

# HOW AMBIGUOUS IS THE STRUCTURAL AMBIGUITY

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## ABSTRACT

*A word, phrase, or sentence is ambiguous if it has more than one meaning. The ambiguity, however, can be noticed if one really has a linguistic knowledge on how to analyze the phrase or sentence. Of the two kinds of ambiguity, lexical and structural, the latter is the one which is explored further in this paper. Structural ambiguity occurs when a phrase or sentence has more than one underlying structure. The phrase can be disambiguated by putting it in a sentence with some sort of formal signals which help the reader or hearer to recognize the sentence structure. Some of the signals include function words, inflections, affixes, stress, juncture, and punctuation. The rest of this paper discusses some types of structural ambiguity, how they differ, and some possible ways to resolve them.*

**Keywords:** *structural ambiguity, phrases, sentences*

## ABSTRAK

*Suatu kata, frasa, atau kalimat akan menjadi ambigu bila mempunyai lebih dari satu arti. Keambiguan dapat terlihat jika kita mempunyai pengetahuan linguistik yang cukup. Dari dua jenis ambigu, yaitu leksikal dan struktural, jenis ambigu yang dijabarkan dalam artikel adalah ambigu struktural. Ambigu struktural terjadi jika suatu frasa atau kalimat mempunyai lebih dari satu pengertian, Frasa atau kalimat ambigu dapat dijadikan tidak ambigu dengan menambahkan tanda khusus, misalnya imbuhan, stress, atau tanda baca yang membantu pembaca atau pendengar untuk memahami wacana atau percakapan lebih baik. Artikel membahas beberapa tipe ambigu struktural, bagaimana perbedaannya, dan cara menjadikannya tidak ambigu.*

**Kata kunci:** *ambigu struktural, frasa, kalimat*

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## INTRODUCTION

There are some ways of classifying ambiguity. Hurford and Hesley (1983:128) group ambiguity into two, lexical and structural ambiguity, and Kess (1992:133), categorizes ambiguity into three levels: lexical ambiguity, surface structure ambiguity and deep or underlying structure ambiguity. Cruse (1986:66), on the other hand, distinguishes four types of ambiguity: pure syntactic ambiguity, quasi-syntactic ambiguity, Lexico-syntactic ambiguity, and pure lexical ambiguity. From those classifications, it can be simplified into two categories: lexical and structural ambiguity.

Ambiguity, either lexical or structural, refers to having two or more possible meanings. In other words, when a sentence has more than one reading, it is called ambiguous. Lexical ambiguity, the one resulting from the ambiguity of a word, is the more common one. See the following example: *They went to the bank*. The word 'bank' in the sentence has two possible meanings; the edge of a river, or a financial institution. From the sentence itself, it is difficult to get the meaning of 'bank'. It needs a context to clear up the message conveyed. In other word, the sentence is ambiguous due to lacking of information. It can be disambiguated by providing additional information as in, 'They went to the bank to save some money'.

The other type, structural ambiguity, occurs when the meaning of the component words can be combined in more than one way (O'Grady et al. 1997), for example: *Nicole saw the people with binoculars*. The sentence can be grasped in two ways. One interpretation is that Nicole used binoculars to see the people. In this sense, binoculars modify Nicole (Nicole with binoculars). The other meaning, the people had binoculars when Nicole saw them. It means that 'binoculars' modifies the people (people with binoculars).

A sentence can be ambiguous because of many reasons, some of which are multiple meaning, lack of information, and, incompleteness (Owen and Sweeney in Visser 2004:1). To make the ambiguous sentences unambiguous and grammatical, it is necessary to have some sort of formal signals which help the reader or hearer to recognize the sentence structure (Taha, 1983). Some of the signals include function words, inflections, affixes, stress, juncture (or word division and punctuation in writing), and major class membership. Those elements will be used as the basis of the discussion of ambiguous construction below. Those formal signals are absolutely important to understand and analyze ambiguity.

Here are some ambiguous sentences, which are included in the discussion of this paper: *The girl hit the boy with a book; Visiting relatives can be boring; I know more beautiful girls than Susanne; Put the bottle on the table in the dining room; The teacher thanked the students who had given her some flowers*.

In each case, the explanations include the types of structural forms, the reasons of ambiguity, and some possible ways to resolve them.

## DISCUSSION

### Types of Structural Ambiguity

From many types of structural ambiguity, the ones that are explored in this paper only include:

Type 1 : VP + NP + PP

Type 2 : Gerund + VP

- Type 3 : VP + NP + more...than + NP  
 Type 4 : VP + NP + PP<sub>1</sub> + PP<sub>2</sub>  
 Type 5 : NP + Adj. Clause

**Type 1: VP + NP + PP (prepositional phrase)**

The girl hit the boy with a book  
 VP    NP            PP

The sentence may mean ‘The girl hit the boy using a book’ or ‘The boy is holding a book when the girl hit him. This type of ambiguity occurs since the prepositional phrase ‘with a book’ can modify two nouns ‘the girl or the boy’, either of which can be treated as its antecedent. In the sentence there is no clue to which noun the PP modifies. In other words, ‘with a book’ can modify *the boy* or *the girl*. This type of structural ambiguity results from the lack of information in the construction. If additional information is added to it, the sentence becomes unambiguous:

- The girl hit the boy with a book. The book is broken.
- The girl hit the boy with a book. The boy hurts.

In ‘a’, ‘with a book’ refers to ‘the girl’; and in ‘b’, to ‘the boy’. Other examples of the same sort (a prepositional phrase that can modify two noun phrases) are:

- He hurt his sister with a knife:  
 Using a knife, he hurt his sister.  
 His sister was holding a knife when he hurt her.
- Brian harms Jenny with a hammer:  
 Using a hammer, Brian harms Jenny.  
 Jenny is holding a hammer when Brian harms her.

**Type 2: Gerund + VP**

Visiting relatives can be boring.  
 Gerund            VP

The second type of ambiguity has the construction a gerund followed by a verb. The example sentence is ambiguous because ‘visiting relatives’ can be understood in two ways: as a compound noun and as a noun phrase consisting of a modifier plus a noun. In writing, it is hard to eliminate the ambiguity, but in speaking, it can be cleared up by using intonation pattern. When it is pronounced with / 2 – 3 1 ↑ / pattern, the utterance indicates a compound noun, which means ‘the action of visiting relatives’. However, when it is pronounced with / 3 2 – 1 ↑ / pattern, the utterance implies a noun phrase, which means ‘relatives who visit’.

Below are other examples which also indicate ambiguity of a compound noun and a noun phrase.

- Flying object:  
 An object to fly  
 An object that flies
- Moving car:  
 A car for moving  
 A car that moves

**Type 3: VP + NP + more ... than + NP**

Jerry loves the fans more than Sally.  
 VP    NP                    NP

This third type of ambiguity concerns comparative degree. It is ambiguous because the shortened version may function as the subject of the second (shortened) clause or as the object of the verb 'love' which is in comparative relation with 'the fans'. The rule is if the comparative clause is identical to the main clause except for a contrasted phrase, optionally remove everything from the comparative clause except for this contrasted phrase (Baker 1989:347). In other words, when one makes a sentence using comparative degree, he/she will use the sentence, for instance, 'Tom hates Martha more than Susanne', rather than 'Tom hates Martha more than he hates Susanne' to avoid repetition of similar words. From the example of type 3 above, because of the removal of similar words, the sentence has two meanings.

- Jerry loves the fans more than Sally loves the fans.
- Jerry loves the fans more than He loves Sally.

To make it unambiguous, the shortened version should be added some missing information. The shortened version of 'Jerry loves the fans more than Sally loves the fans' should be 'Jerry loves the fans more than Sally does'. If we mean 'Jerry loves the fans more than He loves Sally', the sentence cannot be shortened.

The followings are other examples of ambiguity of comparative clauses:

- John listens to rock music more often than his father:  
John listens to rock music more often than his father listens to rock music.  
John listens to rock music more often than he listens to his father.
- James loves Helen more than Joe"  
James loves Helen more than Joe loves Helen.  
James loves Helen more than James loves Joe.

#### **Type 4: VP + NP + PP<sub>1</sub> + PP<sub>2</sub>**

Put the bottle on the table in the kitchen.  
VP    NP            PP<sub>1</sub>            PP<sub>2</sub>

The sentence above is ambiguous since the first modifier 'on the table' can modify the closest NP or PP<sub>2</sub>. It is not clear whether 'on the table' modifies 'the bottle' or 'in the kitchen'. If it modifies 'the bottle', it means that the bottle is already on the table and should be put in the kitchen. On the other hand, if it modifies 'in the kitchen', it means that the bottle should be put from somewhere else to the table which is in the kitchen.

The ambiguity can be resolved by placing a terminal juncture between the first and the second modifier. Thus, the sentence may mean 'Put the bottle on the table / in the kitchen'. The juncture shows that the bottle is already on the table and then to be put in the kitchen. The second interpretation, is 'Put the bottle / on the table in the kitchen'. It means that the bottle should be put on the table, and the location of the table is in the kitchen (not the table in the bedroom).

The followings are other examples of ambiguity with two modifiers.

- Place the box in the drawer in the bed room:  
To place the box inside the drawer, which is located in the bedroom.  
The box is already in the drawer and should be placed in the bedroom.
- Put the radio on the box in that room:  
To put the radio on the box, which is located in that room.  
The radio is already on the box, and it should be put in that room.



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