CHAPTER II

LITERATURE REVIEW

2.1.Review of Related Studies

Speech-disfluency has been discussed by many researchers lately. They enlarged their attempts and find out the main idea that make speech disfluency happen. They observe, analyze, and also characterize it. It is clearly because speech disfluency can be used as a data to investigate the process of speech production. The occurrence of speech disfluency may explain how the system of speech production operates and contribute the knowledge about any aspect of the mental processes involved in speaking.

Goldman-Eisler (1986) conducted the study about the occurrence of speech disfluency. This study is the one of the earliest studies of speech disfluency. She recognized ‘non-fluent’ and ‘fluent’ phases in spontaneous speech. The study is done to identify how non-fluent speech that typically happens in the form of pauses happens in spontaneous speech. She conducted her study by choosing a set of twelve sentences from a large sample of spontaneous speech. She made a criterion for the occurrence of a pause with the existence of a silent interval of greater than 250-millisecond duration. Her end result of the study was that pauses occurred frequently before high-uncertainty lexical items than before low-uncertainty items.

In 1996, Monique E. van Donzel and Florien J. Koopmans van Beinum, from Institute of Phonetic Sciences/IFOTT, University of Amsterdam, Netherlands described an experiment in which the different pausing strategies in discourse in Dutch were investigated. Spontaneous discourses were recorded from four male and four female native Dutch speakers. Silent and filled pauses were located in the speech signal, as well as lengthened words. These were subsequently related to different discourse structures, obtained independently from prosodic features. Results show that there are basically three different types of pausing: silent pauses, filled pauses, and lengthening of words. Speakers apply these means in different ways to achieve pausing, by using one specific pause type or a combination of more than one. The way of applying pausing is rather uniform within one speaker, whereas the choice of a particular strategy is largely speaker dependent.

Carolina (2003) studied speech disfluency in her thesis titled “A Study of Speech Disfluency made by Indonesian Kindergarten Children in Describing Picture.” She studied about occurrence of speech disfluency that often happens in children in kindergarten in describing pictures. Her study was aimed at analyzing speech disfluecy occurred in Indonesian kindergarten children’s speech. In this study, the writer took the data from three kindergarten children age four, five, and six years old. Then, the writer analyzed the findings with the theory of speech disfluency proposed by Clark and Clark (1977).

Ambarita (2007) also studied about speech disfluency in her thesis titled “A Study of Speech Disfluency in Giving Description Made by Kindergarten

Children". She analyzed the occurrence of speech disfluency in kindergarten children when they are giving the description about their house, family members, toys, and clothes. The writer took the data from ten participants that were the students of Bright Kiddie Kindergarten. She also analyzed the data with the theory of speech disfluency proposed by Clark and Clark (1977).

In this study, the writer also studies about speech disfluency and tries to analyze speech disfluency that occurs in children. But the difference is that the speech disfluency analyzed is the occurrences in four years old children in giving argumentation. This study tries to observe and analyze the possibility of speech disfluency in children by giving a certain questions to them, and then they should answer it and argued their argument orally.

While Carolina and Maida used children age four, five, and six years old as her data, the writer only took children age four years old as the data in this thesis, because the writer would like to analyze speech disfluency in the first time of children understand the basics of language (Norton, 1980).

2.2.Review of Related Theories

2.2.1 Speech Production

Speech production is a study about the actions of our vocal mechanism. Berko-Gleason and Ratner (1998), define it as a mechanism by which speakers turn a mental concept into a spoken utterance. This process begins when the speaker's thoughts is generated in Wernicke's area and sent to Broca's area for encoding, then, passes on to the adjacent motor area, which governs the

articulatory organs. After preparing the message in the brain, the speaker puts the messages into linguistic form and turns it into a spoken expression. In other words, speech production is process that lies between the message the speaker wishes to convey and its spoken expression.

Producing speech is done in a complex process. Bock and Levelt (in Harley, 1995) has divided the process of speech production into three levels; conceptualization, formulation, and articulation.

The process of conceptualization is the highest level. This process has to do with the intention of what to say and that determines the concepts that are to be expressed. In other word, in this level, the message that is going to be uttered is being processed. Therefore, this process is sometimes called message-level process.

Conceptualization involves two stages, macro-planning, which breaks the communicative goal into a series of subgoals and retrieves the information necessary to realize these goals and micro-planning, which involves attaching the right propositional structure to each of these chunks' of information, and taking account of where the focus of information is to lie (Levelt, 1989 in Field, 2006).

The next level is formulation or grammatical encoding that involves translating the conceptual representation into a linguistic form. This level is subdivided into two steps, which are called functional and positional steps. In the functional step, the speakers firstly select the lexical form, and then assign function to each form that has been selected by giving the role and syntactic function. In the positional step the speaker constituents those lexical forms he has

selected and then puts them together to form a correct sentence. After that, the speaker should apply inflectional rule, such as adding affix and deciding the right form of verb, for the constituents.

The last level in speech production is the process of articulation or phonological encoding, which involves detailed phonetic and articulatory planning.

2.2.2 Speech Disfluency

In speaking, people take already formulated plans and execute them and not all goes well in everyday speech. As the writer has explained before that speech production is a complex process by which speakers turn a mental concept into a spoken utterance (see also Figure 1), speakers sometimes formulated their message differ from what they have planned in mind. It usually occurs when the speaker changes his or her decision about what to say and how to say. This is what kept speakers from conveying their thought fluently the way they expected. The fact that speakers sometimes pause in their speech production, e.g. to access a word from their mental lexicon or to plan a relatively complex utterance, has made the study of different kinds of speech 'disfluencies' an important topic for linguists, speech technologists and psycholinguists (e.g. Clark & Wasow 1998, Levelt 1989, Heeman 1997, Eklund 1999, Nordling 1998, Shriberg 1994).

The speaker actually knows what they are going to say, but they have difficulties in transforming it to words. Berko-Gleason and Ratner (1998) explicitly state that disfluency is utterances that are characterized by pauses

(unfilled pause and filled pause), repetition, and false start, and it occurs commonly in speech. Clark and Clark (1977) point out that most common type of speech disfluency is pause.

Not all pauses in the stream of speech are hesitation. Therefore, Goldman-Eisler (1986) made a criterion for the occurrence of a pause with the existence of a silent interval of greater than 250-millisecond duration. Furthermore, not all hesitations marked by pauses. People frequently use stock phrases like “you know,” “I mean,” “it seems to me,” “um,” etc., to buy time while they are formulating their message.

The occurrence of speech disfluency for all speakers is not alike. There are some factors that may cause the diversity of speech disfluency from each speaker. Michael Garman (1990) finds that some people appear to have more pause habits. Garman said that task variation could be another factor that influences the occurrences of speech disfluency. For examples, reading aloud yields is consistently more fluent than giving speech, while retelling story is more fluent than spontaneous speech. Another factor that affects the occurrence of speech disfluency is situational nervousness (Clark and Clark, 1977). When the speaker become nervous, he can neither select the word nor make a sentence fluently.

2.2.3 Children Language Development

Language develops with extraordinary rapidity over the early childhood years. Knowing a language means hearing capacity to produce meaningful sounds and to understand sounds produced by others (Fromkin and Rodman, 1988). In

order to have capacity in producing speech, a person has to understand the pattern of the language since he is a child.

Children are subject to the same phases in language development. For Indonesian children, the first word is generally produced at the age of eighteen months (Djarjowidjojo, 2003). At this age, children are uttering their first words. They use one word to name familiar objects and communicate his desires. Then, around two years old, children begin to produce two and three words utterances. Words that are uttered by children at this age usually content words (verb, noun, and adverb), not function words. At three years old, children already show a subtle understanding of the conventions of human communication. In this age, they have already used grammatical rules to combine words into meaningful statements, although there are many error constructions in their statements. In the age four to five years old, children already produce longer utterances. In this age, they acquire vocabulary and grammatical rules for creating a variety sentence structure including negatives, questions, and relative clauses. They store approximately 2500 words. According to Norton (1980), 4 years old children learn the basic of language (Norton, 1980). They have already made affirmative sentence, interrogative sentence, etc (Chaer, 2003) Moreover, they also understand command of a number of sophisticated grammatical forms that is given. Berk (1989) identified that in this age, children are able to do a short discussion with their mother.

2.2.4 Argumentation

Argumentation is a rhetorical form that persuades people to consider their argument or thoughts and latterly they are going to have the same belief as the speaker or the writer (Keraf, 2003). Argumentation uses language to justify or refute a standpoint, with the aim of securing agreement in views. In giving argumentation, the speaker commonly provides facts to support his argument whether it is wrong or right. The speaker is usually critical and logical based on facts in giving his argument.

Argumentation typically centers on one of two objects: either interactions in which two or more people conduct or have arguments such as discussions or debates (Teun Van A Dijk, 1997). It means argumentation does not only occur as monologic packages, it usually may be built in the interaction between someone who puts forward a standpoint and someone who challenges it. The arguments are about the issue which has two sides and which provides for two opposing communicator roles which are a protagonist who puts forward a claim and an antagonist who doubts that claim or contradict it or otherwise withholds assent. Arguments are embedded in acts and activities.

Argumentation is used in variation situations, for instance, in arguing an important issue, in persuading someone to get what the speaker want, in influencing someone to believe, to prove something, etc. Adults use advanced discourse strategies more consistently, more frequently, and more flexibly in giving argumentation than children (Felton, 2002). It showed that although children are less advanced but have already used discourse strategies. Children are

able to apply domain general reasoning strategies in argumentation. Several studies (Eisenberg, 1992; Hay, 1984; Maynard, 1985; Phinney, 1986; Shantz, 1987) have described the nature of arguments among children in the following ways: arguments are rare and very short events when compared to the rest of children's interactions during a typical day, lasting less than ten turns 90% of the time; the first moves in an argument have a tremendous effect on the rest of the interaction; similarly, the topic of dispute has a tremendous effect on the interaction, and topics change in the course of development from an initial focus on object control to include issues of behavioral control or ideational opposition (differences in beliefs, likes, rules of interaction, moral or conventional transgressions). Many researchers have found that a generic characteristic of children's arguments is overt opposition, which can take a variety of forms (e.g., assertion, denial, insult, etc).

2.3.Theoretical Framework

Speakers always think first before they express their thought in words. When people know what they want to say and say it fluently, they are giving an ideal delivery. Unfortunately, it is not easy to do that because when speaker speak, they have to plan and execute speech in the same time. One of an ideal delivery disruption is speech disfluency.

Clark and Clark (1977) point out that speaker generally select their words constituent by constituent. Speakers generally wish to convey all constituent they have planned in the ideal delivery. In other words, the main goal here is to execute

the planned constituent and to do so as fluently as possible. Therefore, they need to stop, plan, and try again to deliver the constituent fluently. This explanation could be a reason why speakers often produce speech disfluency in their speech.

Clark and Clark (1977) divided speech disfluency into some types. However, the most frequent types of speech disfluency that often occur in speech are pause, false, and repetition.

2.3.1. Pause

It is the most common disruption that happens in ideal delivery. There are two kinds of pauses; those are unfilled pause and filled pause.

2.3.1.1. Unfilled pause

Unfilled pause is simply a moment of silence. Unfilled pause occurs in the middle of sentence and words. The example below, pause is formed as '[]', which is considered as disfluency.

- The man **[]** is cute
- Saya suka **[]** musik dan saya senang menyanyi.

2.3.1.2. Filled pause

Filled pause is sounds such as 'uh' or 'um' that filled the gap of speech. The 'uh' and 'um' of spontaneous conversation are included in this set along with 'like', 'yeah', and 'well' in certain environments.

Indonesian people often fill their speech with filled pause such as ‘anu’, ‘apa itu’, and ‘siapa itu’ (Djarjowidjojo, 2003). The boldened words in the example below are the examples of unfilled pause.

- Ashanti wants to go to **um** Bali
- Tadi malam saya nonton **anu** Bajaj Bajuri

2.3.2. False start

False start is correction of a word. It is due to a decision to rephrase because the speaker believes that the best way to produce the intended meaning was not made to begin with. This kind of speech disfluency is represented by ‘/’.

For example:

- Turn off the lamp / the TV
- Letakkan diatas kursi / meja

2.3.3. Repetition

Repetition occurs when one or more words are repeated in a row. It includes repetition of exact syllables, words, or phrases. The underlined words show the occurrence of repetition.

For example:

- **They were eating they were eating** Mcdonald’s sandwich
- Saya **melihat melihat** dia berteriak ketakutan

2.3.4. Syntactic Category

Those types of speech disfluency may precede certain types of words. As proposed by Fromkin and Rodman (1988), there are two syntactic categories of words, which are content word and function word. Content words are words that carry a principal meaning of the sentence which include noun, verb, adjective, and adverb. Function words are needed by the surface structures to bond the content words together. It included preposition, conjunction, and pronoun.

Furthermore, Taylor (1990) mentioned that content words and function words also have different classes. Content words are an open class. It has a large number of members and can acquire a new one constantly. In contrast, Function words are a closed class because their number is fixed. It is very uncommon to have new function words created in the course of speech. Function words are used to connect, relate, substitute, and modify content words in sentences. In other words, function words are used to express grammatical relationships with other words, which mean content words, within a sentence.

In addition, in Indonesian language, those two syntactic categories are also applied. Alwi et al. (2003) stated that in Indonesian language verb, adjectiva (Adjective), adverbia (Adverb), and nomina (Noun) are included to content words; and preposisi (Preposition), konjungtor (Conjunction), interjeksi, and partikel (Particle) are included to function words, which in Indonesian is called *kata tugas*.

2.3.5. Syllable

In Indonesian language, a word consists of one syllabel or more, for example *ban, bantu, membantu, memperbantukan.* It is not a simply process to compose syllables into a word. There is a structure and rule of the syllabification of a word (Alwi et al., 2003). The syllable can be made of:

1. V a vocal
2. VC a vocal and a consonant
3. CV a consonant and a vocal
4. CVC a consonant, a vocal, and a consonant
5. CVCC a consonant, a vocal, and two consonants
6. CVCCC a consonant, a vocal, and three consonants
7. CCV two consonants and a vocal
8. CCVC two consonant, a vocal, and a consonant
9. CCCV three consonants and a vocal
10. CCCVC three consonants, a vocal, and a consonant
11. CCVCC two consonants, a vocal, and two consonants