

CHAPTER II

LITERATURE REVIEW

This chapter presents the theoretical framework and review of related studies related to syntactic ambiguity. Firstly, the writer attempts to explain a review of Ambiguity briefly by some authors and the types of Ambiguities by Fromkin et al (2009). Secondly, the writer provides the fields that are related to Ambiguity: the first one is Lexical Semantics which is the explanation is stated by Kreidler (1998) and Saeed (2009), and it is followed by the Lexical Ambiguity which is stated by Fromkin et al (2009) and a discussion proposed by Gillon (1990). Thirdly, the writer provides a brief explanation of the other field: Deep and Surface Structure by Yule (2012) and it is followed by Syntactic Ambiguity in which the discussion is proposed by Gillon (1990). Fourthly, the writer explains an additional theory to identify syntactic ambiguity using ‘Phrase Structure Rules’ by Fromkin et al (2009). Lastly, the writer provides an explanation about the tool in analyzing syntactic ambiguity by using Phrase Structure Tree by Fromkin et al (2009). The last, the writer presents the review of the related studies which is related to lexical and syntactic ambiguity.

2.1 Theoretical Framework

2.1.1 Ambiguity

Ambiguity, either at the phrase or at the sentence level, is a powerful mechanism in the language (Dostert, 1971, p. 1). Something is ambiguous when it can be understood in two or more possible senses or ways (Quiroga-Clare, 2003). In general, ambiguity is when something could be understood not just one way. For example of ambiguity according to Crowgey (2012), a verb phrase Drink tea with honey could lead an ambiguity. The first one is there is an activity of drinking tea and the tea is mixed with honey. The occasion of its use will be different with an activity of drinking tea with honey (lover) which also has its own occasion of use. It is different in such contexts. Then, some kinds of interpretations emerge as a result of the word, phrase or sentence.

In general linguistics, Fromkin et al (2009) have distinguished ambiguity into two types: Lexical Ambiguity and Structural Ambiguity (or in this study it is also called Syntactic Ambiguity). Ambiguity is the possibility to interpret one phrase in several ways (Gleich, Creighton, & Kof, 2010, p. 2). It appears that whenever the attachment of modifiers either from a whole phrase or just a single word and it could make different meaning, then ambiguity could arise (Roura, 1995, p. 2).

As it is stated that the ambiguities could occur in word, phrase, or sentence level and each will provide more than one possible understanding. The

explanation of each type will be presented below and it is followed by the explanation of the field of each ambiguity.

2.1.2 Lexical Semantics

Lexical semantics are used in the study of word meaning (Saeed, 2009). Saeed (2009, p. 53) states that lexical semantics aim to represent the meaning of words and to show interrelation of the meaning of words. There is a case of lexical ambiguity where there is more than one meaning of at least one word. For example, as stated by Saeed (2009): Duffy discovered a mole; in which the first one is a small burrowing mammal, the second one is a long dormant spy. In the case of ambiguity, the lexical semantics contain two lexical relations that are used in a different sense of a word (Saeed, 2009); they are: Homonymy and Polysemy.

Homonymous words use an identical pronunciation and spelling, e.g.: *bank*; however, the meanings are unrelated (Kreidler, 1998). There are some types of homonymies mentioned by Saeed (2009): 1. Lexemes of the same category, same spelling, e.g.: *lap* and *lap*; 2. The same category, different spelling, e.g.: *ring* and *wring*; 3. Different category, same spelling, e.g.: noun *keep* and verb *keep*; 4. Different category, different spelling, e.g.: *not* and *knot*. When we are talking about interpretations, it is not too far from meanings of a language because meanings role significance effect of such contexts in the polysemy. In the polysemy, the words can have several related meanings (Kreidler, 1998). The sense is used to determine the meaning of the words. For example that is mentioned by Kreidler (1998): the sense of use of the word *head*; head of a person

or head of a company. According to Kreidler (1998), there is a slight difference about those two in the dictionary: a polysemous item in a single entry, and homonymous lexemes into two or more separate entries. Those two lexical relations in lexical semantics could lead to lexical ambiguity, and it is presented as follows.

2.1.2.1 Lexical Ambiguity

A brief explanation of the first type of ambiguity is provided in order to commence the knowledge of the types of ambiguity. The first form of ambiguity is Lexical Ambiguity. Lexical ambiguity is defined briefly by Fromkin et al (2009) as multiple meanings of sentences due to words that have multiple meaning. In other words, an ambiguity which could occur in a single word could be called lexical ambiguity. Lexical ambiguity, which is so common, indicates that the word itself has more than one meaning (Khawalda & Al-Saidat, 2012). Scheffler (1979), in Gillon's discussion of ambiguity (1990, p. 7), argues that "a word is ambiguous if its denotation on one occurrence of its use differs from its denotation on another occurrence of its use." In a sentence, a word choice may affect the meaning of the sentence because the word could stand for more than one meaning. Lexical ambiguity could occur when there is at least one word in a phrase that has more than one meaning (Fromkin et al, 2009). The example for Lexical ambiguity is a word '*skim*' which may have two meanings, as if it is known as a verb of removing something from a liquid surface or as a verb of reading something quickly. The other example is a word *bank* as it is a noun for a

place or institution to store money or it is a noun for the edge of the river. The homonyms occurred when a word has distinct histories and meanings, but it has the same form (Yule, 2010). The conclusion of Lexical ambiguity in this study is in homonyms and polysemy in which the words can be analyzed by identifying the meaning in a form of a single word because homonyms occur in a form of written text and polysemy does the role of the sense of the headlines.

2.1.3 Deep and Surface Structure

In a phrase and sentence level, deep and surface structure could be used to analyze a sentence hierarchically. Structure of a sentence is divided into Deep and Surface Structure. According to Yule (2010, p. 98), which it first was proposed by Chomsky (1955), Deep Structure is a structural organization of sentences in which all the elements that determine the structural interpretation are presented. Deep structure attempts to reveal the meaning of sentences which vary from each other. In Deep Structure, sentences which have different arrangement could have the same meaning. With a variety in the arrangement of the structure, sentences could have the same Surface Structure. Yule (2010, p. 98) states that sentences could have contrasts in form of the structure; however the sentences are very closely related, even identical, at some less superficial. For an example, sentences;

Three men are fixing the fences

The fences were fixed by three men

were different in the arrangement of the structure yet both of them share the same meaning. In some cases, there is a sentence which has a single surface structure yet it shares distinct deep structures. For example, sentence;

Young boys and girls are sitting

contains a single surface structure. However, it contains more than one different deep structure;

Young boys and young girls are sitting

*Young boys and girls (not mentioned that the girls are also young)
are sitting*

In this study, Deep and Surface structure is used only to reveal that the data only have a single surface structure yet they provide multiple deep structures which could emerge ambiguity.

2.1.3.1 Syntactic Ambiguity

Another type of ambiguity is at a different level from words and those could be found in a phrase or sentence. Due to the same grouping of words that has two or more meanings that are represented by different phrase structure analyses (Fromkin et al, 2009) could be called structural or syntactic ambiguity. Gillon (1990) claims that “a syntactic ambiguity or it is called *amphiboly*, is when a sentence can accommodate distinct phrasal structures.” In other words, the structure of the phrase or sentence may carry more than one interpretation and they could result in syntactic ambiguity. Then, another explanation is provided as an ambiguity in which resulting from the syntactic structure of the phrase or

sentence (Crowgey, 2012). In Gillon's (1990) discussion shows that which have more than one structural analysis could emerge ambiguity. More than one structural analysis could occur as a result in multiple deep structures. Yule (2010) claims that sentences which have two significant differences of interpretations have to be represented differently in deep structure. An example of syntactic ambiguity is '*the boy saw the man with the telescope*' in which the sentence could have two deep structures: 1. The boy saw the man who was holding a telescope, 2. The boy saw the man by using a telescope. The sentence accommodates two structural analyses and later it could be analyzed each part by using a tree diagram of syntax or Phrase Structure Tree.

2.1.4 Phrase Structure Rules

In order to know the headlines' structure, it is better to know the classification of each level of the headlines by using phrase structure rules. According to Fromkin et al (2009), our linguistic knowledge permits us to form longer and longer sentences by joining sentences and phrases together or adding modifiers to a noun. In other words, it is allowed to add various modifiers to a noun and forms longer sentences from it. However, it could not be formed arbitrarily because the phrase has to be formed by its own rules (Phrase Structure Rules).

Phrases are produced by rules of the grammar (Phrase Structure Rules). The longer sentences could contain more modifiers in noun. It is allowed to a noun to have more than one modifier as we desire to use it in the noun. Phrase

Structure Rules seize the knowledge of speakers has about the possible structures of a language (Fromkin et al, 2009).

The basic arrangement of Phrase structural rule:

- Phrase structural rule for *NPs*: $NP \rightarrow (Det) (Adj) N (PP)$
(where ‘()’ indicates optionally)
- Phrase structural rule for *VPs*: $V (NP) (PP) (Adv)$
- Phrase structural rule for *PPs*: $PP \rightarrow P (NP)$

A sentence must contain (at least) an NP and a VP (e.g. John saw (John (*NP*), Saw (*VP*)). The matching of each sub-tree is a must to do by using a phrase structure rule in the grammar (Crowgey, 2012).

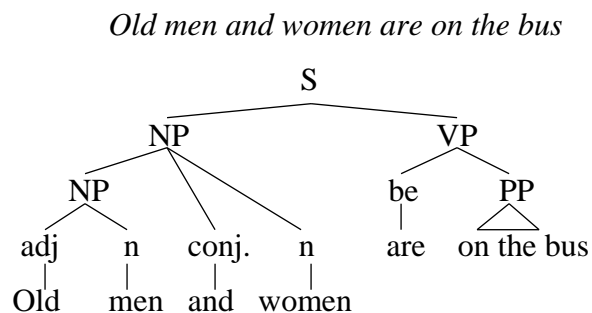
2.1.5 Phrase Structure Tree

Phrase Structure Tree is provided as the tool in analyzing the problem related to syntactic ambiguity. According to Fromkin et al (2009), “Phrase Structure Tree is a tree diagram with syntactic classes that reveals both the straight and hierarchical structure of phrases and sentences.” Tree diagram or parse diagram in syntax is used to arrange the sentence’s order into classes or levels. The resulting tree is represented as a tree in which the sentence is divided into classes *upside down*, the sentence is on the top and the result of each structure is on the bottom (Brett, 2005).

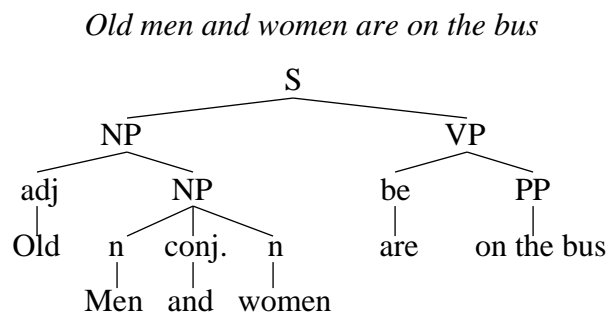
The writer uses Gillon’s (1990) example for explaining the sentence with phrase structure tree. The sentence contains two distinct phrasal structures.

Old men and women are on the bus

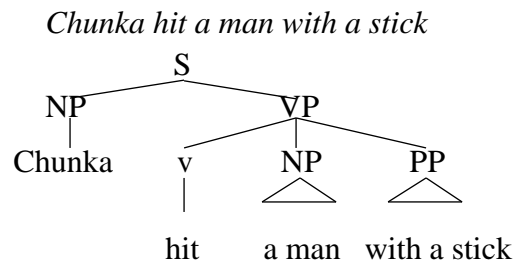
The sentence could be arranged into classes: *Old men and women* as NP, *are on the bus* as VP, in which *on the bus* is categorized into PP. The first interpretation of this sentence is on the noun phrase Old men and women and they are on the bus. The old modifies men which make the men only who are old. The structure or the tree diagram of the sentence is:



The second interpretation of that sentence is that there are old men and old women and they are on the bus. The adjective old modifies both men and women which makes both of them old. The structure or the tree diagram of that sentence is:

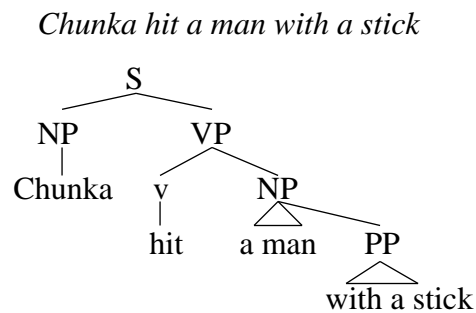


In the sentence level, a whole sentence can distinct its structures. For example in Gillon's (1990) discussion, *Chunka hit a man with a stick*. The possible structure of the sentence is:



The structure shows that Chunka is using a stick to hit a man. The PP with a stick is on the same level as the verb hit in which the tools used to hit is a stick.

The second possible structure is:



The structure shows that Chunka hits a man who is holding a stick. The PP with a stick is on the lower level as the NP in which the man who is using or holding a stick, and he got hit by Chunka. The same case with sentence the boy saw the man with the telescope.

There are many ways of someone that could arrange every conceivable structure of sentences. Due to that, there are also numerous tree diagrams that could be used to reveal its hierarchical structure. However, according to Fromkin et al (2009, the trees are limited by the grammar of the language which could narrow each substructure, and the substructures are divided by the limitation of phrase structure rules.

2.2 Review of Related Studies

A similar thesis of syntactical ambiguity had been done by a student in the English Department of Universitas Airlangga, Titi Kharisma, in 2006. The author showed that the study attempted to discover the possible meanings that may come up from structurally ambiguous sentences in *The Archipelago, and City Columns* Jakarta Post. The study also tried to find the kinds of structural ambiguity that were mostly found in those columns. In analyzing the data, the author classified the data into two types, multiple surface structures and single surface structure containing multiple deep structures. Then the author found 8 types of multiple surface structures by using bracket methods. The contrast of this present study could be looked in theory, the classification of the data, the more sub-columns to use, and different version of The Jakarta Post newspaper; the writer uses the online version. Furthermore, the writer uses the phrase structure tree to reveal the hierarchical structure of each headline and does not classify the data into several types.

The second research had been done by Chiara Bucaria (2004) in her journal article “Lexical and syntactic ambiguity as a source of humor: The case of newspaper headlines.” The author analyzed 135 verbally ambiguous headlines on websites-presenting humorous bits information. The phenomenon contributes to semantic confusion in headlines and she classified the data into lexical, syntactic, and phonological. The contrast of this present study could be looked in theory, the source of data which is using online well-known newspaper of the writer’s location, and not using phonological ambiguity as the concern of this study.

Furthermore, the writer also does not include joke theory for lexical ambiguity's data, but rather to reveal the possible meaning for each lexical ambiguity's data.