

Interrogative Construction in Javanese: X-Bar Theory Analysis

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Abstract

This research aims to determine the elements forming the interrogative sentences in interrogative construction of Javanese language using X-Bar theory. Interrogative construction in a sentence requires yes/no answers or new information is required. The object of the research is interrogative construction in Javanese. The data obtained are interrogative sentences in Javanese. The method used is descriptive qualitative. Data analysis was carried out by condensing data, displaying data and conclusions. From the results of the study it was found that the interrogative construction in Javanese can be concluded that the position of the functional category of interrogative sentence lies in the position of the specifier, complement, and complement. Direct question words with yes/no answers and echo questions occupy positions as complements. Direct question words that require answers such as question words, ing endi (where), and kepriye (how) occupy positions as complements. Meanwhile, a direct question words that require answers, such as the question words sapa (who) and kapan (when) occupy a position as a specifier.

Keywords

interrogative construction;
Javanese language; x-bar
theory



I. Introduction

Interrogative sentences are usually used to ask questions. The interrogative sentence is formally marked by the presence of the question words *apa*, *siapa*, *berapa*, *bila*, *bagaimana*, and *dimana* with or without the *-kah* particle as an affirmation in Indonesian. Interrogative sentences end with a question mark (?). Language is one of the most important things in the life of every human being (Purba, N. et al. (2020). In written language or with rising intonation in spoken language, especially if there is no question word (or down intonation). Interrogative sentences are usually used to ask (1) a "yes" or "no" answer or (2) information about something or someone to the other person or reader. There are three ways to form interrogative sentences from declarative sentences, namely (1) by adding the interrogative *apa* 'what' particle, which must be distinguished from the question word *apa* 'what', (2) by reversing the word order, (3) and by using the words *bukan* 'is not', *bukankah* 'isn't it' *tidakkah* 'is it'. Declarative sentences can be changed into interrogative sentences by adding word *apa* 'what' to the sentence. The *-kah* particle can be added to the question particle to emphasize the question. The intonation used can be the same as the intonation of news sentences (Moeliono et al., 2017). The examples of interrogative sentences that require a "yes" or "no" answer and information about something or someone to the other person or reader are as follows times and be able to foster national generations, so that people become reliable and of high quality, with strong characteristics, clear identities and able to deal with current and future problems (Azhar, 2018).

- (1) a. Dia istri Pak Bambang. (*She is Mr. Bambang's wife.*)
 b. **Apakah** dia istri Pak Bambang? (*Is she Mr. Bambang's wife?*)
- (2) a. Pemerintah akan menaikkan harga minyak dan gas. (The government will increase the price of oil and gas.)
 b. **Apakah** pemerintah akan menaikkan harga minyak dan gas? (*Will the government increase the price of oil and gas?*)
- (3) a. Pak Tarigan meminjam **buku**. (Mr. Tarigan borrowed a **book**.)
 b. Pak Tarigan meminjam **apa**? (*What* did Mr. Tarigan borrow?)
- (4) a. Dia mencari **Pak Achmad**. (*He is looking for Mr. Achmad.*)
 b. Dia mencari **siapa**? (*Who* is he looking for?)

In line with (Aarts, 1997) which states that interrogative sentences are usually used to ask questions. Aarts divides interrogative sentences into four, namely: (1) 'yes' and 'no' interrogatives are interrogatives that require an answer 'yes' or 'no', (2) open interrogatives are interrogatives that use question words such as *where*, *why*, *how* and others (Wh-interrogatives), (3) interrogative alternatives are interrogatives that present questions with choices, (4) interrogative rhetoric is interrogatives that do not require an answer. The examples are as follows:

- a. Can you see this? *Yes, I can* *No, I can't* (interrogative 'yes' and 'no')
- b. What did she eat? *Toast and jam* (open interrogation)
- c. Do you want lasagna or spaghetti? *Lasagne* (interrogative alternative)
- d. How many times do I have to tell you not to lick your plate! (interrogative rhetoric)

Another theory regarding interrogatives is stated by (Haegeman, 1991). The theory explains that the types of interrogative sentences are divided into five kinds, namely; (1) *direct yes-no questions*, (2) *indirect yes no questions*, (3) *echo questions*, (4) *direct wh-questions* (*direct question sentences with question words*), (5) *indirect wh-questions* (*indirect question sentences with question words*). Examples are as follows:

1. Will you come to my party tomorrow? (*direct yes-no questions*)
2. I wonder whether you will come to my party tomorrow. (*indirect yes no questions*)
3. You will come to my party tomorrow? (*echo questions*)
4. When will you come to my party? (*direct wh-questions*)
5. I wonder when you will come to my party. (*indirect wh-questions*)

(Budiman & Mulyadi, 2020) with the title *Interrogative Construction in Japanese: X-Bar Analysis*. From the results of his research, it was found that the functional categories of question words such as complement and the complement has a different behavior in forming interrogative sentence structures in Japanese. Question words in the complementary category are mandatory, but some questions in the complementary category are mandatory and some are not (optional). In the science of syntax, this process is outlined in a theory called the Government and Binding Theory with its derivative the X-Bar theory. Then, there is also a question word study conducted by (Harahap & Mulyadi, 2018) with the title *Question Words in Interrogative Construction of the Mandailing Language* and the result is that whether the question words fill the syntactic function or not related to the word, phrase, and clause grammatical category.

In addition, there is also a research by (Mayasari & Mulyadi, 2020) have also conducted a study on interrogative construction with the title *Question Words in Interrogative Construction in Javanese using X-Bar theory*. The result of his research is that interrogative sentences in Javanese are divided into two, namely partial question words and total question words. The partial question words are in front of the sentence function as specifiers while question words are behind the sentence function as complements. This paper also presents an analysis of *Interrogative Construction in Javanese using X-Bar Theory* to find out what grammatical categories make up interrogative sentences in sentences and clauses by using X- Bar theory but the result of the analysis is different because the data displayed are contrastive with Mayasari and Mulyadi's. In Mayasari and Mulyadi's data, the partial data are in front of the sentence while the in this research, they are in the back of the sentence so the result of the research is different.

This study conducted by sound symbolism focused on comparative between Indonesian and English by using four types of sound symbolism. The objective of this study is to map the sound symbolism in Indonesian and English in accordance with the typology of sound symbolism.

II. Review of Literature

Question words in Javanese have almost the same structure as Indonesian. (Subroto et al., 1991) stated that question words in Javanese are formed from basic sentences by using interrogative intonation such as the auxiliary question *apa* 'what, and using the question word *sapa* 'who', *pira* 'how much', *ngapa* 'why', *kepriye* 'how', *endi* 'where', *kapan* 'when'. Question songs are mandatory if the order of the subject line with the GPD (predicate line) in the interrogative sentence is similar to the basic sentence. Interrogative sentences that require a "yes" or "no" answer can be formed by adding a question song in the form of a rising intonation that is affirmative and adding an auxiliary interrogative word *apa* 'what', *apakah* 'whether'. The question word *apa* is used to ask a non-human noun phrase (FN), while *sapa* is used to ask a human FN, *pira* to ask for a number or number, *ngapa* to ask 'what was done/what was done or to ask the cause or reason', *kepriye* to ask 'how something done', *endi* to ask 'place or choice', *when* to ask 'when the action or process occurred or took place'. The examples of interrogative sentences in Javanese are as follows:

- | | |
|---|---|
| (1) <i>Amir tuku layangan</i>
'Amir buys a kite' | <i>Amir tuku layangan?</i>
'Does Amir buy a kite?' |
| (2) <i>Amir tuku layangan</i> | <i>Apa Amir tuku layangan?</i>
'Does Amir buy a kite?' |
| (3) <i>Amir tuku layangan</i> | <i>Amir tuku apa?</i>
What does Amir buy? |
| (4) <i>Amir tuku layangan</i> | <i>Sapa tuku layangan?</i>
Who buys the kite? |
| (5) <i>Amir tuku layangan</i> | <i>Amir ngapa?</i>
Why Amir? |
| (6) <i>Amir lagi sinau ing kamar</i>
Amir is studying in his room | <i>Amir lagi sinau ing engdi?</i>
Where is Amir studying? |
| (7) <i>Amir baca buku kuwi</i>
Amir reads the book | <i>Amir baca buku endi?</i>
Which book does Amir read? |
| (8) <i>Amir tuku pit motor sarana kredit</i>
Amir buys a motorbike on credit | <i>Amir tuku pit motor kepriye?</i>
How did Amir buy a motorcycle? |

(9) *Wingi sore Amir lunga*
Yesterday afternoon Amir left

Kapan Amir lunga?
When did Amir go?

The construction of interrogative sentences in the Javanese language that has been described was analyzed using X-bar theory. (Sawirman, 2007) stated that the X-bar theory is in the Government and Binding Theory (GB) or known as Lexical Functional Grammar theory. The basic concept of the X-bar theory contained in Lieber, for example, is the X-bar theory which is included in the Government and Binding Theory (GB) which was first proposed by Chomsky.

Chomsky in (Sawirman, 2007) explains that the internal structure of grammar is an interaction between subsystems in GB. X-bar theory which is the central theory of other GB theories such as Theta theory, Case theory, Control theory, Binding theory, Mastery theory, and Bounding theory is part of the theory of Generative Transformation Grammar. Each of these GB theories is related to each other. This is due to the basic principles of GB itself, namely the existence of elements that dominate (governor) and those who are dominated (governee) as well as elements that bind and are bound.

X-Bar theory explains what is common in phrase structure. In X-Bar theory all phrases are dominated by one lexical core. In traditional linguistic terminology, all phrases are classified as endocentric (Haegeman, 1991). In other words, it can be said that every phrase has one lexical core. For example, the core of a noun phrase (FN) is a noun, a verb phrase (FV) is a verb, an adjective phrase (FA) is an adjective and so on. Thus it can be understood that the projection of a nucleus is the phrase itself. Phrase structure in X-bar theory is related to three grammatical functions, namely complement, (Comp.), adverb (Adv), and Specifier (Spes.). A complement is an argument whose position is directly under the X-bar and its presence at that position is a realization of a lexical property. Schematically, an adverb also located below the X-bar in the phrase structure, but on a different level. In other words, the complement is dominated by the first X-bar while the caption is dominated by the second X-bar. In addition, the argument status of the two categories is different. The complement and specifier are mandatory arguments in the phrase structure, while adverbs are optional or peripheral. Specifiers are arguments that are directly underlined by double X-bars or X phrases (Mulyadi, 2010), (Radford, 1981).

(Black, 1998) and (Haegeman, 1991) extend the X-Bar theory at the level of clauses and sentences. In the level of clauses and sentences, the core of the clause or sentence is inflectional (I), Inflectional Phrase (FI). FI is the maximum projection from the core of the clause and a higher level of FI is a complementary phrase (FPm) or is called a Complementizer Phrase and can be aligned with the projection S'. (Budiman & Mulyadi, 2020) state that the structure of the interrogative sentence in X-bar theory is related to four grammatical functions, namely Complement (Pm), Inflection (I), Specifier (Spec), and Complement (Komp). In the Inflection section, Specifiers and Complements have been described previously, while complements will be explained as follows. Complement (Pm) is an element of a subordinate clause that determines the type of clause that follows it. In interrogative sentences, the complement is attached by the question word feature. The question words that are categorized as complementary functional come from the type of yes-no interrogative sentences and interrogative sentences with question words. Called a complement when the question word is in front of the subject of the interrogative sentence. Question words that occupy a complementary function in an interrogative sentence are divided into three characteristics, namely (1) the question word can be removed but cannot be moved its position in the sentence structure, (2) the question word can be removed and its position can be moved in the sentence structure, (3) the question word cannot be removed but can be moved its position in the sentence structure. The question words that

are categorized as complementary functional come from the type of yes-no interrogative sentences and interrogative sentences with question words. Called a complement when the question word is in front of the subject of the interrogative sentence. Question words that occupy a complementary function in an interrogative sentence are divided into three characteristics, namely (1) the question word can be removed but cannot be moved its position in the sentence structure, (2) the question word can be removed and its position can be moved in the sentence structure, (3) the question word cannot be removed but can be moved its position in the sentence structure. The question words that are categorized as complementary functional come from the type of yes-no interrogative sentences and interrogative sentences with question words. Called a complement when the question word is in front of the subject of the interrogative sentence. Question words that occupy a complementary function in an interrogative sentence are divided into three characteristics, namely (1) the question word can be removed but cannot be moved its position in the sentence structure, (2) the question word can be removed and its position can be moved in the sentence structure, (3) the question word cannot be removed but can be moved its position in the sentence structure.

Furthermore, (Haegeman, 1991) states that the phrase term is also used at the clause level in X-Bar theory because clause and sentence rules are treated the same as X-Bar at the phrase level. The structure of clauses and sentences is taken from the phrase rules. Complement combines with Inflection (I) and Specifier combines with I' (I Bar) to form a maximal projection of the Inflectional phrase (FI).

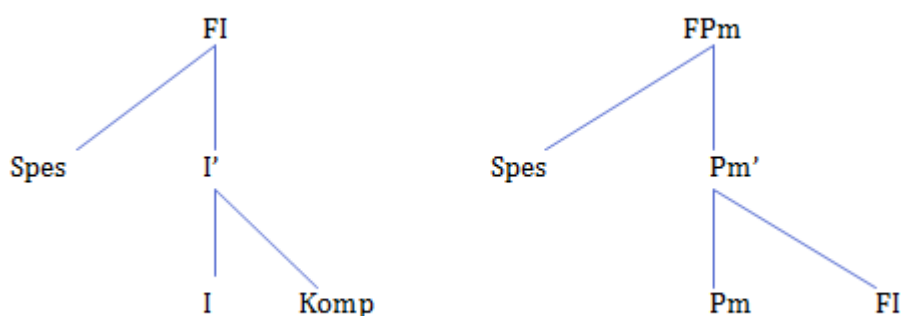
The clauses and sentences in the X-bar theory can be seen in the following tree diagram:

FI = Spes, I'

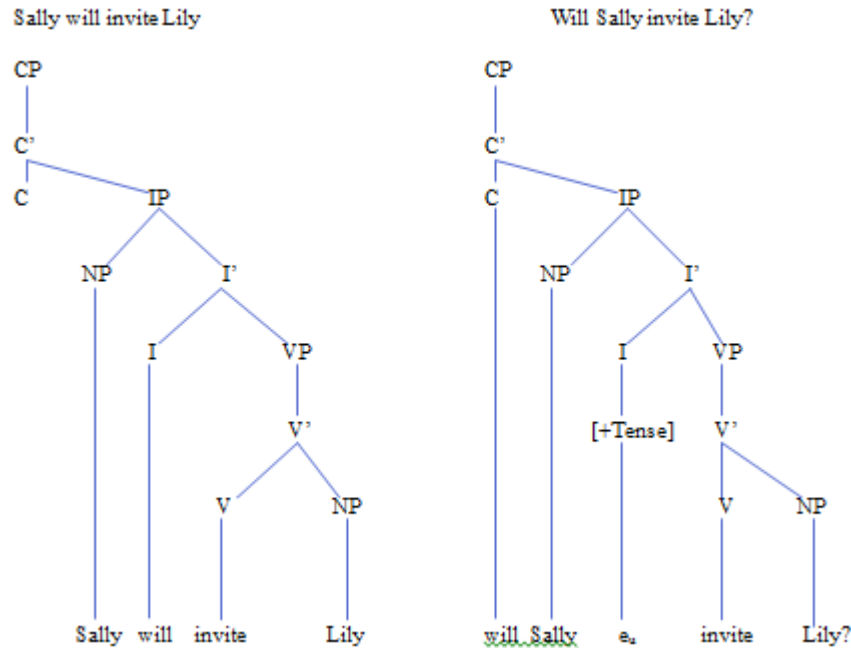
I' = I: Komp

FPm = Spes, Pm'

Pm = Pm', FI



The application of X-Bar theory to interrogative sentences can be seen in the example in English in the following tree diagram:



Description:

- CP : Complementizer Phrase
- C : Complementizer
- IP : Inflectional Phrase
- NP : Noun Phrase
- I : Inflection
- VP : Verb Phrase
- V : Verb
- e_i : moving index element

III. Research Methods

The method used in this study is a descriptive qualitative method with a generative linguistic approach using X-bar theory, which is to explain the general structure of phrases presented in the X-bar scheme. The data is in the form of spoken language and written language which will then be analyzed. The method of data collection used is the library method using written sources. The data taken are in the form of phrases and clauses in a sentence related to interrogative constructions in Javanese (Zaim, 2014). Data collection and data analysis in the study were carried out in three stages, namely: (1) data condensation, (2) data presentation, and (3) drawing conclusions (Miles et al., 2014).

IV. Results and Discussion

Based on the analysis of interrogative constructions in the Javanese language, it was found that the construction of the Javanese language refers to the functional categories of specifiers, complements and complementizer.

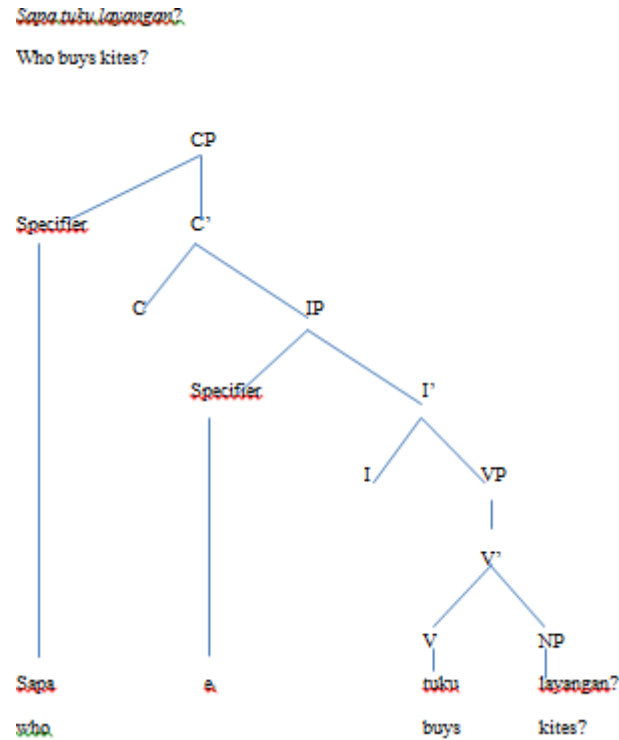
a. Functional Categories of Words and Interrogative Sentence Structures

Functional categories of question words in Javanese are formed from specifiers, complements and complementizers. Specifier in the realm of the sentence is the subject. In the structure of the Javanese language the subject is also in front of the sentence such as

Indonesian or English. In an interrogative sentence, the specifier must be present under the inflectional phrase. Question words that occupy the function specifier in the Java language using X-Bar theory can be seen in the following diagram:

1. *Sapa tuku layangan?*

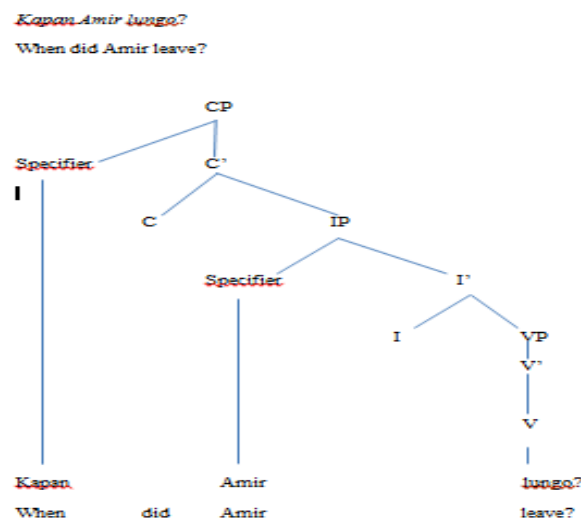
Who buys kites?



In this sentence, the question word *sapa* occupies the position of the specifier where the question word is a question word that requires an answer from a subject. In addition, there are also interrogative sentences that occupy the specifier, namely the question word *kapan* 'when' in Javanese. The sentence can be seen in the following example along with the tree diagram.

2. *Kapan Amir lunga?*

When did Amir leave?

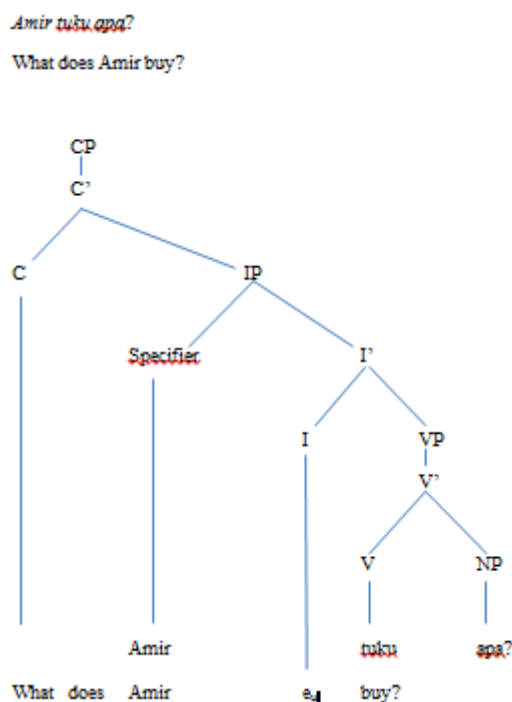


In the diagram, the question word *apan* 'when' requires an answer related to time. The type of interrogative sentence in the diagram above is a direct sentence with a question word.

Next there is a question word that is in a position as a complement. Question words that are positioned as complements are at the end of the sentence or in combination with VP. Examples of sentences using question words in interrogative construction are as follows:

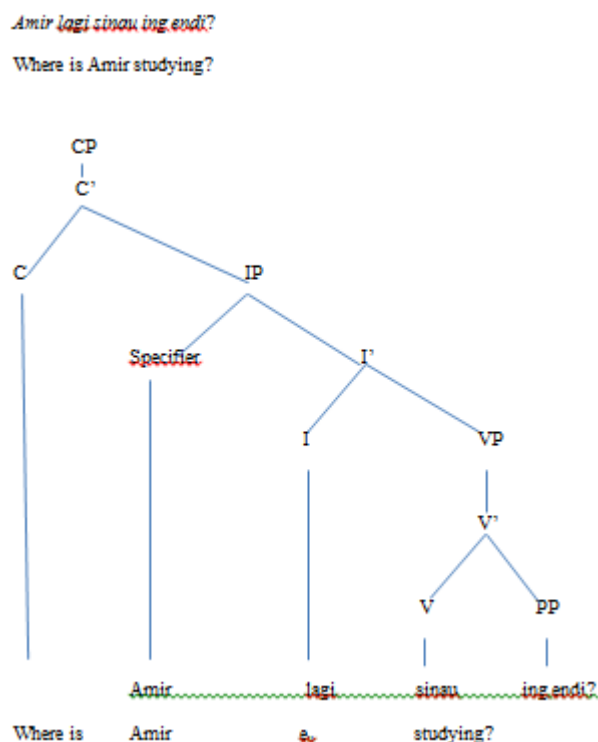
3. *Amir tuku apa?*

What does Amir buy?



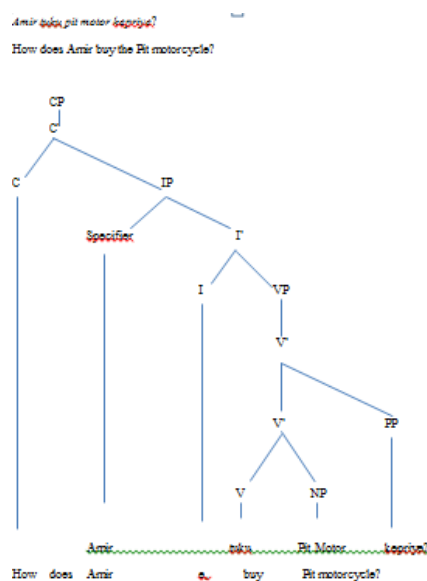
In the sentence above, the question word *apa* 'what' occupies a position as a complement and is combined with a verb phrase in an interrogative construction. The type of interrogative sentence in the question word is a type of interrogative sentence with a direct question word where this type of interrogative sentence requires an answer with additional information. In addition to the question word what, there is also the question word *ing endi* 'where' in the Javanese construction. Example sentences can be seen in the following sentences.

4. *Amir lagi sinau ing endi?*
Where is Amir studying?



Then there is also a question word that occupies a complementary position, namely the question word *kepriye* 'how' in Javanese with an explanation through the following tree diagram:

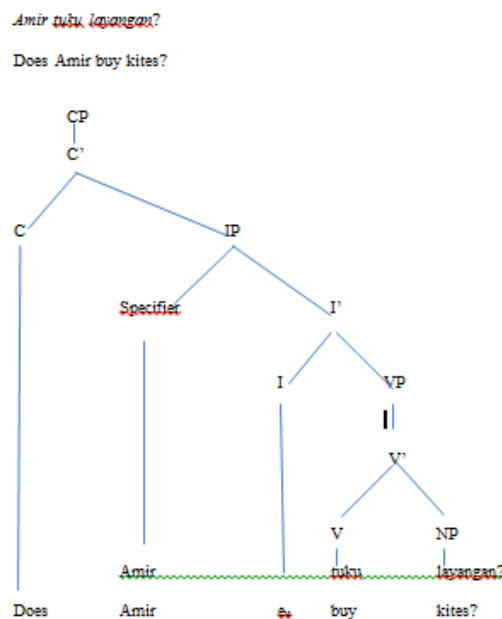
5. *Amir tuku motor pit kepriye?*
How does Amir buy the Pit motorcycle?



In the sentence above, the question word *kepriye* is in a complementary position in the sentence and the type of question word in the interrogative sentence is also included in the category of interrogative sentence with a direct question word and the answer required in the interrogative construction is an answer that requires further information.

In the next construction, the question word in the interrogative sentence is in a position as a complement. The question word is in the I bar position in X-bar theory and will move to complement the interrogative sentence. The examples of interrogative sentences in these sentences can be seen in the following diagram:

6. *Amir tuku layangan?*
Does Amir buy kites?



The interrogative sentence in the example above is an echo type interrogative sentence which is a declarative sentence that turns into a question sentence because there is a question mark at the end of the sentence. This sentence can also be equated with the question, *Does Amir buy a kite?*. When the sentence is converted into a sentence by adding the question word *whether*, then the status of the sentence type changes to a type of interrogative sentence that requires a *yes/no* answer. In the X-bar analysis in the sentence, it can be seen that the question word is not seen in the sentence with the echo question sentence type, therefore the question word is raised in the *yes/no* interrogative sentence because the echo question sentence also requires a *yes/no* answer. The sentence becomes *apa Amir tuku layangan* is the same with *does Amir buy kites?*.

IV. Conclusion

Based on the analysis of interrogative construction in Javanese, it can be concluded that the position of the functional category of interrogative sentences lies in the positions of the specifier and complement. Direct question words with *yes/no* answers and echo questions occupy positions as complements. Direct question words that require answers such as question words *apa*, *ing endi*, *kepriye* and *ngapa* occupy positions as complements. Meanwhile, direct question words that require answers, such as the question words *sapa* and *kapan* to occupy a position as a specifier.

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