



**HOW THE COMMON PEOPLE UNDERSTAND THE SIGN LANGUAGE
OF THE DEAF STUDENT IN SLB B BINA ASIH BONDOWOSO**

THESIS

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FACULTY OF LETTERS
JEMBER UNIVERSITY**

2015



**HOW THE COMMON PEOPLE UNDERSTAND THE SIGN
LANGUAGE OF THE DEAF STUDENT IN SLB B BINA ASIH
BONDOWOSO**

A thesis presented to the English Department
Faculty of Letters, Jember University,
as one of the requirements to obtain
the Award of Sarjana Sastra Degree
In English Studies

Written by:

Tri Wulandari

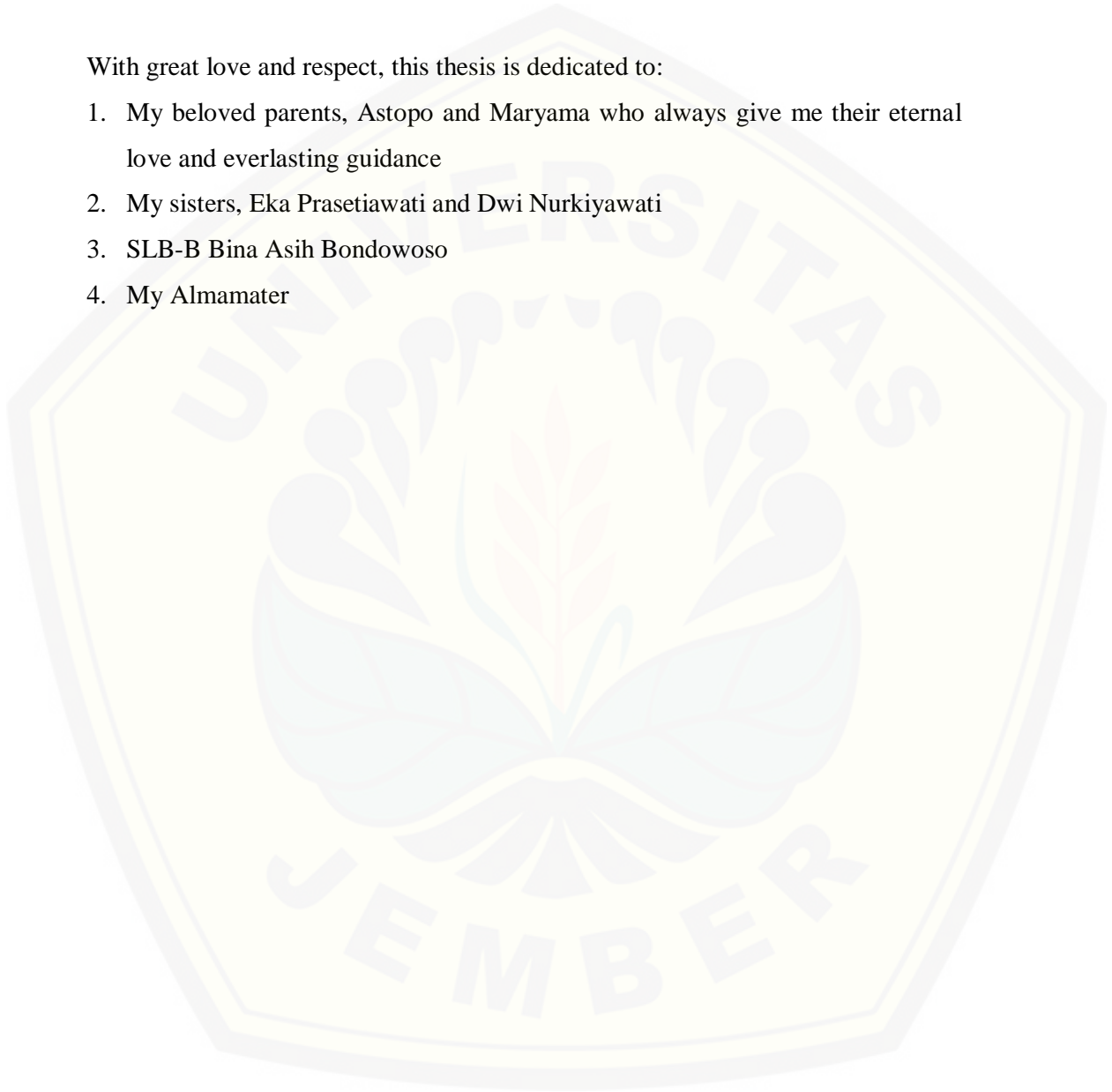
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JEMBER UNIVERSITY
JEMBER
2015**

DEDICATION

With great love and respect, this thesis is dedicated to:

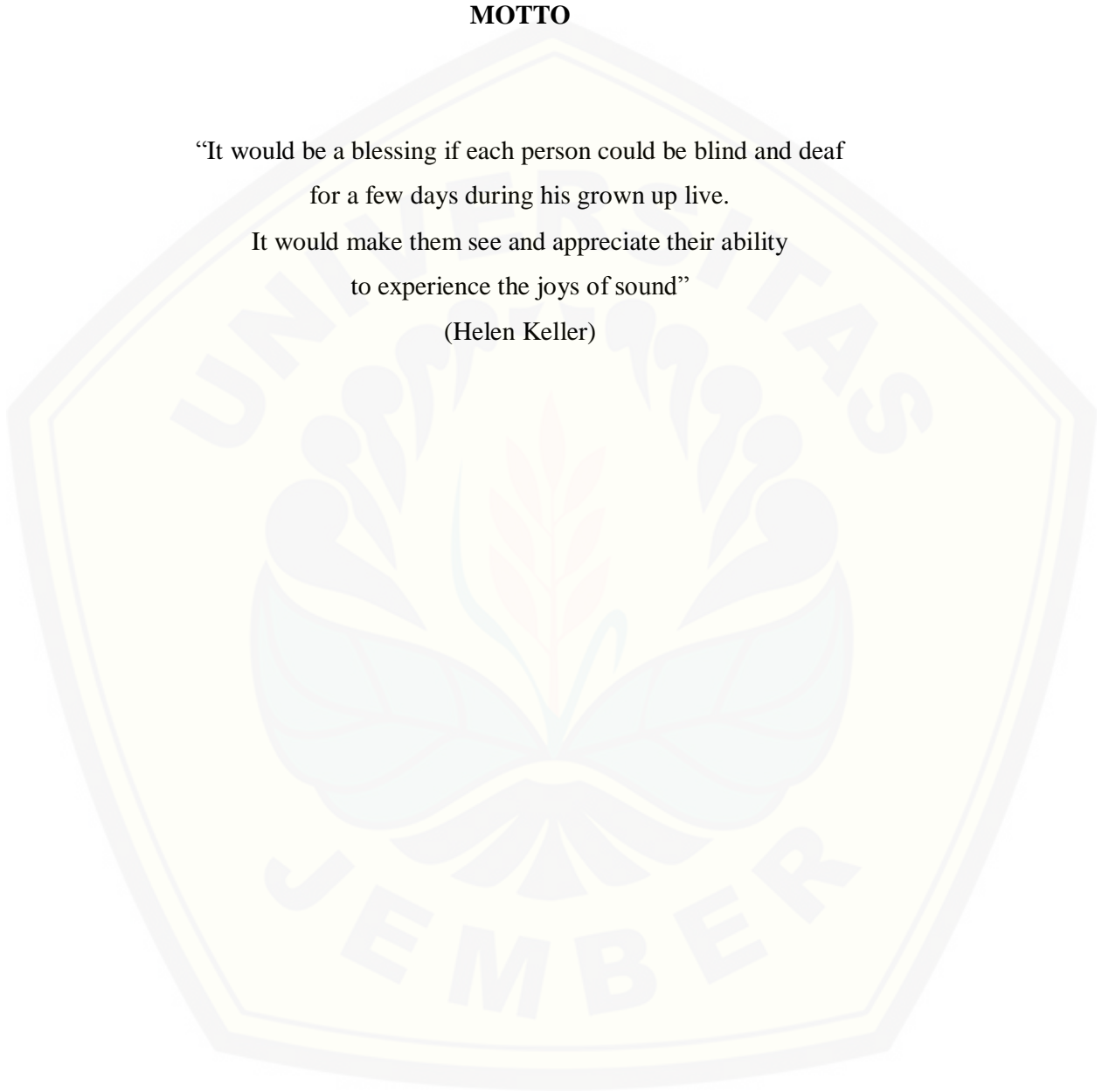
1. My beloved parents, Astopo and Maryama who always give me their eternal love and everlasting guidance
2. My sisters, Eka Prasetiawati and Dwi Nurkiyawati
3. SLB-B Bina Asih Bondowoso
4. My Almamater



MOTTO

“It would be a blessing if each person could be blind and deaf
for a few days during his grown up live.
It would make them see and appreciate their ability
to experience the joys of sound”

(Helen Keller)



DECLARATION

I hereby declare that the thesis entitled *How the Common People Understand the Sign Language of the Deaf Student in SLB-B Bina Asih Bondowoso* is an original piece of writing. I guarantee that the analysis and the research described in this thesis have never been submitted for any other degree or publications. I certify to the best of my knowledge that all sources used and any help received in the research of this thesis have been acknowledged.

Jember, November 5th, 2015

The candidate,

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ACKNOWLEDGMENT

In the name of Allah, the most Beneficent and the most Merciful Who has given me all of His blessing and loving, so that I can accomplish writing this thesis as one of the requirements to obtain Sarjana Sastra degree in English studies. I do hope this thesis will give better contribution to those who are interested in the subject discussed.

In connection with the writing and finishing of this thesis, I would like to express my gratitude to:

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12. Almamater.

Finally for the improvement of this thesis, I do hope for the suggestion and advice from the readers, particularly those who would like to study psycholinguistic. Hopefully this thesis will be useful to increase some insight on psycholinguistic.

May Allah allow and bless my efforts.

Jember, November 2015

Tri Wulandari

SUMMARY

How the Common People Understand the Sign Language of the Deaf Student in SLB-B Bina Asih Bondowoso; Tri Wulandari, 080110191005; 2015: 65 pages; English Department Faculty of Letters Jember University.

This thesis analyses a sign language in SLB – B Bina Asih Bondowoso. Sign language is used to communicate between the teacher and deaf students in a classroom discourse.

The objectives of this study are to know how many coefficient percentages of the abilities of the common people understanding about sign language, and to show how the way of the common people in understanding of the deaf students languages. The analysis is based on visual signal and association.

This study uses mixed method, qualitative that makes groups into correct, close, incorrect and no answer by using table format. and quantitative that analyses the factor why the respondents guess correct, close, incorrect, and no answer, to analyze the data.

This research views this term from the psycholinguistic point of view which focuses on sign language as visual communication by observing the common people who guess the signs as visual signals in every word. It begins by giving questionnaire to the students of English Department by watching videos of one of the students in SLB-B Bina Asih Bondowoso.

The data were taken from the questionnaire. It asks the respondents to guess the meaning of the signs that were shown by the model in the video. The time allocation is 10 minutes to write the answer in the answer sheet. However, there were some respondents who exceed the time. It happened because there were two obstacles in guessing. The first, there are some movements that are needed for repetition. The second, the respondents still need more time to think in

looking for the correct answer. It proves the opinion of Arnold & Mills (2001:187). They say that in this process of receiving signed message, it needs retained long visual sequences of hand shape in working memory to get the meaning of the messages.

The result shows that the numbers of personal interpretations are 13 times with the percentage score below 70%, and the cultural interpretations are 16 times with the percentage above 70% while the universal interpretations are 21 times with the percentage score above 80%. As the result, the 50 respondents are generally concluded to use their universal reference of the world to address the signs though somehow it is not the exactly questioned word.

**How the Common People Understand the Sign Language of the Deaf Student
in SLB-B Bina Asih Bondowoso**

Tri Wulandari

ABSTRACT

Sign language is used to communicate between the teacher and deaf students in a classroom discourse. The goal of this study is to know how the common people understand the sign language of the deaf students in SLB-B Bina Asih Bondowoso. This research will view this term from the psycholinguistic point of view which focuses on sign language as visual communication by observing the common people who guess the signs as visual signals in every word. It begins by giving questionnaire to the students of English Department by watching videos of one of the student in SLB-B Bina Asih Bondowoso. The results suggest that visual ability is needed for the common people, such as imagery, memory for simultaneously presented shapes, visual attention, visual closure, face recognition and motion detection in peripheral vision.

Key words: sign language, visual signal, psycholinguistics

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CHAPTER 1. INTRODUCTION

1.1 The Background of the Study

All human needs communications. One of the means of communication frequently used is language. As a means of communication, language has several functions. First, language is for interpersonal interaction. Second, it prevents conflict in society. The third, it will make a good cooperation in various aspects especially aspect of education which has a positive impact (Ministry of Education and Culture of Indonesia, 1995:24). So communication will break down if there is misunderstanding among people involved.

In the educational aspect, communication process is crucial. It can be proven when the teachers are delivering subject, asking question and giving information to the students. They always make communication to explain the subjects to their students. If the teachers explain the information well, the student will do the subject well and certainly get a good education. According to Hodge (1981:vii) someone who cannot communicate means that he cannot teach. He explains that a teacher will not know wheather the teaching has been effective or not if the teacher cannot understand what the students are trying to communicate. "So, teachers of all subjects need to understand principles of language and communication as part of the basic pre-service training" (Hodge, 1981:vii).

In accordance to this explanation, it is said that communication is the process that gives information from a sender to the receiver (Gander, 1996:9). It means that the information is given by someone to another no matter what the people condition they still need to communicate each other, including normal as common people or children with special needs. Common people are person who has no serious physical or mental health problems whereas children with special need are children who need extra help with their condition (Byrnes, 2008:2).

As we know that children with special need might not be like the common people – mainly because they have special needs. Byrnes (2008:4) says that they might be having difficulties or challenges with learning or they might be having a hard time with communication. Some special students might have behavioral or emotional disorders while others might have physical disabilities that prevent them from learning the same way and pace like typical understudies. Because of these special needs, it is necessary to create a certain category of education that would cater to these types of individuals – special education.

Marschark (2007:67) states that everyone who is born in the world has surplus and lack. They need other people to help them to cover up the lack. It is supported by the statement:

“... lack of understanding of the cognitive skills underlying educational intervention is the fundamental problem in the development of special education. Without understanding the full complexity of cognitive abilities, special educational methods can never be special” (Detterman & Thompson, 1997:2 cited in Marcschark, 2007:67).

For common people, it can be easy if they make communication with other people but for the children with special needs, it is difficult to communicate with others.

Certainly, understanding a language needs more attention, particularly with the children with special needs in their education. In Indonesia, The government gives equal right for the people to have education. It can be proven in *Pancasila* which explains that all human have equal rights among other people (Ministry of Education and Culture of Indonesia, 1995:3), especially English learning.

At this time, English becomes an essential language. It can be proven that subject of English has been learned in each school earlier. Therefore, English skill must be given, not only to the common people but also to the children with special needs.

In this research, the children with special needs are deaf student. Deaf student person is someone whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid (Halahan and Kauffman, 1991 cited in Ministry of Education and Culture of

Indonesia, 1995:26). On the other hand, deaf students can be said that they are unable to hear anything well. However, deaf students are not dumb. They only have obstruction to produce sound. So, deaf students need to practice their communication (Ministry of Education and Culture of Indonesia, 1995).

To strengthen my point of view, I conducted an interview with one of the teacher of SLB B Bina Asih Bondowoso, Mrs Siti on May 3rd 2012 reported that potentially, they are same with the normal people whereas they are quite different functionally. It occurs because deaf students' experiences become an obstacle in language delays or their speaking decay or the organ of hearing does not work. As the result, the ability of hearing becomes an obstruction their communication. Musselman *et all*, (1988) as cited in Cawthon (2001:213) states that "Language delays generally lead to poor academic success and difficulties in classroom communication". Furthermore, it influences their education, particularly their English abilities and life until requiring attention, understanding, servicing and occasion that is given to the deaf students.

Their restricted communication can be maximized by using sign language. Cawthon (2001:212) says sign language is used to communicate between the teacher and deaf students in classroom discourse. According to Arnold & Mills (2001:187), there are many of hand shapes of sign. They say that each sign have deferent meaning. It depends on hand configuration, location, and context. There are several movements to deliver message to interlocutor and it needs capability to understand the sign. They say that in this process, receiving signed message needs retained long visual sequences of hand shape in working memory to get the meaning of the messages. Marschark (2007:114) states that:

"When hearing children use gestures, however, we can easily distinguish them from word. The distinction is somewhat harder to make when deaf children intermix gestures with their signs, because the two forms of communication share the same channel of communication-from hand to eye".

It can be concluded that it makes the deaf students use visual abilities to make communication with other people.

According to National Centre for Learning Disabilities (NCLD) (1999), a visual processing or perceptual disorder refers to a hindered ability to make sense of information taken in through the eyes. Moreover, difficulties with visual processing affect how visual information is interpreted or processed by the brain. According to Garman (1990:64) the visual processing is through:

Eye → retina → optic nerve → midbrain nuclei → cortical processing

Figure 1.1 The simplification of Visual Processing (Garman, 1990:64)

It can be seen from the figure 1.1 that eyes receive light stimuli and turn them into nerve impulses that run along the visual path consisting of the retina that the location is at the back of eye. It receives the image that sees and then sends the image to the brain. After that, it goes to the optic nerve which is functioning nervous system transmits visual information from the retina to the brain and is continued to the midbrain nuclei and toward cortical processing causing the sensation of seeing.

NCLD (2012) states that there are lots of ways the brain processes visual information. Weaknesses in a particular kind of visual processing can often be seen in specific difficulties with practical exercises like everyday tasks.

The situation of teaching process in SLB B Bina Asih Bondowoso, sign, gesture, or speech reading is one of visual communication. Jamieson (2007:16) says that visual communication is a series of delivery process of information or messages to others by using media depictions which are only read by the sense of sight. It is interesting to discuss because sign language is difficult to be known by common people.

This research can be viewed by psycholinguistic study because it is a language that is used to make communication with the people. It can influence the mind of the learners to know how the common people can understand the deaf students' languages.

This research will view this term from the psycholinguistic point of view which focuses on sign languages as visual communication by observing the

common people who guess the sign as visual signal in every word. Those words can be provided that is given by researcher and produced by one of student in SLB B Bina Asih Bondowoso. The common people in this research are the students of Faculty of Letters, English Department. From this phenomenon, this study is conducted to know how far the common people understand the application of sign language used by the deaf student. After all, since this problem is interesting, it needs to be solved through this research.

1.2 The Problem to Discuss

The education of deaf students gives priority to the approach of speaking with other people. As they cannot speak or produce sound, it will obstruct personal improvement, intelligence, and performance as human being. Communication of deaf student uses sign. It will be easy to understand if they speak with their friends and their teachers, but how common people can understand in communicating with them is questionable. From this, I want to know how common people understand the utterances of the deaf students. In this case, the common people are the students of English Department of Faculty of Letters. Finally, I analyse how they can get deaf students languages mainly when use English conversation. After all, since this problem is interesting, it needs to be solved through this research.

1.3 The Research Questions

The research questions composed in this research are:

- 1) How many percentages do the common people understand about the sign language?
- 2) How do the common people understand the language of deaf students?

1.4 The Purpose of the Study

The purposes of this study are:

- 1) To know how many coefficient percentages of the abilities of the common people understanding about sign language;
- 2) To show how the way of the common people in understanding of the deaf students languages.

1.5 The Scope of the Study

The general discussion of this study is psycholinguistics. In an effort to focus on the topic of discussion, it is important to limit the scope of the study. It is purposed in order to avoid broadening discussion from the main analysis. The limitation will give the clear and valid explanation about the result of the study, so it will be easy to understand. Related to this reason, this study will be focussed on the visual signal processing to understand sign language.

1.6 The Significances of the Study

- 1) For the learners, this study can become a reference in the psycholinguistic analysis about sign language in visual signal;
- 2) For the teacher, it can be guidelines when they are working in English class and contributing knowledge, especially English education and visual dictionary;
- 3) For the lecturers, it is expected that the outcome of this study will become additional materials of psycholinguistics;
- 4) For the readers, it is expected that readers have a new comprehension about how the way they, as common people, can understand the utterances of sign language of deaf students.

1.7 The Organization of the Thesis

This thesis contains five chapters. Each chapter will be recognized by providing relevant theories to give the clearest view on the discussion. The first chapter is introduction. It consists of the background of the study, the problem to discuss, the research questions, the goal of the study, the scope of the study, the significances of the study and the organization of the thesis. Chapter two deal with theoretical framework. The theoretical framework defines the description of supporting theories used in the study. Chapter three is research methodology. It concerns with the type of research, the type of data, the data collection and the data analysis. Chapter four is discussion. It contains of the discussion of how common people understand the sign languages of the deaf student in SLB B Bina Asih Bondowoso. The last, chapter five is conclusion. It draws a conclusion of the analysis of this study.

CHAPTER 2. LITERATURE REVIEW

2.1 Previous Researches

The first research was done by Stephanie W. Cawthon (2001). The title of her research is *Teaching Strategies in Inclusive Classrooms with Deaf Students*. She investigated the teacher speech and educational philosophies in inclusive classroom with deaf and hearing students. The data were collected from language transcript, classroom observation, and teacher interviews by using calculated from Total speech out, Mean Length Utterance, proportion of questions to statements and proportion of open to closed questions. The result of this study demonstrate that communication needs of deaf students may vary by level of hearing loss yet at the same time confirm previous findings that simultaneous.

The second research was done by Alegria, Charlier, & Mattys, (1999) with focus theme on *The Role of Lip-Reading and Cued Speech in the Processing of Phonological Information in French-Educated Deaf Children*. They conducted research of the role of lip-reading and cued speech (CS) in the processing of phonological information in French-educated Deaf Children. They split the participants into two groups as a function of the age at which they have been exposed and use two types of phonological misperception resulting from CS's structural characteristics were analysed; substitutions based on similarity between CS units, and intrusions of third syllable for bisyllabic pseudowords requiring three CS units. The aim of this research was to examine the effects of adding CS to lip-reading on phonological perception and establish the way in which lip-reading and CS combine to produce unitary percept. The result showed that CS substantially improved performance suggesting that CS corrects for lip-reading ambiguities and the frequency of such misperceptions increased with CS.

2.2 Theoretical Framework

2.2.1 Visual Signal Processing

Norman (1992, cited in Gander, 1996:2) states that visual signals are part of communication. He says that visual signal that control the interaction needs to be present. If they are not used, communication will break down. Moreover, Gander (1996:25) states that visual signals usually handled by eye-gaze, head nods, and gestures. In SLB-B Bina Asih Bondowoso when the teachers communicate, they use sign language to make communication with the students. It is visual code representing communication. According to Gander (1996:27), there are three ways of tests performance of visual signals:

- 1) Visual signals help to control the interaction,
- 2) Using visual signals, explicit illustrative gestures could be made illustrating certain aspects of the task,
- 3) Gestures could be used to enhance understanding.

Arnold & Mills (2001:187) define that in this process, receiving signed message needs retain long visual sequences of hand shape in working memory to get the meaning of the messages. For example child might to look hand movements to understand the information that the teacher said in front of the class. Eye Care Center give me example abaout the understanding the information as the child needs to remember what they saw (visual memory) and wrote the information accurately (visual integration).

Eye Care Center, 2011 says that “visual processing refers to group of skills used for interpreting and understanding visual information”. It is important for deaf student when they got subjects in their classroom. It happens because they cannot hear a word. According to National Centre for Learning Disabilities (NCLD) (1999), a visual processing refers to a hindered ability to make sense of information taken in through the eyes. Moreover, difficulties with visual processing affect how visual information is interpreted or processed by the brain.

Garman (1990:208-213) says that there are several attentions in process of visual; they are visual shape-perception and visual recognition. Visual shape-perception is problematic in understanding of the shape like shape of each sign.

Visual recognition is introduction of the whole of the object perception. Moreover, he says that in the visual process, the light stimulating of retina was also influential. Seeing is processing of interpretation of objects by the sense of sight by using reflected light. So, the light and darkness greatly affect the essence of the visual signal.

According to Garman (1990:64) the process of visual system is; the first, eyes receive light stimuli and turn them into nerve impulses that run along the visual path consisting of the retina that the location is at the back of eye. It receives the image that sees and then sends the image to the brain. And then go to the optic nerve which is functioning nervous system transmits visual information from the retina to the brain and is continued to the midbrain nuclei and toward cortical processing causing the sensation of seeing.

Eye → retina → optic nerve → midbrain nuclei → cortical processing

Figure 2.2 The Simplification of the Visual Processing (Garman, 1990:64)

Garman (1990:5) mentions that the visual input is everything that we see. The visual systems perceive the visual signals and deliver it to the brain. The output is the respond that is interpreted is a good feedback.

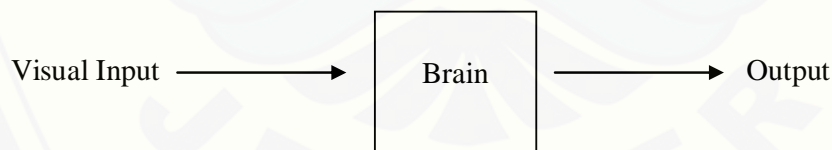


Figure 2.3 The Simplification of the “language switchboard” (Garman, 1990:5)

Marschark (2007:114) states that:

“When hearing children use gestures, however, we can easily distinguish them from word. The distinction is somewhat harder to make when deaf children intermix gestures with their signs, because the two forms of communication share the same channel of communication-from hand to eye”

2.2.2 Sign Language

The effective communications of deaf students are using sign language because it is a viable alternative method to get information. Tennant & Brown (1998:11) state that “a sign is a gesture or movement that conveys a concept”. Each sign is completed with a specific configuration or handshape, placed at a variety of locations on or near the signer’s body.

In classroom discourse, sign language is used to communicate between the teacher and deaf students (Cawthon, 2001:212). They are several hand shapes and hand movements. Arnold & Mills (2001:187) state that each sign has different meaning. If the handshape, movement or location changes, the meaning of sign also changes. It depends on hand configuration, location, and context. Hence, Tennant & Brown (1998:12) state that there is parameter of each sign such as; handshape, palm orientation, location, movement, and nonmanual features or signals. A completely different sign may be formed, if one of these five parameters changes. Marschark (2007:67) says sign language contain number signs and manual alphabet. According to Marshark (2007:12), understanding the meaning of sign language that contains hand shapes and hand movements are using visual spatial. From this, that sign as visual signal includes elements of communication such as gestures, facial expression, direction of gazes and body postures (Gander, 1996:2).

According to Mrs. Siti on 3rd; May 2012 sign language that is used in the process of learning and teaching in SLB B Bina Asih Bondowoso is mixing American Sign Language and British Sign Language. However, American Sign Language always is used in English class.

Department of Education and Culture (1995:154) states that in system of sign language, there are two components. The first function is a determinant or distinguishing meanings, while the others serve as supporting. All of them can be seen visually.

2.2.3 Sign Language in the Brain

According to Hickok, *et all* (2001:48) sign language focusses on visual-spatial changes to become signal linguistics. It is happened by systems in the brain's right hemisphere. They state that the sign language analogue of Wernicke's area which is near the brain is relating with visual processing. While the analogue of Broca's area which is near the motor cortex is controlling hand and movements.

They say that there are several components of sign language. There are handshapes, the locations around the body where signs are made, the movements of the hands and arms and the orientation of the hands.

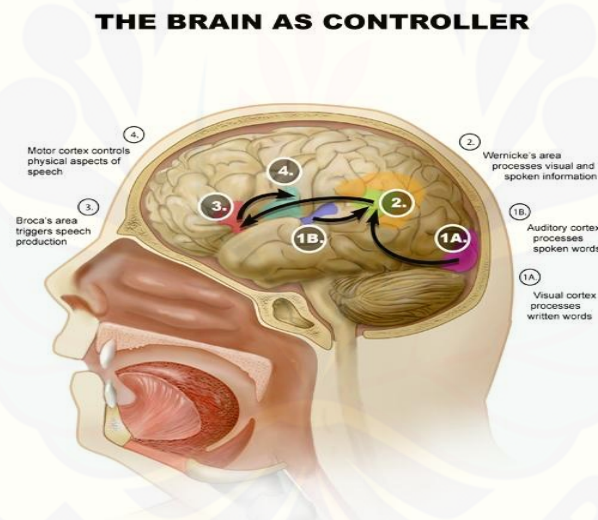


Figure 2.4 Human Brain

<http://www.news-medical.net/health/Language-and-the-Human-Brain-%28Indonesian%29.aspx>

CHAPTER 3. RESEARCH METHOD

The method of research is important. It is used as a way or method of the research that is made in this thesis. This chapter discusses: the type of research, the population and sample, research strategy, type of data, data collection, and data analysis. For the clearer description, it is explained in the following:

3.1 The Type of Research

The type of research uses mixed method. It combines the qualitative and quantitative researches. Moreover, Denzin and Lincoln (in Ospina, 2004) state:

“Qualitative research involves an *interpretive and naturalistic* approach: This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them”.

Qualitative research depends on transforming information from observations, reports and recordings into data in the form of the written word not numbers. In this study, it applies qualitative research to describe about the process of gathering in understanding of the sign in video that contains several words. It is used because in spite of attempting to present in depth visual analysis. It can also be used to make a complete and detailed description of sign in several words in the video.

Quantitative research is an analysis which deals with amount of numbers (Denscombe, 2007:248). It tends to involve relatively large-scale and representative sets of data. This study uses quantitative research to count the percentage of the students of English Department in guessing of words in video.

3.2 The Population and Sample

Population in each study must be mentioned explicitly, namely with regard to the magnitude of population members and research areas covered. It is needed in conducting a research to discover principles that have universal applications. Best (1981:8) mentions that population is the group to which the result of the study conform to specific criteria and to which intend to generalize the result of the research. To get the objective of the population, it can determine the amount of sample members were drawn from members of the population and limit the validity generalization. The population in this research is students of English Department Faculty of Letters of Jember University. The population taken are 50 students.

From this population, I try to take a sample which is needed to obtain information about the research object here. It is impossible to observe the entire member of the population one by one if the population is in big number. It means that sample is needed to get information about the research's object by observing some parts of the members of the population. Denscombe (2007:13) says that a sample of people is number of the chosen out of larger group and then used in tests or used to provide information about the whole group.

The technique used in choosing sample is stratified sampling. Denscombe (2007:14) states that "a stratified sample can be defined as one in which every member of the population has an equal chance of being selected in relation to their proportion within the total population". Moreover, Cochran (1977:212) says that simple or stratified random sampling is greatly dependent on the properties of the population.

In this study the individual people are chosen as the unit of analysis. Hence, the respondents must have specific qualification such as: the respondents do not understand sign language; they are accessible and same age. It means that all of students in English Department of Faculty Letters who have those criteria can be the respondent. To get the respondent, I give them questions about videos of sign languages.

3.3 Research Strategy

The strategy of this research uses survey. This research observes the students of English Department Faculty of Letters where it collects the data by giving questionnaires to the respondents and gets information by interviewing them. Denscombe (2007:8) says survey is an activity of research to get information by taking sample from one population and using questionnaires, interviews, documents and observation as the tool to collect the data. This study focuses on observation the ability of the common people when they interpret the sign language.

3.4 Type of Data

This study uses quantitative and qualitative data. According to Mc Millan says (1992:9) says that qualitative data are data based on a research that focuses on understanding and meaning through verbal narratives and descriptions rather than through numbers. In this study the qualitative data are the explanation and description of the result of the score of questionnaire.

Denscombe (2007:254) quantitative data are the data in form of numbers. In this study the quantitative data are the score of the respondents in guessing sign language in the video that they watch.

3.5 Data Collection

The common people who I observe are the students of English Department Faculty of Letters. They are fifty students who become my observation. The model in video is one of students who can use American Sign Language well in SLB B Bina Asih Bondowoso. The methods of data collection applied in this research are:

3.5.1 Observation

Observation is the way of gathering data by using witnesses' accounts in which a research involved. Blaxter, Huges, Tight (1997:158) mention that observation is method that involves the researcher in watching, recording, and analysing events of interest. I observe how the students can interpret the sign language by analysing the answer of the respondents in guessing the video. I use a direct observation. A direct observation also enables a researcher to observe and note down the condition that exists in the research.

3.5.2 Questionnaire

Questionnaire is an obvious strategy for finding the answer to the research questions. It is formulated in written questions. Mackey & Gass (2005:92) say that questionnaire is the ordinary methods of collecting data on attitudes and opinions from large group of participants in survey. It means that questionnaire is a technique of collecting the data by means of written forms with questions in them that are distributed to the people or group of people in order to gain the answer that required. I use open-ended question. Mackey & Gass (2005:93) state that open-ended question allows respondents to express their own ideas. The questionnaire consists of twenty questions to find out the answer of the respondents when they interpret the sign language.

3.5.3 Document

I use The American Sign Language Handshape Dictionary as parameter to give score when analyse the word that can guess by student of faculty of letters. Descombe (2007:227) says that “the documentary sources identified below are written sources”. Dictionary is one of document for the resources of researcher.