the researcher watches and transcripts the videos related to characteristics and the levels of language impairments in people with Broca's aphasia in the SymphUK YouTube channel. Furthermore, the second step is to investigate the part of the videos that appropriate for the study. The last step is the researcher collects and analyzes the data through the theory.

5. Data Analysis

After collecting the data, the analysis is conducted of each section based on the difficulties experienced by Sarah Scott when she was producing words, especially when she told her story and tried to convey her idea in the appropriate sentences. The data are classified from how Sarah Scott produce the language. The purpose of the data classification is to make it easier to understand Broca's aphasia's characteristic, experienced by Sarah Scott.

The function of the data is to increase the knowledge about the language, mind, and language disorders experienced by people with aphasia. To discuss and

develop the research, the researcher uses the theory by Hallowell (2017) about Aphasia and Ardila's (2014) idea about the linguistics defects in aphasia. The discussion of the study covered several things, especially Broca's aphasia's characteristics and the types of language impairments experienced by Sarah Scott in the *SymphUK* YouTube channel.

CHAPTER II

REVIEW OF RELATED LITERATURE

This section discusses a review of related literature that contains the description from general terms to specific, those are psycholinguistics, brain, and language, language disorder, aphasia, and language impairment in aphasia.

A. Psycholinguistics

Psycholinguistics is interdisciplinary studies that learn about language and mind. In its development, this discipline has several terms; the first is linguistics psychology. The second is called the psychology of language. Then, scientists agreed to call this discipline with psycholinguistics terms resulting from systematic cooperation by the scientist (Sumardiono, 2014). The term psycholinguistics comes from the words psychology and linguistics, which is concerned with the process and knowledge about the ability to use a language and how it relates to the human cognition aspects (Cowles, 2011, p. 10).

The scholars who first introduced the term psycholinguistics are Charles E. Osgood and Thomas A. Seboek in the book Psycholinguistics: Survey Theory and Research Problem in Bloomington, the United States, in 1954 (Indah & Abdurrahman, 2008). Several types of development psycholinguistics periods are the Formative period, Linguistic period, the Cognitive period, and Psycholinguistics Theory period. Those periods discussed using language in communication and psychological processes (Kess, 1992 in Syarifah, 2020).

The scope of psycholinguistics also derived into three types namely General psycholinguistic which discusses how the perception of human to the use of language and how to produce language, Applied psycholinguistics which apply psycholinguistic theories in daily life on children and adults, and Developmental psycholinguistics which examines the acquisition of language in children and adults (Indah & Abdurrahman, 2008).

To sum up, psycholinguistic is the field of study concerned with language and its psychological processes. Some researchers have evolved and explored this field to find out the methods of human communication. That process included how the human produces the language and the acquisition of human language.

B. Brain and Language

The use of language in human communication's processes cannot be separated from the human brain. The responsible of the brain is the most important thing to the occurrences of human language processes. If a person experiences brain damage, they will have difficulties in producing and comprehend the language. The regulating of language processes are divided into several characteristics, which are two-way communication and alternating between the speakers and listeners. It means that the speaker can be a listener, and then the listener to be a speaker. Theoretically, the language processes need a long time, but due to the role of the brain, this happens so quickly and in a short time (Indah & Abdurrahman, 2008, p. 6)

The relationship between brain and language was firstly introduced by Edwyn Smith, who found the impairment of the human brain, which is affected language abilities. In the 19th century, he mentioned 48 cases: the 22 issues explained that it caused a brain injury, which involved the loss of language skills (Indah & Abdurrahman, 2008, p. 7). In addition, the physicians also observed that the loss of linguistics abilities often impaired on the left hemisphere of the brain, and it does not happen on the right one (Ronny, 2003, p. 3).

The human brain's left hemisphere consists of two areas: Broca's area and Wernicke's area. Broca's area is located on the brain's left frontal lobe, contributing to producing a language. Sleeper (2007) explained that the central portion of Broca's area is generating the speech articulation, then the upper part is responsible for comprehending the meaning of words. Meanwhile, Wernicke's place is located in the temporal lobe, which deals with words' meaning. This area has contributed to the comprehension of language such as spoken word, written word, or sign language (Haira, 2012)

In conclusion, the brain and language are two components that are essential for the human communication process. The left hemisphere is the part of the human brain that is responsible for human language ability. That part is also divided into two areas, such as Broca and Wernicke area. As same as with the name of the area, Broca's area is the core part of Broca's aphasia which impaired human language production.

C. Language Disorder

A language disorder is the ability to produce and process language. It arises from impairments at many different processing structures: input, output, and word meaning. Most linguists and clinicians differentiated language disorder by the deficit of two components, namely expressive and receptive. The deficiency of expressive refers to the output processes, producing semantically with the correct grammatical sentences and following pragmatics rules of conversation (be a competent speaker). Meanwhile, deficits in receptive language affect comprehension, including input processes (be a competent listener) (Reily, 2014, pp. 2-3).

Language disorder can be defined as a communication disorder in which the sufferer has difficulty interacting with others. It characterizes by the inability to express the idea, the use of words and their meaning is not proper, inability to use the correct grammatical, the vocabularies are reduced, and they cannot follow the directions (NICHCY, 2011, p. 3). Several causes of language disorder are categorized into developed language disorder: inability to speak fluently, which acquired since newborn, and acquired language disorder caused by stroke, brain injury, and aging (Indah, 2011).

Moreover, the person's difficulties with a language disorder can be derived into different problems: fluency and problems with writing. The problem of fluency is caused by psychological issues, which the sufferer experienced stuttering. In contrast,

written problems are usually experienced by people with alexia or dyslexia, which is had difficulties in writing and reading (Indah 2017a in Syarifah, 2020).

Therefore, a language disorder is an inability to communicate with others. Language disorder can be experienced by the child acquired since newborn and adults caused by accident, which impaired the brain's language skills. The problem of language included speaking, writing, and reading abilities.

D. Aphasia

Aphasia is a language disorder usually caused by brain injury such as stroke. Aphasia can be defined as verbal communication disorder according to the central nervous system's acquired lesion, including language processes such as producing and comprehending the language (Basso and Cubelli, 1999 in Withaker, 2007).

Aphasia language disorder is characterized by either partial or total loss of verbal communication ability and using written words. People with aphasia may have problems speaking, writing, reading, recognizing the names of things, and understand what other people say (Indah & Abdurrahman, 2008). Aphasia refers to the impairment of language caused by brain damage on the left hemisphere, which is the core part of language components such as semantics (word and sentence meaning), Syntax (Grammatical structure), Morphology (word structure), and Phonology (sound structure) (Code, 2019, p. 317).

Paul Broca presented the appearance of aphasia in 1861, which is shown the case of the person who suffers from the lost language ability with brain pathology at the

Anthropological Society of Paris. However, there were some researchers reported the observed language impairments after pathological brain conditions. From its appearance, the history of aphasia is divided into several periods; those are Preclassical (until 1861), Classical (1861-1945), Modern (until the 1970s), and Contemporary (Since 1970s) (Ardila, 2014, p. 11).

According to the brain's location, which is affected on the left hemisphere, the most common types of aphasia are divided into their area, Broca's aphasia and Wernicke's Aphasia. As discussed in the previous subtitle, Broca's aphasia refers to language production's inability, while Wernicke's Aphasia refers to language comprehension impairment.

Furthermore, Hallowell (2017) classified the types of aphasia as the classic aphasia subtypes and illustrated the features based on the Hallmark characteristics of aphasia. Those types can be seen in table 1.

Table 1 Types of Aphasia

Aphasia Syndrome	Classically Associated Lesion Site	Auditory and Reading comprehension impairment	Oral and Written Expression Impairment	Other Features		
	Classic Aphasia Syndromes					
Wernicke's	Posterior	Moderate to	Anomia, semantic and	Poor self-		
Aphasia	portion of the	severe	literal paraphasias, jargon,	monitoring,		
	superior		neologism, circumlocutions,	lack of		
	temporal gyrus		a press of speech, logorrhea	awareness of		
				deficits		
Broca's	Inferior frontal	Mild to	Agrammatism/telegraphic	Typically		
aphasia	lobe	moderate,	speech, anomia, literal	aware of		

		difficulty with passives and complex grammar	paraphasias more common than semantic, circumlocutions	deficits, sometimes with catastrophic reaction and emotional lability; often concomitant apraxia of speech, dysarthria, contralateral hemiparesis
Conduction aphasia	Arcuate fasciculus, supramarginal gyrus	Mild to moderate	Mild to moderate, especially with repetition impairment; phonemic paraphasias, conduit d'approche	
Global Aphasia	Large perisylvian lesion, including frontal and temporal lobe and often parietal lobes	Severe	Severe; may be nonverbal; may have jargon and stereotypy	
Transcortical sensory aphasia	Temporal lobe watershed regions; angular gyrus	Moderate to severe	Moderate to severe, especially with paraphasias, logorrhea, poor self- monitoring; intact repetition; paraphasias and neologisms	
		Classic Aphasia		
Transcortical motor aphasia	Frontal lobe watershed regions;	Mild to moderate, difficulty with passives and complex grammar	Mild to moderate, telegraphic; intact repetition; literal and semantic paraphasias	
Mixed	Inferior frontal	Mild to	Mild to moderate,	

transcortical aphasia	lobe	moderate, difficulty with passives and complex grammar	telegraphic	
		Other Types of	f Aphasia	
Anomic Aphasia	Variable, often angular gurus	Mild	Mild to severe, word- finding difficulty; paraphasias, circumlocutions, fillers; use of generic terms	
Primary progressive aphasia	Depends on subtype	Mild to severe, progressive	Favorable to severe, progressive	Unlike other forms of aphasia, it worsens over time; individuals eventually develop dementia
Crossed Aphasia	Right hemisphere in a right-handed person	See the corresponding type of aphasia above	See the corresponding type of aphasia above	Concomitant impairments more typically associated with right hemisphere syndrome are likely
Subcortical Aphasia	Thalamus, basal ganglia, cerebellum, connecting white matte	Depends upon subtype; variable across individuals	Depends upon subtype; variable across individuals	

(Hallowell, 2017, pp. 157-159)

1. Broca's aphasia

Broca's aphasia is language impairment which is affected the location of the Broca's area. This type of aphasia is also called non-fluent Aphasia because a person with Broca's aphasia has problems producing the language. They know what they

want to say, but they are challenging to express it. They may able to speak a single word which the main point of what they want to say. The ability to generate the correct sentences with grammatical rules can be a significant problem for the patient. Furthermore, small word like conjunctions (and, or, but), article (a, an, the) can be eliminated which lead to the telegraph quality of their speeches (Indah & Abdurrahman, 2008).

According to Hallmark characteristics of aphasia (in Hallowell, 2017) and Ardila (2014), Broca's aphasia patients will have several characteristics, which are described as follow:

a) Agrammatism

As the researcher explained before, people with Broca's aphasia has difficulties generating the appropriate sentences that follow the grammatical rules. That problem is called agrammatism, which means the deficit in formulating and processing syntax (Hallowell, 2017). A person with aphasia is usually tricky to reversible passive. It may difficult to differentiate the object and subject in the sentences, for example:

"Laura was kissed by Daddy."

From that sentence, it would make sense for either the subject (Daddy) or the object (Daddy) to do kissing. However, it would differ if the object is an inanimate object, for example:

"The rice was cooked by Missel."

This sentence is not reversible because the rice cannot cook a person, but people with Broca's aphasia are relatively easy to understand that sentence.

b) Telegraphic Speech

Broca's aphasia tends to produce short sentences and simple phrases and cannot produce complex grammatical construction. The words which are mostly missing such us the function words (preposition, pronouns, determiners, conjunctions, and auxiliary verbs) and content words (nouns, verbs, adjectives, and adverbs) (Hallowell, 2017, p. 163). For instance, an individual with Broca's aphasia may say "walk dog," which means "I will take the dog for a walk," or "Book book two tables," which means "There are two books on the table" (Septianto, 2020).

c) Dysnomia

Dysnomia or anomia also become a problem for people with Broca's aphasia. Dysnomia is difficulty with word-finding. They have always used circumlocutions which are used the other words than intended words. For example, they might be saying, "Hand me the cutters," rather than "Hand me the scissors." (Hallowell, 2017, p. 163). Furthermore, Ardila (2014) also classified the difficulty of word-finding into several types in person with Broca's aphasia such as confrontation which Broca aphasic person tend to line drawing and photograph the function word (noun and verb), difficulty to define some objects, and fluency.

d) Literal (Phonemic) Paraphasias

Broca's aphasia patients also have a problem with their phonological system. According to the phonological rules, there are several types of phonological deficits found in Broca aphasic patients. Those are: Phoneme ommissions (e.g., pencil > pecil), Phoneme addition (e.g., pencil > precil), Phoneme displacements (e.g., pencil > pelcin), Phonemic substitution (e.g., pencil > percil) (Ardila, 2014)

e) Disfluent

People with Broca's aphasia tend to be effortful. They tend to be aware of their errors, especially in contrast to people with aphasia with more posterior (temporal lobe) lesions. Some have extreme frustration when struggling to communicate. The example of speech from a person with Broca's aphasia can be seen as follows:

"Many many years back, uh, stroke. Speech, uh. No. No speech. But uh work work. Hospital. Work work work. Rehab. Work work work. Home. Work work work work. This one and that one. And now . . . speech pretty good. Not speak like you. No speak like old me. But speak way way better." (Hallowell, 2017, p. 164)

f) Repetition

The ability to repeat also becomes a significant difficulty in people with Broca's aphasia. The repetition symptom caused by different mechanisms is the limitation of auditory verbal short-term memory, problems at the level of phonological production, impairments in phoneme recognition, and semantic and syntactic comprehension. According to the specific task, the error of Broca's aphasic person can be seen in the

difficulties at the level of phonological production and defects in grammar comprehension. The example of speech for this characteristic of Broca's aphasia can be seen in Sarah Scott's utterance, as follows:

"and..and.. connect."

2. Wernicke's Aphasia

Unlike Broca's aphasia, Wernicke's Aphasia is the type of aphasia that affects Wernicke's area, particularly in the superior temporal lobe (Hallowell, 2017). Wernicke's aphasia is categorized as fluent speech, but they have a problem comprehending the language. Most people with Wernicke's Aphasia cannot recognize that they have speech problems. However, they may have difficulties retrieving vocabularies with a reliance on general or inappropriate nouns and verbs (Indah & Abdurrahman, 2008).

3. Conduction Aphasia

Conduction aphasia is one of Wernicke's Aphasia development, which impaired speech comprehension (Jordan & Keiser, 1996). The characteristics of conduction aphasia into three basic characteristics are (1) fluent conversational language; (2) comprehension almost normal; and (3) significant impairments in repetition. Secondary characteristics include: (1) impairments in naming; (2) reading impairments; (3) variable writing difficulties (apraxic agraphia); (4) ideomotor apraxia; and (5) additional neurological impairments (Ardila, 2013).

4. Global Aphasia

Global aphasia is the type of aphasia that is impaired the multiple frontal areas; those are Wernicke and Broca. Some people with global aphasia cannot speak, especially soon after stroke (Hallowell, 2017). However, they can communicate in written language (Sumiardi, 2019 in Syarifah, 2020).

5. Transcortical Sensory Aphasia (TSA)

The brain's location, which is impaired this type of aphasia, is located in Wernicke's area surroundings (Hallowell, 2017). Based on the basic definition, TSA is a fluent language disorder impaired by auditory comprehension with preserved repetition (Ardila, 2013). People who suffer from this type of aphasia will tend to produce lots of words or sentences to reduce meaningful words conferring the impression of emptiness. The content of each sentence is irrelevant or even meaningless (Septianto, 2020).

6. Transcortical Motor Aphasia (TMA)

Transcortical Motor Aphasia is one type of aphasia similar to Broca's aphasia (Syarifah, 2020). This type of aphasia could be interpreted as an executive function defect specifically affecting language use. The ability to actively and appropriately generate language appears impaired while the phonology, lexicon, semantics, and grammar are preserved (Ardila, 2013)

7. Anomic Aphasia

Anomic aphasia is a speech disorder caused by the temporoparietal cortex's damage (Syarifah, 2020). It characterized difficulties in recalling words or names of people, places, things, and others. Patients suffering from aphasia usually speak indirectly to express certain words that they do not remember the name. In cases speech production is fluent but contains semantic paraphasias (usually with obvious similarity to the target word-), sometimes they need some instructions to help them remember the names or words. They can speak with correct grammar; however, they have problems finding the right words of people's names or objects (Indah & Abdurrahman, 2008).

8. Primary Progressive Aphasia

This type of aphasia is the loss of language abilities caused by neurodegenerative diseases. That causes is similar to the forms of dementia. They tend to difficulty with word-finding, which relatively affects the cognitive abilities. It also occurred in various forms and derived to the several classifications such as semantic, logopenic, and agrammatism (Hallowell, 2017, p. 166)

9. Crossed Aphasia

Crossed aphasia is one type of aphasia that is caused by brain damage in the right hemisphere. This type of aphasia is rarely (less than 3% to 4%). Some people with crossed aphasia tend to have concomitant symptoms typically associated with right

hemisphere lesions, such as left visual neglect and visuospatial deficits (Hallowell, 2017, p. 167).

10. Subcortical Aphasia

Subcortical aphasia is any form of aphasia that is associated with a lesion below the cortex. The very term defies the traditional viewpoint that aphasia can only be related to cortical lesions. Primary structures that have been implicated in subcortical aphasia are the thalamus, the basal ganglia, and the cerebellum (Hallowell, 2017, p. 167)

E. Levels of Language Impairment in Aphasia

Aphasia is one of the language impairment which is caused by brain injury. The different types of aphasia levels of language are also impaired differently. The levels of language analysis can be derived such as Phonetic, which concerned with the speech sound analysis of human language, Phonemic which referred to the minimal sound of the language that can arrange and convey the meaning (e.g./a/, /b/), Morphemic is the smallest unit of language, Morphosyntactic which referred to the grammatical rules of language, Semantic is the study of the meaning of language and Pragmatic which concerned with how language to be used in everyday life which refers to the social contexts (Ardila, 2014, pp. 51-52).

Based on the types of each characteristic of aphasia, the different levels of language impairment can be seen from the types of disturbances of language, for example, the core of language deficit in Broca's aphasia is the grammatical function,

so that the level of language in people with Broca's aphasia is morphosyntactic. Other different language levels are illustrated in table 2 based on Ardila's theory (2014, p. 52).

Table 2 types of different levels in language impairment (aphasia)

Level of the Language	Types of Language Impairment (Aphasia)
Phonetic	Broca, Dysarthria
Phonemic	Wernicke, Conduction
Morphemic	Broca
Morphosyntactic	Broca
Semantic	Transcortical Sensory, Wernicke
Pragmatic	Transcortical Motor (Dysexcutive)

CHAPTER III

FINDING AND DISCUSSION

This chapter discusses the finding and discussion based on the explanations in the previous chapter. The researcher elaborates the analysis and discussions of the problem. The data are in the form of utterances produced by Sarah Scott, who suffers from Broca aphasic syndromes in *SymphU K* YouTube channel. The findings consist of analyzing the characteristics of Broca's aphasia had by Sarah Scott, and the discussion explores the analysis of the research finding.

A. Research Finding

This research focuses on finding some utterances from Sarah Scott as people with Broca's aphasia analyzed in this study. The researcher transcripted the videos from the *SymphUK* YouTube channel and classified Sarah Scott's utterances which shows the characteristics of Broca's aphasia, to get the data analysis. Not only the characteristics of Broca's aphasia, but the researcher also analyzed the levels of language impairment had by Sarah Scott.

The researcher found twenty-six characteristics of Broca's aphasia on Sarah Scott. Several types of characteristics are found based on Hallmark characteristics of aphasia (in Hallowell, 2017) and Ardila (2014); those are; agrammatism, telegraphic speech, dysnomia, literal (phonemic) paraphasias, disfluent, and repetition. Based on the data, only eleven data are discussed in this section, representing the data and the

chronologies. The complex data are located in the appendix, which is in the form of utterances produced by Sarah Scott in the *SymphUK* YouTube channel.

Data 1

" $Um ... um ... um ... li_{[1.1]}$ school [1.2], and English class, and I. um ... book and $I. li_{[1.2]}$ read it aloud. And ... um ... but I. can't. cause. a... stroke. And so I. stand. there [1.3] and um ... also arm, it's um, the same as um... the same as kind of thing as um, you $li_{[1.4]}$."

The data is taken from Sarah Scott's utterance as people with Broca's aphasia in *SymphUK* YouTube channel. In this data, Sarah Scott told how the first time she had a stroke. At that time, she was at school and taking an English class. When she read the book and stood in front of the class, she couldn't read aloud, suddenly her arms was tingling, and her legs was broken. As Broca aphasic person, Sarah had difficulty producing the language, so that she wrote the word that she wanted to say to help her communicate with Joanie Scott, her mother.

In this utterance, the researcher found four characteristics of Broca's aphasia on Sarah Scott. The first characteristic is **disfluent**. It can be seen at the beginning of the sentence she tends to do humming like *umm* .. *um* .. *um* .. as a sign she thinks to continue what she wants to say. It is caused by the disruption of temporal lobe lesions in the brain so that she cannot produce a language and sentence where in production becomes meaningless.

The second characteristic is **telegraphic speech**. This type appeared when Sarah tells the chronology of how the first time she was exposed to stroke. Sarah

could say the core words that she remembers when things were happening, which is dominated by the phrase categorized as a noun such as *school*, *English classes*, *and book* in the utterance of data. She tends to miss the function words that cause the sentence was not complex and make the interlocutor challenging to accept what she is talking about.

The following characteristic which the researcher found in this datum is agrammatism. This characteristic can be seen in the *sentence "So, I stand there"* in the utterance. It is classified as agrammatism because Sarah Scott did not use inflectional morpheme in the sentence. In this case, Sarah has to say, "So, I stood there" in the sentence that because she told about the experienced when the first time she was attacked by a stroke. It happened because the auditory comprehension was impaired at Sarah Scott, who suffers from Broca's aphasia that causes the deficit to formulate and process syntax.

Finally, Broca's aphasia which was found in this data is **dysnomia**. It was found in the sentence "... it's um the same as um .. the same as kind of thing as um, you know". In that sentence, she did circumlocution because she was difficulty in finding a word. It occurred when she told her mother that her arm was tingling when the first time she attacked by a stroke, she was not able to mention that, and finally, Joanie Scott says "pins and needles" to answer it.

Based on several characteristics of Broca's aphasia had by Sarah Scott in this data, the levels of language impairment that affect Sarah Scott's speaking ability is **Morphemic**. It occurred when she said, "So, I stand there," and it was classified as agrammatism. It is often experienced by people who suffer from Broca's aphasia, especially Sarah Scott which she did not change the word stand when she told the first time she attacked by a stroke. Instead, she has to say the word stood as the inflectional morpheme from the word stand.

Datum 2

"Yeah, the same, and also **arm** (hold the legs) is broke."

The data is taken from Sarah Scott's utterances as people with Broca's aphasia in *SymphUK* YouTube channel. It happened when she told about the first time she had a stroke. As explained in the previous datum, Sarah had a stroke when she was in school. Suddenly, her hand was tingling, and her leg fell off. At the time of the recount of that experience, Sarah Scott was supposed to say her *leg* while holding it. However, she mentions it with *arm*.

In this utterance, Sarah has a problem with word-finding, especially to define some object. This problem is called **dysnomia**. It is often experienced by people with Broca's aphasia, especially Sarah Scott, who has difficulty finding the appropriate word in her sentence. Based on the data, Sarah incorrectly calls the word *leg* into *arm* because she was being told while holding his leg and explained that her legs are being dropped.

Based on the data, the levels of language impairment that affect Sarah's speaking ability are not found in this sentence. It is caused due to the characteristics of dysnomia not included in the difficulties in preparing the word or using the system phonology. This characteristic is caused by temporal-occipital damage, which makes Broca aphasic person difficult with word finding.

Datum 3

" **Egs** (legs) , er .. yeah "

This data is taken from Sarah's utterances as people with Broca's aphasia in *SymphUK* YouTube channel. It happened when she told her mother how she had a stroke. When she said that her leg suddenly fell while holding it, she misstated the word *leg* into the *arm*. After that, his mother confirmed her word that what she touched was a *leg*, not an *arm*. Instantly, Sarah Scott also confirmed what she was said, but with the wrong sound. She calls the word *leg* with *egs*.

Based on the context above, phoneme omissions can be seen at the beginning of the word. Sarah Scott omits the phoneme /l/ for the word *leg*. This problem is called **literal (phonemic) paraphasia**. It often occurs in people who suffer from Broca's aphasia, especially Sarah Scott which suffered a setback in the phonological system.

Therefore, the level of language impairment that can be seen in this datum is **Phonetic**. It caused that people with Broca's aphasia has difficulty to distinguish the

appearance of sounds and words. As a result, some of the words that they were produced do not conform or deviate from the point of view of the correct phonetic rules.

Datum 4

"Err .. yep .. (writing down) apha .. aphasia ."

This data is taken from Sarah Scott's utterances as people with Broca's aphasia in *SymphUK* YouTube channel. It occurred when she was asked by his mother, Joannie Scott that what she was suffering from. After that, she tried to answer this question with effort and try to write the word that she wanted to say in the book. After trying to write it down, finally she could answer the question that she was suffering from aphasia. Joannie Scott was excited about her answer because this is the first time she heard her daughter mention the word aphasia, although she says it less smoothly.

Based on the context above, the characteristic of Broca's aphasia which can be seen in this datum, is **dysnomia**. In this utterance, Sarah Scott had a confrontation in which she had to write down the word *aphasia*. As people who suffer from Broca's aphasia, Sarah Scott claimed that writing down the word that she wants to say is help her to communicate with others. It occurred because Broca aphasic person, has problems with word-finding, so she has to write it first to make it easier to find the words that she wants to say.

Therefore, the levels of language impairment were not found in this data utterance. It is caused due to the characteristics of dysnomia not included the difficulties in the preparation of the word or used the system phonology are correct. This characteristic is caused by temporal-occipital damage in the brain, leading to Broca aphasic person's difficulty with word finding.

Datum 5

Sarah: "Oh .. um .. speech lang. . (language) um .. the .. speech .. umm .."

Joannie: Therapy ?!

This data is taken from Sarah Scott's utterances as Broca aphasic person in *SymphUK* YouTube channel. She produced this sentence when Joannie Scott asked her about the activities she did after a stroke hit her. After that, Sarah Scott tried to explain the activities she did as a person who suffered a stroke. The activity is speech therapy. However, Sarah cannot find the word *therapy*. It caused a lot of pauses in Sarah's utterance, and Joannie Scott helps her to answer it.

Based on the context above, the researcher found two characteristics of Broca's aphasia in this data utterances. From the utterance, Sarah Scott did the phoneme omission, which is the problem was categorized as **literal (phonemic) paraphasia** in the characteristic of Broca's aphasia. It can be seen in the datum that Sarah wanted to say a word language /læŋgwidʒ/. However, she only said phoneme lang /læŋg/ and omit phoneme /widʒ/ in the word. It occurred because Sarah Scott is aware that the word was not appropriate as she wants to say

Another characteristic of Broca's aphasia that appears in this utterance is **Dysnomia**. As the researcher explained in the previous data utterance, Sarah Scott tried to explain her activities after post- stroke. However, Sarah was challenging to answer it because she had problems with word finding. In this case, Sarah has a problem defining some objects. she cannot find the word *therapy* to answer Joannie Scott's question.

Therefore, the level of language impairment that affects the speaking ability of Srah Scott in this data utterance is **Phonetic**. It occurred when she did phoneme omission when she omits the phoneme /widʒ/ for the word /læŋgwidʒ/ and she only says the initial phoneme /læŋg/. It happens because people with Broca's aphasia has difficulty to distinguish the appearance of sounds and words. As a result, some of the words that they were produced do not conform or deviate from the point of view of the correct phonetic rules.

Datum 6

" And .. and .. connect. "

This data is taken from Sarah Scott's utterance as Broca aphasic person in *SymphUK* YouTube channel. It occurred when Joannie Scott asked her daughter, Sarah about what activities she did after a stroke. Sarah tried to explain the activities she did after having a stroke. Those are speech therapy, riding horses, and the last one was connected. The last activity is part of speech therapy in which, as a person who

suffering from problems in producing language, Sarah often has to learn to formulate words. However, when answering the last activity, Sarah Scott repeated the word *and* three times in her sentence.

Based on the context above, the characteristic of Broca's aphasia which can be seen in this datum is **repetition**. As explained before, this utterance appears when Sarah explained the activity she did after getting a stroke. However, when explain it, Sarah did a lot of repetition of the word *and* three times in her sentence.

Meanwhile, the levels of language impairment that affected the speaking ability of Sarah Scott do not appear in this data. Repetition is the symptom which part of sensory perception, motor speech capacity, inner speech, the understanding of the material that has been repeated, attitude and educational level of the subject, and the context in which the repetition occurs.

Datum 7

"Yeah, I don't know. But **it's I can't**. Some .. sometimes I write it down cause it's easier and also speaking is easier, so I don't know."

This data is taken from Sarah Scott's utterance as Broca aphasic person in *SymphUK* YouTube channel. When Sarah Scott was asked by her mother, Joannie Scott, writing down what she wanted to say was quite helpful for her in communicating. Then, Sarah replied that she didn't know. She felt that sometimes writing will become more accessible, and sometimes speaking is also more accessible without writing it first.

Based on the context above, there is grammatical errors in the Sarah Scott utterance, which leads to the types characteristic of Broca's aphasia, namely **agrammatism**. It can be seen in the sentence "But, it's I can." From this sentence, she uses two different subjects, which are it and I. Grammatically, this is not well structured and does not match to the context being spoken. Sarah should only use the subject I because she tells herself whereas a person, the subject it is only used for inanimate objects.

Therefore the level of language impairment that can be seen in this data is **Morphemic**. Sarah cannot use the subject correctly so that the sentences produce are not grammatical well structured. This problem often occurs in people who suffer from Broca's aphasia, which regresses as pathologically inability to use words in grammatical sequence.

Datum 8

"Yeah, And I can't write like one word. I'm fine sometimes that a long sentences. I can't read .. I can't write."

This data is taken from Sarah Scott's utterance as people with Broca's aphasia in *SymphUK* YouTube channel. It occurred when Joannie Scott asked Sarah whether writing would make it easier for her to find the words she was talking about. Then Sarah replied, she didn't know, she felt that sometimes writing would help her but sometimes speaking was easier without writing it first. After that, Sarah added that

she could write one word. Sometimes she could also write a long sentence. Sometimes she also can't read and write.

Based on the context above, there is a grammatical error that produced by Sarah Scott. It can be seen in the sentence "I'm fine sometimes that a long sentences." In this sentence, Sarah Scott makes the mistake of using an article in the word sentences. Supposedly in that sentence, Sarah Scott should not use the article a because a single word follows this article. Meanwhile, the phrase long sentences is a plural sentence that cannot be combined with article a. This difficulty was lead to the characteristic of Broca's aphasia called **agrammatism**.

Therefore, the level of language impairment that affects the speaking ability of Sarah Scott is **Morphosyntactic**. It happened because Sarah Scott could not put the article function correctly. This problem often occurs in people who suffer from Broca's aphasia, which regresses as pathologically inability to use words in grammatical sequence.

Datum 9

" Vell (means well) it's hard .. and .. but, you should fight and speak a lot and .. um .. "

This data is taken from Sarah Scott's utterance as people with Broca's aphasia in *symphUK* Youtube channel. It occurred when Joannie Scott asked Sarah Scott to deliver a message to other people who had suffered a stroke. Then Sarah Scott put it

effortfully, and there are many pauses in her sentence. She said that it is a hard thing, so we have to struggle and learn to speak a lot.

Based on the context above, the characteristics of Broca's aphasia can be seen in the Sarah Scott utterance is **literal (phonemic) paraphasia**. In this utterance, there is a phoneme substitution made by Sarah Scott. It happen in the word *well / wel /* which it replaces phoneme /w/ into /v/. In the rule of phonology, the phoneme pronounced by Sarah Scott is wrong because the category of the two types of consonants is different, which is phoneme /w/ classified as fricative while phoneme /w/ classified as approximant type of consonant.

Therefore the level of language impairment which affects the speaking ability of Sarah Scott in this utterance is **phonetic**. It happens because people with Broca's aphasia has difficulty to distinguish the appearance of sounds and words. As a result, some of the words they produce do not conform or deviate from the point of view of the correct phonetic rules.

Datum 10

"Um.. well I think .. I think that .. I think.. it.. it's.. I think later on still think it's too much and.. I think .. I still.. think writing and speaking, I think .. I'm always gonna think it's hard so I just think and just to have work but what I don't know because I'm it's difficult."

This data is taken from Sarah Scott's utterance as people with Broca's aphasia in *symphUK* Youtube channel. It occurred when Joannie Scott asked Sarah Scott

about the university that off another year and how about her future. Then, Sarah tried to answer it with effort and repeated the exact words many times, so her utterance was challenging to understand. She said that it was a tricky thing, but she had to work hard to make her language skills recover such as speak and write.

Based on the context above, the characteristic of Broca's aphasia had by Sarah Scott in this utterance is **repetition**. From her utterance, there is the same word that she repeated many times. She repeated the phrase "*I think*" three times and the phrase "*it's*" twice at the exact times.

Therefore, the levels of language impairment that affected the speaking ability of Sarah Scott does not appear in this data. Repetition is the symptom which part of sensory perception, motor speech capacity, inner speech, the understanding of the material that has been repeated, attitude and educational level of the subject, and the context in which the repetition occurs.

Datum 11

"Mmm.. cat .. I hated it.. and .. also my .. um.. Dad is a.. um.. asthma.. and so.. um.. it's a life long so summer sad but.."

This data is taken from Sarah Scott's utterance as people with Broca's aphasia in *symphUK* Youtube channel. It occurred when Sarah Scott explained that she got a dog, and she was talking about why she prefers to have a dog than a cat. When she

tried to explain that, Sarah had difficulty to conveythe word that she wanted to say, so that there are many pauses and humming in her utterance.

According to the context above, the characteristics of Broca's aphasia which can be seen in this datum is **disfluent**. From her utterance, there is humming "umm.." which can be seen at the beginning of the sentence before she said the word cat. Then, there is humming three times in the middle of the sentence; before she says the word Dad, Asthma, and it's a life.

Therefore, the levels of language impairment that affect the speaking ability of Sarah Scott does not appeared in this datum. It occurred because the disfluent symptom was not included the difficulties in preparing the word or use of the system phonology. It is caused by the disruption of temporal lobe lesions in the brain so that she cannot produce a language and sentence where in production becomes meaningless.

B. Discussion

In this section, the researcher shows the aspects of identification after the finding. Based on the research question, two questions must be answered in this discussion. The first question is about the characteristics of Broca's aphasia had by Sarah Scott. The second is how the levels of language impairment affected the speaking ability of Sarah Scott. From the data analysis above, the researcher found that Sarah Scott has some characteristics of Broca's aphasia which can be seen in the

Sarah Scott utterances. Those characteristics are the problems that made people who have a conversation with her are misunderstand what she was talking about.

1. The characteristics of Broca's aphasia had by Sarah Scott

The researcher found several problems of Sarah Scott when she produced the sentence and had a conversation with her mother, which lead to Broca's aphasia's characteristics. According to Ardila (2014), there are two levels to differentiate the characteristics of Broca's aphasia those are motor level such as the deficit of fluency, the kinetic speech melodies are disintegration, the impairment of verbal-articulatory which refers to the apraxia speech, and the purely of language level especially in the reduction of grammar named agrammatism. Individuals with Broca's aphasia tend to non-fluent and poorly articulated, but the understanding of the language is relatively standard.

In this study, all of the data are found from Sarah Scott's utterances which shows several characteristics of Broca's aphasia. The researcher found twenty-six speech errors produced by Sarah Scott and classified them into the types of characteristics of Broca's aphasia based on Hallmark (in Hallowel 2017) and Ardila (2014). Those characteristics are agrammatism, telegraphic speech, dysnomia, literal (phonemic) paraphasia, disfluent, and repetition.

a. Dysnomia

Dysnomia was the characteristic of Broca's aphasia which tend to produce by Sarah Scott in the *SymphUK* YouTube channel. Dysnomia occurred when the person with Broca's aphasia had difficulty defining something. They tend to use circumlocutions or other words to get the closest word and related meaning that they are difficult to say (Hallowell, 2017, p. 163). Moreover, according to Ardila (2014), dysnomia can be defined as the difficulty of word-finding and classified into several types, such as doing confrontation, which means line drawing and photographs the function word (noun and verb) difficulty to define some objects and fluency.

The data analysis can be seen in the research finding, Sarah Scott's utterance in SymphUK YouTube channel classified as dysnomia. It can be seen on **data 1 datum**1.4, datum 2 datum 4, and datum 5. That datum not only showed dysnomia, however it was also followed by others characteristics such as agrammatism, telegraphic speech, literal (phonemic) paraphasia, and disfluent.

In data 1 datum 1.4, Sarah said, "... also arm it's um the same as um.. the same as kinsd of thing as um, you know." Sarah wanted to say that her arms got "pins and needles" from this utterance, she had difficulty to found that word. In this case, the types of dysnomia that Sarah Scott uttered are complex in defining something. Meanwhile, in datum 2, Sarah produces the word "arm," but instead, she wanted to say the word "legs." In this case, Sarah had difficulty defining some objects. She cannot mention the appropriate word.

The next type is in datum 4, it occurred when Sarah wanted to say that she had suffered from aphasia, however she had difficulty to say that word and writing down the word "aphasia" to make it easier. So that, she said, "Err.. yep.. (writing down) apha.. aphasia.". The last type found in datum 5; in this case, Sarah had difficulty finding the word "therapy." So, she said, "Oh.. um.. speech lang (language) um.. the.. speech.. umm". There are many pauses and humming as signs that she had challenges producing the word from her utterance.

Those difficulties had by Sarah Scott are categorized as her characteristics of Broca's aphasia. The dysnomia characteristics happened when Sarah Scott tried to utter some object and naming something, especially the word was classified as noun and verb. As Broca aphasic person, Sarah had a problem with her language production. Thus, there are a lot of pauses in her utterances. When she had difficulty uttering something, Sarah had always doing humming and repeated the word twice or three times, such as"... also arm it's um the same as um.. the same as kind of thing as um, you know." and "Oh.. um.. speech lang (language) um.. the.. speech.. umm".

Moreover, this kind of characteristic also appears when Sarah Scott was communicating with other people. It happened when she had a conversation with her mother in the video. When she got a question from her mother that she was suffering from what, she had difficulty finding the word "aphasia" to answer her question, then, she had to write down to make her easier to produce that word. This context was illustrated in figure 1, which was taken from video 1 in minutes 1:54.

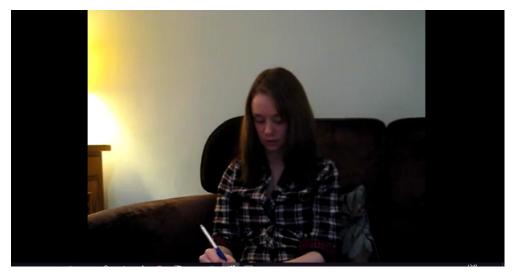


Figure 1. Sarah Scott had been writing down the word "aphasia"

b. Agrammatism

Agrammatism also becomes a significant problem for people with Broca's aphasia. It is characterized by a deficit in formulating and processing syntax. It also impaired auditory comprehension, such as the complex types of grammatical constructs. According to Hallowell (2017), agrammatism is a symptom caused by limited working memory and the deficit speed of processing capacity. The reduced power leads to difficulty receiving the information that must be processed to be understood and produce the grammatical sentences.

People with Broca's aphasia tend to produce and understand only a few meaningful words. The function words such as article and preposition tend to be omitted, and they may substitute the suffixes or affixes but more likely cannot produce the inflectional morphemes (Ardila, 2014). From those problems, the

researcher found some data utterances in the research finding classified as agrammatism. It can be seen on **data 1 datum 1.3**, **datum 7**, **and datum 8**. That datum not only showed agrammatism, but the researcher also found the other characteristics of Broca's aphasia such as telegraphic speech, dysnomia, disfluent, and literal (phonemic) paraphasia.

In data 1 datum 1.3, Sarah made a grammatical error in her utterance, "So, I stand there", when she talked about how the first time she had a stroke. She should change the word "stand" into "stood" as the past form from that word. Meanwhile, in datum 7, Sarah said, "But it's I can't," which shows two subjects in her utterance where she should only put the subject "I" as the appropriate subject for the context. Then, in datum 8, the grammatical error made by Sarah can be seen in the utterance "I'm fine sometimes that a long sentences". She shouldn't use the article "a" in that utterance because the phrase "long sentences" is categorized as plural.

The agrammatism characteristics happened in the middle of her utterance. When she produced the utterance, Sarah was always careful, and there was a hesitation when she was trying to say the word. As Broca aphasic person, Sarah had a problem producing the word. Besides, she also experiences the reduced working memory, so that she tends to cannot produce the sentence with the grammatical constructions.

c. Literal (Phonemic) Paraphasia

Literal (phonemic) paraphasia is the characteristic of Broca's aphasia which is also found on the Sarah Scott utterances in the *SymphUK* YouTube channel. Literal (phonemic) paraphasia occurs when a person with Broca's aphasia always substituted one more sound in the word. Furthermore, according to Ardila (2014), literal (phonemic) paraphasia is the symptom in which the patient was always doing phoneme substitution and phoneme omission. They had difficulty to produce a specific phonemes such as fricative or affricative phonemes and produce complex syllables such as consonant-consonant-vowel in the word tree.

The phoneme substitution that always occurs in people with Broca's aphasia is substituted the fricative phoneme with stop phoneme. For instance, phoneme /s/ in the word becomes are replaced with phoneme /t/. Meanwhile, the phoneme omission, which mostly occurs in people with Broca's aphasia, omits the complex syllable becomes the primary syllable, such as the word *tree* become *tee*. Not only that, the phoneme addition and phoneme displacement also might occur in a person with Broca's aphasia. For instance, the word *pencil* is adding phoneme /r/, so it become *precil* and the word pencil becomes pelcin which displacement the phoneme /n/ in the last word.

From the data analysis in the research finding, the researcher found several utterances produced by Sarah Scott, categorized as literal (phonemic) paraphasia in the *SymphUK* YouTube channel. It can be seen in **datum 3**, **datum 5**, **and datum 9**.

The researcher found this type of characteristic from those utterances, followed by other characteristics such as dysnomia.

In datum 3, Sarah wanted to say the word "legs" but omitted the first phoneme of the word become "egs." Moreover, in datum 5, she only said the word "lang," but instead, she wanted to say the word "language." The last type was shown in datum 9; Sarah wanted to say the word "well," but she substituted the first phoneme become "vell.". Those errors are classified the problem of apraxia of speech in people with Broca's aphasia. Sarah had experienced a deficit of fluency, and the kinetic speech melodies are disintegration, the impairment of verbal-articulatory.

The literal (phonemic) paraphasias mostly happened in the middle of the utterance. It also occurred when Sarah produced the wrong word or the different word that she wants to say. She tends to omit and substitute the word. For example, when she tried to say the word *legs* become *egs*, the term *language* becomes *lang*, and the word *well* becomes *vell*. These errors was produced by Sarah Scott when she had a conversation with her mother.

d. Disfluent

Disfluent is a characteristic that mainly occurred in people with Broca's aphasia. According to Hallowel (2017), disfluent in people with Broca's aphasia only conveys the fewer word and the content is less meaningful per unit of time than other types of aphasia and people without aphasia. People with Broca's aphasia also tend to be

aware of these errors, especially in contrast to people with aphasia with more posterior (temporal lobe) lesions. Some have extreme frustration when struggling to communicate.

The data analysis shown in the research finding found several utterances produced by Sarah Scott are classified as disfluent in the *SymphUK* YouTube channel. The data can be seen in **data 1 datum 1.1 and datum 11**. The researcher found this type of characteristic from those utterances, followed by other characteristics such as dysnomia, agrammatism, and telegraphic speech.

In data 1 datum 1.1, it occurred when Sarah talked about how the first time she had a stroke. She said, "Um.. um.. um.. "[1.1] school [1.2], and English class, and I. um.. book and I read it aloud...". At the beginning of her utterance, there is humming three times before the word school. Meanwhile, in datum 11, she said, "Mmm.. cat.. I hated it.. and .. also my .. um.. Dad is a.. um.. asthma.. and so.. um.. it's a life long so summer sad but..". There are humming at the beginning of the sentence and three times in the middle of the sentence; before she says the word Dad, Asthma, and it's life.

Disfluent characteristics appeared when Sarah tried to explain something. As Broca aphasic person, she had challenges producing the word, so that there are many pauses and humming in her utterances. Humming is often appeared at the beginning of the sentence and also in the middle of the sentence. Not only humming, but she

also used the gesture when she was trying to say the word *cat* in datum 11. It illustrated in figure 2, which taken from in video 2 in the minutes 05:08



Figure 2. Sarah gestured her hand to find the word cat

e. Repetition

Repetition is one of the characteristics which occur in people with Broca's aphasia. Ardila (2014) stated that repetition symptoms caused by different mechanism are limitation of auditory verbal short-term memory, difficulties at the level of phonological production, impairments in phoneme recognition, and semantic and syntactic comprehension. According to the specific task, the error of Broca aphasic person can be seen in the difficulties at phonological production and defects in grammar comprehension.

From the data analysis, which can be seen in the research finding, the researcher found several utterances produced by Sarah Scott, classified as repetition in the *SymphUK* YouTube channel. It can be seen in **datum 6** and **datum 10**; She said, "And.. and.. and.. connect.". Sarah talked about her activity after having a stroke and repeated the word and three times at the beginning of the sentence. Then, she also repeated the phrase "I think" three times and the phrase "it's" twice at the exact times in datum 10.

The repetition's symptom appeared when Sarah tried to convey something. As Broca aphasic person, she had difficulty with producing the word. So that, there are many pauses in her utterances, and she repeated the same word many times to continue the next term. For example, as explained in datum 6, Sarah repeated the word and continued the word *connect*.

f. Telegraphic Speech

Telegraphic speech was also found in the Sarah Scott utterances as Broca aphasic person in the *SymphUK* channel. Telegraphic speech tends to occur in a person with Broca's aphasia, which cannot produce complex sentences. They often have short sentences such as a single word (Ardila, 2014, p. 68). In addition, a person with Broca's aphasia tends to omit the function word such as prepositions, pronouns, determiners, conjunctions, and auxiliary verbs, which refers to the closed class words that relatively be a small set of the language to compare with open class words. The content word such as nouns, verbs, adjectives, and adverbs are also tend to omit on

the person with Broca's aphasia, which refers to open class words used and combined with other class words arrange the sentences (Hallowell, 2017, p. 163).

The researcher found telegraphic speech in the Sarah Scott utterances in SymphUK YouTube channel from the research finding. It can be seen in the **data 1 datum 1.2**. At the beginning of the word, Sarah said, "...school, and English class, and I.. um.. book...". From this sentence, Sarah only said the short sentence as a single word categorized as a noun. Her sentences were not completed with any function words that must be arranged to make a complex sentence.

The telegraphic speech appeared when she tried to explain something. She also used the gesture to make her easier to speak. For instance, when she said the word books, she used her hands and acted as she was holding a book. It is illustrated in figure 3, which is taken from video 1 in the minutes 1:02.

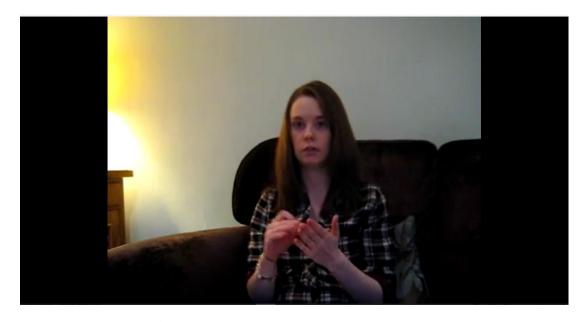


Figure 3. Sarah gestured as she hold the book

Based on the explanation above, here is a summary of the analysis results in the form of images. Figure 4 explains the characteristics of Broca's aphasia had by Sarah Scott based on the theory by Hallowel (2017) and Ardila (2014).

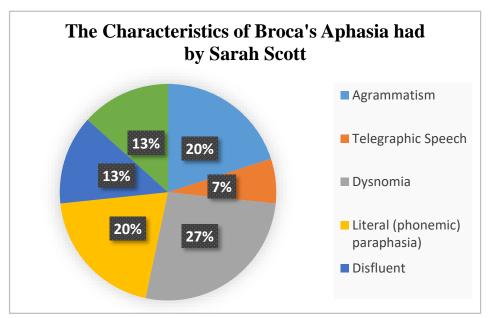


Figure 4. The Characteristics of Broca's aphasia had by Sarah

2. The levels of language impairment that affect the speaking ability of Sarah Scott

This section has become the last discussion in this study. It discussed how the levels of language impairment affect the speaking ability of Sarah Scott. The researcher used the theory proposed by Ardila (2013) and (2014) to answer the last research question and complete this discussion. Ardila (2014) explained that the levels of language analysis are classified into several types, those are phonetic, which concerned with the speech sound analysis of human language, Phonemic which

referred to the minimal sound of the language that can arrange and convey the meaning (e.g./a/, /b/), morphemic is the smallest unit of language, morphosyntactic which referred to the grammatical rules of language, semantic is the study of the meaning of language and pragmatic which concerned with how language to be used in everyday life which refers to the social contexts.

However, the levels of language-impaired in each type of aphasia are different. It can be seen by the deficit or problem in the different types of aphasia. For instance, people with Wernicke-type aphasia had a problem with language comprehension and tended to decrease with lexical (words) and semantic (meaning) association. Thus, the levels of language in Wernicke-type aphasia are semantic. Meanwhile, in people with Broca's aphasia, they had difficulty to produce the language.

According to Ardila (2013), Broca-type aphasia had two different significant problems that can be observed. First is the motor level, which is located on the one hand, a motor component. This part is related to the lack of fluency, the disintegration of the speech kinetic melodies, verbal-articulatory, etc. This kind of problem referred to the apraxia of speech. Apraxia of speech is categorized as a contiguity disorder, however many phonetic-level errors mostly referred to the segmental distortions. The second problem had by people with Broca's aphasia is the reduction in grammar, which is referred to as agrammatism. It is associated with damage in a large part of the front-parietal-temporal cortex observed to be involved with syntactic-morphological function. From those difficulties, it can be concluded that the levels of

language-impaired in a person with Broca's aphasia are phonetic, morphemic, and morphosyntactic.

As discussed in the previous chapter, Sarah Scott was a young person with Broca's aphasia. She was convicted by a stroke at eighteen years old. It happened when she was in English class, but she couldn't when she was trying to read aloud. Sarah also remembered that her legs were broken, and she was taken to the hospital. Since then, Sarah Scott lost her language abilities, such as writing, reading even speaking. It made it challenging to communicate with others. Moreover, the loss of her language ability is caused by aphasia, which can be seen from its characteristics. The researcher found several characteristics of Broca's aphasia, leading to the levels of language-impaired in Sarah Scott.

One of the characteristics can be seen in **data 1 datum 1.3.** From that data, Sarah made an error which categorized as agrammatism. She said, "So I stand there" when she was talking about the experience how the first time she had a stroke. As Broca aphasic person, Sarah had difficulty arranging the sentence with the correct grammatical. In this case, the levels of language-impaired in Sarah are morphemic. It occurs because Sarah didn't change the word *stand* into *stood* as an inflectional morpheme from that word. It should be changed to shows the grammatical function to indicate a condition in the past event.

The next problem related to the grammatical deficit and it also referred to as agrammatism characteristics that can be seen in datum 7. In this datum, Sarah made

an error by uttered: "Yeah, I don't know. But it's I can't. Some ... sometimes I write it down cause it's easier and also speaking is easier, so I don't know.". From this sentence, there is grammatical error produce by Sarah Scott. It can be seen in the sentence" But it's I can't." It is not grammatical well-structured because Sarah used inappropriate subjects at the beginning of the sentence. Instead, she only used the subject I because she talked about herself as a person, while the subject it only used for inanimate objects. Thus, the levels of language impairment in Sarah Scott in this sentence is morphosyntactic. It occurs because the part of the front-parietal-temporal cortex was damaged, related to the morphosyntactic function.

Then, a problem, which refers to agrammatism, also can be seen in **datum 8**. From this datum, Sarah produces the sentence categorized as agrammatism, said: "... I'm fine sometimes that a long sentences.". The grammatical error made by Sarah was using an article a for the morpheme that was classified as plural. Instead, the article a only followed by a single word. Meanwhile, the phrase long sentences is a plural sentence that cannot be combined with article a. Thus, the level of language-impaired in Sarah Scott in this context is morphosyntactic. It occurs in Broca aphasic person because the part of the fronto-parieto-temporal cortex was damaged related to the morphosyntactic function.

Other characteristics had by Sarah Scott as Broca aphasic person can be seen in **datum 3**. In this datum, Sarah made an error that refers to the literal (phonemic) paraphasias as characteristics of Broca's aphasia. In the datum, she said

"Egs (legs), er.. yeah". There is phoneme omission in this datum, that Sarah omits the phoneme /l/ from the word leg. From this case, it can be seen that the levels of language-impaired in Sarah Scott is phonetic. The phonetic levels often occur in people with Broca's aphasia because they had deficits with their motor component. It influenced their fluency, disintegration of kinetic melodies, and verbal articulatory.

The following datum, which refers to the literal (phonemic) paraphasia's characteristics, is in **datum 5**. In this datum, Sarah was talking about her activity after she stroke. She said, "Oh.. um .. speech lang. . (language) had .. the .. speech .. umm .. ". The error which can be seen in this datum was phoneme omission. She omitted the last phoneme of the word language, so that she only said lang /læng/ and omit phoneme uange /widʒ/. The characteristic of this problem is literal (phonemic) paraphasia. From this characteristic, the levels of languageimpaired in Sarah Scott is phonetic. It occurred because one hand of the motor component of Sarah as people with Broca's aphasia was impaired. This problem refers to the apraxia of speech which had fluency, the disintegration of kinetic melodies, and verbal articulatory.

The last characteristic, which refers to the literal (phonemic) paraphasia, is in **datum 9**. In this datum, Sarah said, "Vell (means well) it's hard .. and .. but, you should fight and speak a lot and .. um .. um .. ". From this datum, it can be seen that Sarah Scott makes phoneme substitution. She uttered the word well into vell. She substituted phoneme /w/ classified as a fricative type of consonant while phoneme /v/

classified as an approximant type of consonant. From this case, it can be concluded that the levels of language-impaired in Sarah Scott is phonetic. Phonetic level occurs in people with Broca's aphasia because they had the problem referred to as apraxia of speech. This problem resulted from the damage of the motor component that influenced their fluency, disintegration of kinetic melodies, and verbal articulatory.

CHAPTER IV

CONCLUSION AND SUGGESTION

This chapter contains the conclusion of the thesis and suggestions given by the researcher. After presenting the findings and discussions in the previous chapter, the researcher concludes and offers suggestions to the readers and next researcher, which is concerned with Broca's aphasia language impairment. The conclusion and suggestion below are based on the result of the data analysis on the language impairment of Sarah Scott as a person with Broca's aphasia in the *SymphUK* YouTube channel.

A. Conclusion

The following conclusion consists of explaining the research problem statement, the result of the analysis, and the finding and discussion of the research. Based on the analysis of the study, the researcher concluded that Sarah Scott had several problems, which leads to the characteristics of Broca's aphasia and the levels of language impairments that affect her speaking ability. The significant problem had by Sarah as a person with aphasia is remembering the name of something or object. She also had difficulty finding the right word, so that she had to gesture her hand to help her find the word that she wanted to say.

Furthermore, Broca's aphasia also made her speaking ability was disturbed, mainly to produce the sentence. She had the problem of producing the sentence with

the correct grammatical. Therefore, it made difficult to understand and also there are many pauses and repetition in her utterance. The phonological system of Sarah Scott was also disturbed, which made her utterance tend to omit and substituted the phoneme of the word. That difficulty is the condition of Sarah Scott as people with Broca's aphasia in the *SymphUK* YouTube channel.

Based on the utterances produced by Sarah Scott, the researcher found twenty-six problems of Sarah Scott, which related to the characteristics of Broca's aphasia. Through using the Hallowel (2017) and Ardila (2014) theory, the researcher concluded that the most dominant characteristic found in Sarah Scott is dysnomia. The following characteristics are literal (phonemic) paraphasia and agrammatism. Then the other characteristics are disfluent, repetition, and telegraphic speech.

The following finding is about the levels of language impairment that affect the speaking ability of Sarah Scott based on the theory proposed by Ardila (2013) and (2014). According to Ardila (2013), Broca-type aphasia had two different major problems: the motor level related to the phonetic-level error and reducing the grammar, which is referred to as agrammatism. Ardila (2014) also classified the levels of language-impaired in Broca's aphasia are morphemic, morphosyntactic, and phonetic. The language levels that the most damaged in Sarah Scott as people with Broca's aphasia are phonetic. She often omitted the last phoneme of the word and substituted the phoneme at the beginning of the word. Other levels impaired in Sarah Scott are morphosyntactic and morphemic.

Through investigate this research, the lesson learnt that the researcher take from the subject of the study that Sarah Scott is a young aphasia sufferer who never gives up. She has inspired many people especially sufferers of Broca's aphasia that these symptoms can recover due to speech therapy. Despite having difficulty in communicating she also remained determined and tried to get on with her life. She still wants to study at university and try to get a job like any other normal person. That desire is certainly not achieved easily. Sarah had to wait a year to be able to study at university and she also had a lot of difficulty communicating to get the job done.

B. Suggestion

In this research, the researcher found that Sarah Scott, as Broca aphasic person, had a problem that led to Broca's aphasia and the levels of language impairments that affect her speaking ability. Sarah was very effortful to communicate with others, and sometimes she looks surrender with her condition. Therefore, the researcher applies the suggestion for people facing people with aphasia to care more about them.

As explained in the previous section, a person with aphasia have several difficulties in producing language. Thus, people who interact with them must be patient to comprehend what they are saying about. It is caused by their language deficit, so that they cannot produce the word correctly. The researcher also offers the following researchers and the lecturer the suggestion to make this research a

reference for a better understanding of language impairment, especially the understanding of the characteristics of Broca's aphasia.

REFERENCES

- Ardila, A. (2010). A proposed reinterpretation and reclassification of aphasia syndromes. *aphasiology*, 366.
- Ardila, A. (2013). A New Classification of Aphasias. *Departments of Communication Science Disorder*.
- Ardila, A. (2014). Aphasia Handbook. Florida: Florida International Uniersity.
- Ardila, A., & Benson. (1996). *Aphasia: A clinical perspective*. New York: Oxford University Press.
- Azad, O. (2020). Lexical Ambiguity Processing in Persian-Speaking Patients with Broca and Wernicke Aphasia. *Modern Rehabilitation*, 39.
- Beverley, H. (1998). *An Intoroduction to Qualitative Research*. Nottingham: The Trent Focus Group.
- Bodgan, R. C., & Biklen, S. K. (1982). *Qualitative Research For Education (An Intoduction to Theory and Methods)*. Syracuse: Nancy Forsyth.
- Burcu, A. (2019). Lexocal-Semantic and Phonological Processing Deficits in Wernicke's Aphasia. *Dilbilim Araştırmaları Dergisi*.
- Code, C. (2019). The Cambridge Handbook of Psychology, Health and Medicine (pp.428). Cambridge: Cambridge University Press.

- Cowles, H. W. (2011). *Psycholinguitics 101*. New York: Spreinge Publishing Company.
- Haira, R. (2012). A Psycholinguitics Analysis of Dyslexia in Backwards: The Roddle of Dyslexia. Yogyakarta: Undergraduate Thesis of The State University of Yogyakarta.
- Hallowell, B. (2017). Aphasia and Other Acquired Neurogenig Language Disorder: a guide for clinical excellence. San Diego: Plural Publishing.
- Heal, B. (2019). Word Error and Word Frequency Correlation in Broca's aphasia.

 Speech Pathology and Audiology Commons.
- Indah, R. N. (2011). Gangguan Berbahasa. Malang: UIN Press.
- Indah, R. N., & Abdurrahman. (2008). *Psikolinguistik: Konsep & Isu Umum*. Malang: UIN Press.
- Jordan, L., & Keiser, W. (1996). *Aphasia- A Social Approach*. Canada: Chapman & Hall.
- Kuzmina, E., & Weekes, B. S. (2016). Role of Cognitive Control of Language Deficits in Differents types of aphasia. *Aphasiology*.
- NICHCY, N. D. (2011). Speeah and Language impairment. *NICHCY Disability Fact Sheet*, 3.

- Project, I. C. (2021, January 21). Retrieved from International Communication

 Project: https://internationalcommunicationproject.com/profile/an-18-yearold-with-aphasia-sarahs-story/
- Reily, J. (2014). Language Disorder. Ensyclopedia of Theory in Psychology, 3.
- Ronny, P. (2003). Language and Brain. Linguistically Relevance Films, 3.
- Septianto, R. D. (2020). A Case Of Language Disorder On Aphasia and Its

 Phonological Error Found Within Edwyn Collins Utterances As A Main

 Character in The Possibilities Are Endless Movie. Surakarta: Unpublished

 Undergraduated Thesis.
- Sumardiono. (2014). Psycholinguitics: Copilation of Psycholinguitics Materials.

 Blitar: STKIP PGRI Blitar.
- Syarifah, W. H. (2020). *Broca's aphasia Word Production on My Beautiful Broken Brain Movie.* Malang: Unpublished Undergraduated Thesis.
- Thye, M., & Mirman, D. (2018). Relative contributions of lesion location and lesion size to predictions of varied language deficits in post-stroke aphasia . NeuriImage: Clinical.
- Withaker, H. A. (2007). Language Disorder: Aphasia. *Encyclopedia of Language and Linguistics*, 10.
- Yule. (1985). The Study of Language. Cambridge: Cambridge University Press.

Yulia, H., Syarif, H., & Marlina, L. (2018). The Syntactical Analysis of The Influence of Speech Therapy to Post Stroke Patients With Broca's aphasia Speech Ability. E-Journal of English Language & Literature, 422-431.





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APPENDIX

Table of The Characteristics of Broca's Aphasia had by Sarah Scott

AG: Agrammatism

TS: Telegraphic Speech

DN: Dysnomia

LP: Literal (Phonemic) Paraphasia

PO: Phoneme Omission

PA: Phoneme Addition

PD: Phoneme Deletion

PS: Phoneme Substitution

DF: Disfluent

RP: Repetition

No. Data	ш		The Characteristics of Broca's Aphasia									
	No. Datum	Utterances	AG	TS	DN	LP				DF	RP	
						РО	PA	PD	PS		KI	
1.	1.1,	Um um um ^[1.1] school ^[1.2] ,	$\sqrt{}$	$\sqrt{}$	V					$\sqrt{}$		
	1.2,	and english class , and I um										
	1.3,	book and I read it aloud. And										
	1.4	um but I can't cause a stroke.										
		And so I stand there ^[1,3] and										
		um also arm it's um the same										
		as um the same as kind of										
		thing as um ^[1,4] , you know.										

2.	2	Yeah the same and also arm (hold the legs) is broke.			1					
3.	3	Egs (legs), err yeah. Yup				1				
4.	4	Err yep (writing down) apha aphasia.			1					
5.	5	Sarah: "Oh um speech lang (language) um the speech umm" Joannie: "Therapy."			V	V				
6.		Oh, umhoo horses							V	
7.	6	And and connect								V
8.		Yeah, I don't know. But it's I can't. Some. sometimes I write it down cause it's easier and also speaking is easier so I don't know.	V							
9.	8	Yeah, And I can't write like one word. I'm fine sometimes that a long sentences. I can't read I can't write.								
10.		Yeah. It's I can't speak a little but it's harder and I can't sometimes um it's harder causes speaking I like my friends like um it's too hard and I don't like it so I it's hard. Than friends than (family).	V							
11.		A tiny bi' (bit) but I can't a little.						V		
12.		Well its cause it's							V	
13.		Um heart um hole in the		V						

	heart. And I um close up , so						
14.	See It's (trying to shape a heart with her finger)		V				
15.	And it's it's						V
16.	9 Vell (well) it's hard and but, you should fight and speak a lot and um um				V		
17.	N n oh eighteen, no no					V	
18.	I'm writing and but instead of Tuesday, Wednesday it's oh Monday, Tuesday		V				
19.	And also I can like um Monday I can um					V	
20.	Oh waitress um ssh (Shelf)					V	
21.	But it get and like just talking and and yeah so it's good						√
22.	Yeah. It says um says um stroke and oh speech problems and it's tiny but it's						V
23.	Um I think tiny but I can my speech therapies, that I can try like it's tiny book and I can read like I can do it. But it's some difficult and it's tired and it's still ee um it it's hard yeah.						
24.	10 Um well I think I think that I think it it's I think later on still think it's too much and I think I still						V

		think writing and speaking, I think I'm always gonna think it's hard so I just think and just to have work but what I don't know because I'm it's difficult.					
25.		We yeah and but they um my um				$\sqrt{}$	
26.	11	Mmm cat that's I hated it and also my um Dad is a um asthma and so um it's a life long so summer sad but				V	