



## Syntactic Analysis of Makassar Question Words: An X-Bar Theory Approach

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### Abstract:

*This article endeavors to scrutinize the creation and functionalities of interrogative constructions, with a specific emphasis on the Makassar Language. The research design employed in this study involved the use of primary sources and followed a descriptive approach. Data collection was carried out through conversations with Makassar participants. To analyze the syntactic data, the study adopted X-Bar Theory as its theoretical foundation, which was then depicted in the form of syntax trees. The findings of this study indicated that the Makassar Language serves two grammatical functions, namely as a specifier and a complement. The highest level of projection in this structure was the Complementizer Phrase/CP. The distinction between these functions lay in the placement of question words. When a question word was positioned at the beginning of a sentence, it functioned as a specifier and followed the interrogative structure rule of QW + Subject + Predicate + Adv (optional). On the other hand, question words that required an answer other than the subject or were positioned at the end of a sentence were referred to as complementary functions. In this function, the researcher identified the pattern where the structure was written as Subject + Predicate + QW. X-Bar theory also helps in teaching syntax which needs a lot practice including creating tree diagrams of sentences to parse each constituent that requires a platform or program that can lead the students to diagramming.*

*Keywords: Makassar Language, Question Words, Syntactic Analysis, X-Bar*

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## 1. INTRODUCTION

Language is a basic tool of communication that indicates certain information among all individuals. Information is sent from one person to another based on how they use language (Udoeyo & Enang, 2018). It may be inferred that language is a meaningful communication instrument that brings people together, fosters social engagement within communities, and facilitates teamwork (Uktolseja et al., 2019). Humans can form sentences that have specific meanings when they communicate with one another through language. Put another way, the purpose of the speaker determines the phrase that a person speaks, whether it is an exclamation, inquiry, directive, or assertion (Adiantika, 2020). The four moods listed below are imperatives, exclamations, questions, and assertions, according to Sneddon (1996). This research focuses on the inquiry variations or interrogatives. Interrogative structures are employed to pose queries. It means that this involves two or more people in communicating. The inquiry terms *apa* 'what', *nai* 'who', *kemae* 'where', *siapanna* 'when', and *antekamma* 'how' for providing more information, with or without the *-to* particle for yes or no response as an affirmation in Makassar Language (ML), technically indicate an interrogative phrase. Queries terminate with a question mark (?). The purpose of the question structure is to either elicit an answer in the form of a response or to reinforce the questioner's prior knowledge (Mayasari & Mulyadi, 2020). According to Cox (2020), one notable feature of wh-interrogatives, when examined from a syntactic perspective, is the presence of gaps within the clauses that come after the wh-words. These gaps represent the absence of explicit constituents in positions that are typically occupied by different grammatical roles in regular declarative clauses. In these interrogatives, the wh-words or wh-phrases are interpreted as fulfilling the grammatical roles that are typically associated with these vacant positions. There are five types of interrogative sentences according to Haegeman (1994). First, there are direct yes-no questions; second, there are indirect yes-no questions; third, there are echo questions; fourth, there are direct wh-questions (direct question sentences with question words); and fifth, there are indirect wh-questions (indirect question sentences with question words) (Haegeman, 1994, p. 297-298). It has been proven that there are several types of question sentences by experts, this research will focus on the type of direct question sentences. This research provides examples in ML as follows:

1. *Katte kulleki a'lampa balanja kamma-kamma inne to?* (Yes/No Question)  
'You can go shopping now, can't you?'
2. *Bagus a'lampa kemae?* (WH-Question)  
'Where does Bagus go?'
3. *Antekamma katte appare dumpi inne?* (WH-Questions)  
'How do you make this cake?'

The phrases "interrogative" and "declarative," while meant to be labels for strictly formal kinds, are plainly evocative of how these sorts of sentences are used. It is to inquire (interrogate) and to inform (declare) in this instance (Trinh & Bassi, 2023, p. 2). On the other hand, his research is comparable to mine in that it investigates the genesis and functionality of interrogative constructs, with a concentration on the Makassar Language, which is nearly identical to Mukramah & Mulyadi (2022), with the exception that Mukramah & Mulyadi (2022) examined the Acehnese language in depth. Next, Fitriyani & Mulyadi (2017) conducted a thorough analysis of the structural arrangement of interrogative phrases and the grammatical roles of question words in the Minangkabau language, employing the X-Bar Theory. Her findings revealed that wh-question words assumed the grammatical roles of both complement and specifier, with the

question word “iyonyo” in yes-or-no inquiries serving solely as a complement. Notably, the internal structure of an interrogative phrase in Minangkabau comprised specifiers, complements, and adverbs.

The grammar has 170 constructs, 55 of which are morphological and lexical. Aside from these, the language includes 115 grammatical constructs that capture phenomena such as referential expressions, spatial linkages, coordination and subordination structures, and a variety of interrogative structures (Eecke et al., 2022, p. 298). Furthermore, researchers looked at how variances in puzzle interrogatives (i.e., what, how, and why) affected Exploratory Practice (EP) (Kato, 2023, p. 4). EP enables instructors and students to create their own agendas (such as riddles) to explore their practice. It has been stated that puzzles are most successful when presented as why questions (e.g., "Why do we cheat?") rather than other forms of queries. This is because practitioners feel that asking why questions helps them get a better knowledge of their work. However, they discovered that learners frequently ask other types of inquiries, such as what or how. Furthermore, researching a why inquiry does not necessarily result in a greater understanding. To solve this issue, they performed a research with my own 66 second-year undergraduate students in Japan to see if the puzzle had to be a why question in EP. The students developed and researched their riddles using a chosen structure of what, how, and why inquiries, and then communicated their findings with their peers via poster presentations. This was followed by surveys and focus group talks in which they elicited feedback on the differences between the three problems. Instead, the study found that the process-oriented ambition, as represented by the 'I/we wonder'4 mentality, should be prioritized above a single interrogative term in a problem (Kato, 2023, p. 19). Muthalib et al. (2022, p. 837) also address the same issue, with the sixteenth verb pattern being intransitive/reflexive/transitive verbs with an adverb/prepositional phrase/noun phrase/clause, as in the sentence '*he carried himself with dignity*'. The seventeenth pattern is the verb with an interrogative word, such as 'what', 'when', and 'how', as in '*she knows when to keep quiet*'. Moreover, there are no constraints that necessitate the utilization of do-support in interrogative scenarios, resulting in phrases like 'why consider-s John Mary angry' (Ermolaeva, 2023, p. 101). As a result of these parametric variances, languages might have distinct but similar systems such as head parameter, wh-question, null-subject, and so on (Bello, 2021, p. 516). Trinh & Bassi (2023), on the other hand, give unique discoveries concerning forms of queries that occur often in natural conversation but have yet to be studied. They suggest an explanation that bases the observations on the fundamental premise that speech activities are grammatically represented.

In the context of Bulgarian, the the complex head involving the verb and the clitics (si-mu-gi-dal) moves and left-adjoins to the interrogative particle li, as in, '*Dal li si mu gi parite?*' or '*have you given him the money?*' (Isac, 2024, p. 6). Then, he posits that the host of the definite suffix in Daco-Romanian languages such as Modern Romanian, Old Romanian, Megleno-Romanian, Istro-Romanian, and Aromanian (DacRom) is decided at PF as a result of the Spell-Out requirements. The relevant chains are the consequence of an Agree connection formed by the [def] feature of the D head and a matching feature of other heads in the DP, such as N and A. Afterwards, Corbeanu & Geană (2024) examine the grammar of interrogative sentences in Istro-Romanian. The goal is to define the parametric settings for V-to-C, subject placement (SVO or VSO), and the objective for component movement under discourse triggers. Subsequently, Munaro & Poletto (2023) examine the distribution of *wh-in-situ* and short (i.e., clause internal) wh-doubling in Northern Italian dialects with the purpose of showing that *wh-in-situ* and wh-

doubling are not unitary phenomena, given that they are subject to distinct distributional characteristics across various dialects. Munaro & Poletto (2023) also study cases of short doubling, that is, doubling within a simple main interrogative clause. We disregard both cases of long extraction from a complement clause (similar to those reported for the Germanic languages) and cases of doubling within embedded interrogatives. The results show that wh-doubling cannot be reduced to a single analysis but rather corresponds to a family of phenomena which have in common the basic procedure of feature doubling, within which the copying mechanism applies to different subsets or packages of features and is constrained in different ways. Furthermore, some types of doubling correspond in their distribution with some types of wh-in-situ, which shows that the two phenomena must be related and that different types of *wh-in-situ* are the null counterpart of different types of wh-doubling. However, in languages where wh-in-situ is widely used, there is no correlation between wh-in-situ and wh-doubling. To address this, when faced with a copy construction, syntacticians typically resort to one of two approaches, what we will call the single representation approach and the dual representation approach such as in Afrikaans, '*Waarvoor dink julle waarvoor werk ons?*' or '*What do you think we are working for?*' (Paul & Potsdam, 2024, p. 20).

In the context of Arabic, Hassanein (2021) favours 'interrogative opposition' because it is a superordinate under which the disjunctive coordinator 'or', the question mark '?', and binary choice are all subsumable. Interrogation distinguishes between disjunctive coordination and disjunctive interrogation, selecting from multiple options. Afterwards, only one case of interrogative opposition is recorded, occupying a very marginal, almost statistically insignificant (Hassanein, 2021, p. 14). Moreover, proverb '*Lying to the living or to the dead?*' the original form of the text utilizes an interrogatively disjunctive framework 'X or Y?' to incorporate interrogative opposition in its features, in order to host two mutually exclusive binary and complementary opposites, al-ḥayy/al-mayyit ('living/dead'). The Arabic proverb lacks a question mark in its orthography, but its interrogative nature is conveyed through intonation. This could be the reason why the English translation of the proverb ends with a question mark.

In the context of Japanese linguistics, Gapur & Pujiono (2018) delved into the Polar Interrogative Construction, utilizing data from textbooks Nameraka Nihongo Kaiwa and Minmano Nihongo Shokyuu I. The study highlighted interrogative tags, particle addition, and intonation as the principal components of polar interrogative construction while identifying the absence of modifications in disjunction, verbal inflection, and constituent order. Afterwards, Mayasari & Mulyadi (2020) focused on Javanese interrogative constructions, particularly analyzing question words (*tembung pitakon*). Her study revealed that the entire question phrase fulfilled a complement function, while the Javanese portion sentence assumed both grammatical and complementary roles. Then, according to some recent studies, in various European languages, a future form can represent the speaker's guess about a condition that is valid at the moment of utterance, and when employed in interrogative sentences, it expresses conjectural or non-intrusive queries (Kaneko, 2024, p. 1). On top of that, Kaneko (2024) aims to show that not only future markers, as recently discussed, but also past markers contribute to expressing conjectural or non-intrusive questions (respectively, uttered when the addressee is absent or assumed to be ignoring the answer and when she isn't forced to give an answer), although their modes of contribution are different: the conjectural reading is integrated into the lexical meaning of some future forms while it is pragmatically derived comb.

In a parallel investigation within the Javanese linguistic context, Nurmala & Mulyadi (2022) further explored interrogative constructions. The study's findings underscored the functional categories within an interrogative phrase, emphasizing their placement in the specifier, complement, and complement positions. These studies collectively contribute to advancing our understanding of diverse interrogative sentence structures across languages. Consequently, in a study conducted by Pasaribu & Mulyadi (2023), the syntactic behavior of Malay question words within the interrogative construction of North Labuhanbatu is meticulously examined. The findings reveal distinct grammatical and complementary roles for the fragment sentence in Malay, shedding light on its internal organization based on X-bar theory and distributed approaches. The research underscores the strategic incorporation of specifiers, complements, and adverbials in the formation of Malay question words, significantly contributing to our understanding of the intricate syntactic dynamics within this linguistic context.

In contrast to prior research endeavors, the distinctiveness of this study lies in its focus on the previously unexplored territory of the Makassar Language (ML) regarding the structure of question words in direct interrogative phrases. Consequently, researchers are employing ML as the primary dataset for analysis. The objectives of this study are twofold: firstly, to discern the position of question words in ML and infer their respective functions, and secondly, to portray the structural arrangement of question words within the framework of X-bar theory through the visualization of syntax trees. Linguists frequently encounter structural or syntactic uncertainty (Valentino, 2023). In terms of X-Bar theory, Valentino (2023) employed a syntactic technique to analyze the many meanings of the course name, English for Business and Professional Communication. Even, Valentino (2023) examined the structural meaning options using a syntactic technique based on the X-bar theory principles. The data point to three probable structural readings of the program name, which is an English program with two separate goals: business and professional communication. The course of study consists of two specializations: English for Business and Professional Communication, as well as an English program with a specific purpose in the field of communication, which is divided into two sub-fields: Business Communication and Professional Communication.

Moving on to the subject of research in the form of literary texts, the grammatical transformation of adjectives into noun phrases in the translated text of the play *Macbeth* has resulted in a change in the phrase's meaning. Imamah & Subiyanto (2021) sought to identify the grammatical change using X-Bar theory. *Macbeth* is one of Shakespeare's plays with particularly dramatic adjectives and nouns (Imamah & Subiyanto, 2021, p. 196). They emphasized parts of speech such as adjectives and nouns because "*Macbeth*" is one of Shakespeare's plays that uses adjectives and nouns in an unusual and dramatic way. Their study focuses on grammatical changes that occur during the translation of literary works from English into Indonesian.

## **2. LITERATURE REVIEW**

### **2.1 Syntactic Analysis**

The examination of syntax has played a critical role in the historical development of linguistics by facilitating comprehension of the complexities inherent in the structure of human language. Hence, it proves advantageous to categorize a language into distinct elements based on various common attributes. These elements and classifications are organized based on syntactic methods, wherein syntax refers to the examination of elucidating the process by which words

combine to create grammatically coherent sentences and expressions (Al-Enezi, 2018). It can be emphasizing transformations, hierarchy, constituent connections, and the fundamental structure of sentences. It can be contended that syntax is a determining factor in the process of word combination to form phrases. Syntax not only contributes to the comprehension of language functionality, but also facilitates text analysis and the extraction of meaning, translation from foreign languages, and an array of other language-related applications. Syntax, as the study of the appropriate organization of words into sentences, is rooted in the bedrock of sentence structure, as posited by Carnie (2006, p. 72).

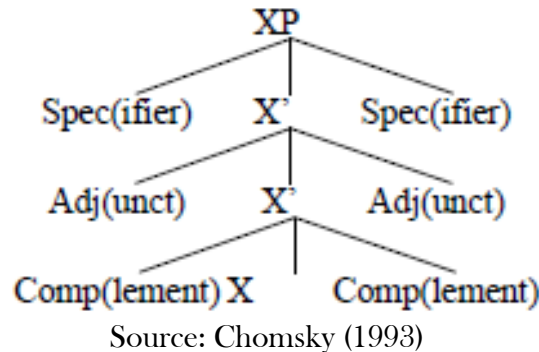
In the realm of language, phrases are regarded as syntactic entities comprised of words and their accompanying modifiers, encompassing nouns, verbs, adjectives, and adverbs. These phrases harbor profound connotations and are indispensable in the construction of sentences. Familiarity with the grammatical framework of a sentence, which encompasses core elements such as the subject, predicate, object, and modifiers, is pivotal in comprehending the intricacies of syntax and linguistics. Sentences are constituted by clusters of words known as constituents, which subsequently amalgamate to form larger constituents, and this process continues until a complete sentence is formed. This assertion aligns with Valin's contention that users of language employ a wide array of potential arrangements for the constituent components of a sentence, and that syntax is intricately interwoven with the manner in which sentences are structured. Van Valin (2004) introduces the concept of constituent structure within the framework of unit units, wherein words are organized in a hierarchical sequence as constituents. Chomsky asserts in Morley (2000)'s work published in 2000 that the syntactic arrangement of a sentence serves to expose particular unit sentences, thereby demonstrating the interrelatedness of a given sentence, unveiling the hierarchy in the arrangement of elements, and elucidating the emergence of surface ambiguities. Subsequently, a diverse array of techniques is employed to evaluate the constituent structure of a phrase from both a structural and functional standpoint. While functional syntax concerns itself with the organization of sentences in terms of smaller functional components and ultimately words, formal syntax addresses how words may combine to form larger units of structure, culminating in sentences (Sa'adiyah & Reztia, 2019). This analysis is founded on the deconstruction of phrases into their constituent parts. Within the realm of syntax, tree diagrams are frequently employed to delineate the hierarchical patterns of phrases or sentences. The constituent elements of a category are depicted as branching out from it in a tree diagram. The grammatical rules of various languages differ, leading to variations in the order of elements. This, in turn, influences the manner in which a message is conveyed in a particular language (Divany et al., 2024).

## **2.2 X-Bar Theory**

The present investigation applies the X-bar theory of phrase structure and syntactic function. It is a theory of language generation, initially proposed by Noam Chomsky in 1970 and later expanded upon by Jackendoff in 1977, which concerns the fundamental structure of syntactic elements. In accordance with this line of reasoning, Haegeman (1994, p. 95) defines the X-bar theory as "the aspect of grammar that governs phrase structure." Haegeman further asserts that the X-bar module emphasizes the similarities in phrase structures. As per the X-bar hypothesis, every sentence possesses a lexical head. For instance, a complementizer heads a complementizer phrase (CP), a verb heads a verb phrase (VP), a preposition heads a prepositional phrase (PP), an adverb heads an adverb phrase (ADVP), an adjective leads an adjective phrase (ADJP), and so forth. Cook (1996, p. 14) notes that the primary objective of X-bar syntax is to convey

generalizations about the phrase structure of all human languages, rather than characteristics that are exclusive to a particular language or subset of languages. Due to this underlying hypothesis, the X-bar theory is commonly referred to as the theory of phrase structure. In the analysis of data within X Bar Theory, diagrams will be utilized to explicate the structure under examination.

Figure 1. Diagrammatic Representation of X Bar Theory



From Figure 1, the initial projection is commonly referred to as the maximum projection (XP). It is denoted as X', initially. X' serves as the head of a phrase, with the complement following it. In the figure, X' is also described as an intermediate projection. The lexical categories, such as determiners, nouns, verbs, and prepositions, are represented by X. For instance, an adverb serves as a VP specifier, a degree word functions as an AP specifier, and a determiner acts as an NP specifier. Consequently, the aforementioned parameters will be employed in this study to examine direct interrogative structures in ML. It should be noted that different languages may possess distinct interrogative structures. In interrogative sentences, there is either the movement of wh-elements or the insertion of question words. Rather than mere memorization, the x-bar graphic facilitates the perception of the rules as movements, thereby enhancing comprehension (Wittaningsih, 2018).

### 3. RESEARCH METHODOLOGY

#### 3.1 Research Design

The primary objective of the present study is to explore the structures and functions of question words in the Makassar Language (ML). The research design incorporates a descriptive qualitative technique to comprehend the comprehensive structure of interrogative phrases. Following the guidelines outlined by Creswell (2014), this study conducts a thorough descriptive analysis of the syntactic structures of question words within interrogative phrases in the Makassar language. The chosen theoretical framework for this investigation is the X-bar theory, wherein syntax trees are employed to facilitate the researchers in both the data analysis and identification processes. This design aligns with Creswell (2014)'s approach, ensuring a rigorous and systematic exploration of the syntactic intricacies within the context of Makassar question words.

#### 3.2 Participants

Participants were purposefully selected based on specific criteria established by the researcher to ensure the appropriateness of the data for this study. The stipulated criteria included: 1) being a native resident of Makassar, 2) utilizing Makassar as the primary language for daily communication, 3) exhibiting proficiency in oratory skills and linguistic fluency, 4) demonstrating

availability for research activities, 5) expressing a willingness to actively participate, and 6) possessing other relevant attributes such as a background in linguistic studies, cultural familiarity, or educational experience in language-related fields. The selection process targeted individuals of both genders with ages exceeding 20 years, due to the fact that individuals at this stage have a greater proficiency in comprehending sentence structures in the authenticity of their native language as a result of their prior experiences as outlined in the aforementioned criteria. In this concise research endeavor, a cohort of five participants was engaged to contribute to the data collection process for the present investigation.

### **3.3 Instruments**

Regarding the instruments employed for data collection, the research sourced data from daily conversations in Native Makassar. This involved several steps, including listening to the conversations of participants who used Makassar as their daily communication language and creating a documentary record of spoken data. Additionally, note-taking was conducted to document interrogative phrases uttered by participants during conversations. The research further involved clarifying with participants the structural aspects of question words based on their verbal expressions. These carefully selected instruments facilitated a comprehensive exploration of question word structures and functions within the linguistic context of the Makassar language.

### **3.4 Data Analysis**

In the process of data analysis, researchers undertook a methodical approach encompassing several stages. Initially, the collected data was systematically classified into distinct categories, predicated upon the positional attributes of the question words within the phrases under investigation. Subsequently, the researchers discerned the functional roles of question words within the interrogative structure of the Makassar Language (ML). Following this, syntax tree diagrams were generated from the data to ascertain the head of the phrase, contributing to a comprehensive syntactic analysis. Upon completion of all procedural stages, the researcher systematically expounded upon the syntactic analysis derived from each identified data finding through prose descriptions.

## **4. RESULTS**

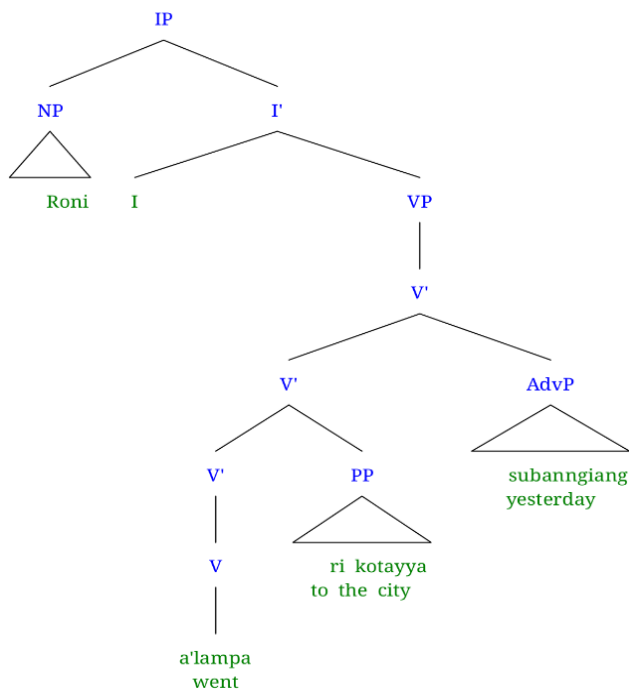
In this section, the study explores the previously uncharted aspects of the Makassar Language (ML), focusing on the structure of question words in direct interrogative phrases. Using ML as the primary dataset, the study aims to discern the positions and functions of question words and provide a detailed depiction of their structural organization within the theoretical framework of X-bar theory. The analysis employs syntax trees to enhance our understanding of Makassar's syntactic intricacies. According to Nurmala & Mulyadi (2022), three characteristics distinguish question words that serve a complementary function in an interrogative sentence: (1) they can be removed but their position in the sentence structure cannot be changed; (2) they can be removed but their position in the sentence structure can be changed; and (3) they cannot be removed but can be moved. More analysis can be described below.

### **4.1 Question Words as Specifier**

In ML, the formulation of interrogative words can serve as a specifier. Prior to delving into further explanation, this section will elucidate the process of transforming a declarative sentence

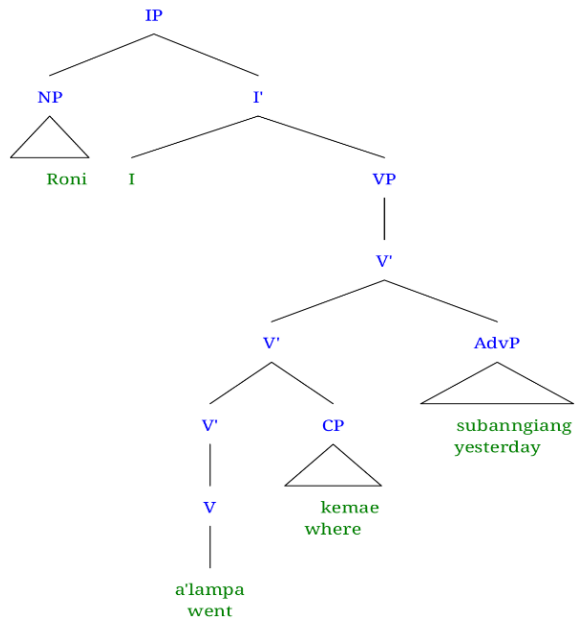
into an interrogative one through the utilization of *wh*-words. The declarative structure comprises the highest projection being IP. A declarative phrase is characterized by its emphasis on providing the most straightforward answer. In the creation of a sentence, the object can be positioned amidst other components if necessary to achieve a concluding effect. If deemed necessary, the predicator should be inserted after the phrase and be succeeded by a direct object, indirect object, or any additional components. An illustrative example is provided below.

Makassar : *Roni a'lampa ri kotayya subanngiang*  
 Gloss : Roni go-PST DEF city ADV  
 English : 'Roni went to the city yesterday'



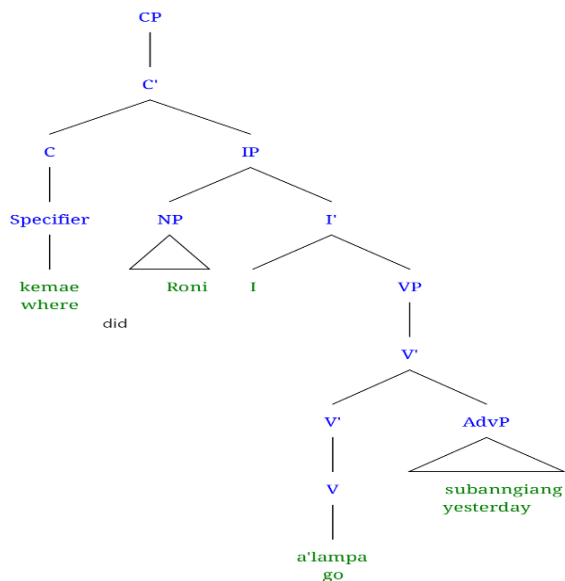
The phrase provided above presents a declarative statement. The researchers will commence their explanation by discussing the origin of sentence structure. Based on the data, the sentence consists of a Subject, predicate, and two adjuncts (place and time). The Subject, in this case, is the Noun Phrase/NP Roni. The term *a'lampa* or 'go-PAST' is an intransitive word, indicating that it does not require an object following it. These adjuncts are positioned after the verb, with one being a Prepositional Phrase (PP) and the other an Adverbial Phrase (AdvP). Since the PP functions as an adjunct, it should be combined with the first V' to form the second V'. The AdvP is then combined with the second V' to create the third V', which immediately forms the VP. The VP serves as the complement of the IP, as it combines with the I to form I'. The NP 'Roni' is joined with the first I' to form the IP and acts as a specifier. The question in this sentence would revolve around the PP *ri kotayya*, which consists of a preposition (P) and a noun phrase (NP). The preposition *ri* translates to 'to' and the NP *kotayya* means 'the city'. If these elements are related to the place, then the question word should be *kemae* or 'where'. *Kemae* functions as a CP and should replace the PP. The structure of this sentence can be observed below.

Makassar : *Roni a'lampa kemae subanngiang*  
 Gloss : Roni go-PST COMP ADV  
 English : 'Roni went where yesterday'



The aforementioned explanation illustrates that when transforming a declarative sentence into an interrogative sentence that necessitates a response, the prepositional phrase *ri kotayya* meaning ‘to the city’ is replaced with the complementizer *kema'e* meaning ‘where’. It is evident that the overall structure of the phrase remains unaltered. In this particular context, *kema'e* serves as a complement, connecting the first V' to form the second V'. Moving forward, let us delve into the CP structure as a determinant. Subsequently, we will proceed with the grammatical analysis of an interrogative sentence.

- Makassar : *Kema'e Roni a'lampa subanngiang?*<sup>2</sup>  
 Gloss : COMP Roni go-PST ADV?  
 English : ‘Where did Roni go yesterday?’

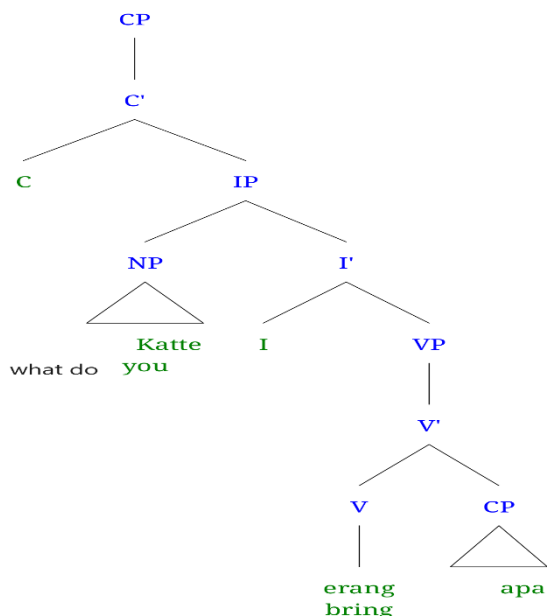


The data provided above demonstrates that the NP ‘Roni’ is observed following the IP specifier C specifier *kemae* ‘where’. As an adjunct of VP, the AdvP combines with the first V’ to instantly generate the second V’. When VP combines with I to form I’, it serves as a complement to IP. CP is formed when C’ joins C *kemae*. In other words, the interrogative word *kemae* moves to come before the non-primary noun ‘Roni’. The analysis in the figure as mentioned includes specifier functions. If the query word appears before the inflectional phrase/IP, it is considered to have a specifier function as it is connected by C’.

#### 4.2 Question Words as Complement

The subsequent discovery pertains to the inclusion of Makassar question words as a complement. This complement functions as an internal argument, serving to manifest lexical qualities, and is positioned within an interrogative construction structure, directly subordinate to the bar inflection. Within the ML interrogative construction, the complement is situated on the right side and connected to the center of the sentence. It is imperative for an interrogative expression to always have a complement. In other words, the resulting structure becomes grammatically incorrect if the interrogative lacks complements. The VP occupies the complements that constitute the interrogative constructions of the ML and combines them with question words from the NP, PP, and AdvP categories. In ML, the arrangement of question words as complementary words pertains to inquiries that necessitate a response following the subject in a declarative sentence. The complementing question word is derived from the echo interrogative construction type. An illustrative example is provided below.

Makasar : *Katte erang apa?*  
 Gloss : 2SG bring-PRS COMP?  
 English : ‘What do you bring?’

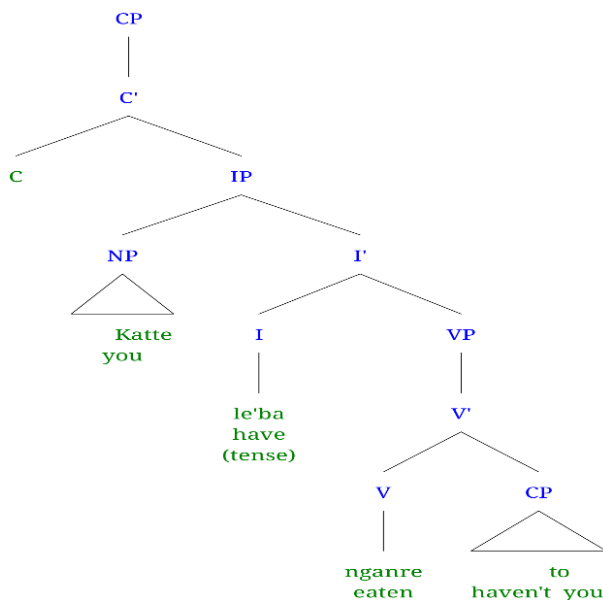


In the preceding sentence, the interrogative word *apa* ‘what’ is positioned as a complement within the sentence. This type of interrogative sentence falls under the category of direct questions, where the answer necessitates additional information. From the perspective of the interrogative

structure, the question *katte erang apa?* ‘what do you bring?’ is formed through the subject-predicate-question word sequence. By the X-Bar theory, the subject is placed in the specifier position, the predicate functions as a verb, and the question word *apa* serves as the implicit object of the predicate, thus making it a complement. As previously mentioned, the complement needs to be present in the sentence, rendering it ungrammatical if the question word is omitted.

In ML, there is another structure called a direct confirmative integrative sentence which needs a yes/no answer where it can be called as yes no question. Confirmatory interrogative sentences are interrogative sentences that intend to clarify the truth about something. Confirmative interrogative sentences in ML are typically distinguished by the presence of interrogative particles *to* at the end of the sentence. The example data illustrating this structure can be found below.

Makasar : *Katte le'ba nganre to?*  
 Gloss : 2SG AUX.PRS.PRF eat-PTCP Q?  
 English : ‘You have eaten, haven’t you?’



The question word is positioned at the end of the sentence, emphasizing or confirming the interlocutor’s awareness of a particular action. The merging of CP with V results in the formation of V”, which then combines with I to create VP. I represents the aspect related to tense, while VP serves as the complement of IP, uniting with I to form I’. Here is another example sentence.

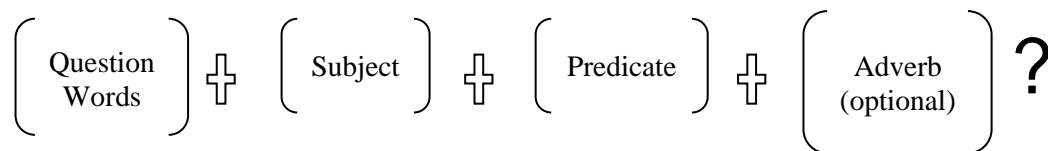
### 4.3 Syntactic Analysis of Makassar Question Words

The syntactic representation of an interrogative phrase in ML can vary depending on its position within the sentence. To distinguish the grammatical function of question words in different types of questions, the researchers have presented a table. This table can be observed in the subsequent section.

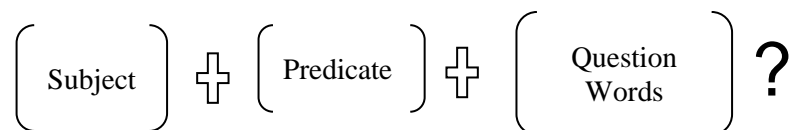
Table 1. Differences Kind of Grammatical Function in Interrogative Sentences

Question Words		Specifier	Complement
What	Apa	✓	✓
Where	Kemae	✓	✓
Who	Nai	✓	
When	Siapanna	✓	✓
Why	Anggapa	✓	✓
How much/many	Sikura	✓	✓
How	Antekamma	✓	✓
(From) where	Battukamae	✓	✓
Where (to)	Kemae	✓	✓
(With) who	Surangki nai	✓	✓
Tag question	to		✓

Certain question words in ML can serve as both specifiers and complements, although there exists a distinction between them. When these question words are positioned at the beginning of a sentence, they are initially considered specifiers. For instance, the question word *nai* ‘who’ which inquires about the subject always acts as a specifier. In ML, *nai* ‘who’ cannot function as a complement since it cannot be placed at the end of a phrase. The structure of question words in ML governing the function of specifiers is demonstrated below.



At the conclusion of a phrase, it assumes the role of a complement in the latter instance. The entire construction of an interrogative sentence adheres to a singular grammatical representation, which is that of a complement. An illustration of this can be seen in the question word *apa* meaning ‘what’. It functions as a specifier in the structure *apa katte erang?* meaning ‘What do you bring?’. Conversely, it serves as a complement in the structure *katte erang apa?* meaning ‘What do you bring?’. However, certain question words can solely be found in question words that function as complements or specifiers, such as outlined in Table 1. The structure stated below pertains to a question word functioning as a complement positioned after the subject.



## 5. DISCUSSION

The first discussion is coming from the research of Celle (2023) who focuses on interrogative what in English and its counterparts in French - *qu'est-ce que* and *quoi*. It is argued that the negative inference associated with surprise is conveyed through different means in English and in French, which has repercussions on the type of expressivity. In English, the value of the wh-

phrase may be modified with the intensifier *the hell*, which has no real equivalent in French. In French, two constructions are possible, involving either the complementiser *qu'est-ce que* or the *in situ* construction *c'est quoi* followed by a right dislocation (*ce + N*). In either case, the surprise reading results from a combination of syntactic and semantic factors. In constructions in which there is *wh*-movement out of an embedded clause, there is a *uWh* feature in a non-interrogative *C* that hosts a *wh*-phrase (Fong & Ginsburg, 2023, p. 7). Therefore, Mukramah & Mulyadi (2022) also discovered that the complement and complement fall under the functional category of question words. Both closed and open interrogative constructions function as complements. In contrast, transitive verbs in Lasi agree with subjects in terms of number, gender, and person in the present and future tenses, but not in the past (Azam et al., 2022, p. 37). In Lasi, the inflection of transitive and intransitive verbs in present simple tense is completely consistent with their subjects in tense, number, gender, and person (Ali et al., 2021, p. 355). Then, Azam et al. (2022) found that intransitive verbs agree with their subjects in the past tense. English verbs agree with their subjects in the present simple tense, but the past and future tense inflections are identical. In terms of syntax, Rafat (2022) investigates the fixed placement of certain adverbial words within a clause to emphasize the diverse functions of adjuncts and complement phrases. It also emphasized the importance of adverbial and prepositional terms in establishing the character's perspective, attributes, and worldly characteristics. He also observed that adverbial placement rules are applied to the narrative's sentences, revealing that changes in a few adverbial terms can render the phrase ungrammatical (Rafat, 2022, p. 27).

In Italian, *'Do a van-u?* means 'Where are they going?'. Therefore, *do* needs to be adjacent to the inflected verb, and therefore cannot cooccur with a vocalic subject clitic and cannot introduce an embedded interrogative in co-occurrence with the complementizer (Munaro & Poletto, 2023, p. 7). In terms of interrogative syntactic structure, the Makassar inquiry sentence form serves several unique and complimentary tasks. Makassar question words can be formed using specifiers and complements. The CP/Complementizer Phrase has the highest degree of projection in this sentence form. The Makassar inquiry phrase, which serves as a specifier, has a structure in which the question word is put on the *C* branch with the *IP*, resulting in *CP*. As a result, it may be represented using the rule *QW + NP + Predicate + Object (optional)*. Responding to that, Corbeanu & Geană (2024) examine the grammar of interrogative sentences in Istro-Romanian. The goal is to define the parametric settings for *V-to-C*, subject placement (*SVO* or *VSO*), and the objective for component movement under discourse triggers. The results show that Istro-Romanian kept the parametric settings of Old Romanian, particularly those that converged with the parametric settings of Croatian grammar. *SVO*, in instance, can only be explained by inheritance, but *VSO*, a lack of *V-to-C*, and scrambling are the result of both inheritance and Croatian convergence. Taking into consideration simply prevailing word ordering ignores the fact that German is highly flexible. *VSO* order is seen in in subordinate and interrogative phrases, and there is a large body of work on the triggers of *OVS* order, which include given/new status, definiteness, duration, and argument animacy (Walker & Faghiri, 2023, p. 3). Furthermore, Corbeanu & Geană (2024) then provides examples of instability in Istro-Romanian grammar in terms of word order in *wh*-interrogative clauses, in root and subordinated contexts. There is no *V-to-C* transition in interrogative sentences in Istro-Romanian. This was an unproductive alternative in Old Romanian, and it became the norm in Istro-Romanian, possibly due to the influence of Croatian, which also lacks *V-to-C*. Then, the parametric option for word order is also unstable, since Istro-Romanian shows both true *SVO* and *VSO*. our is a common characteristic of our grammar; interrogatives are no exception. The preference for *SVO* has

been observed in adjunct interrogatives. This unstable parameter was inherited from Old Romanian and has been retained as such. Thus, discourse triggers in interrogative phrases cause constituents to scramble inside the TP field. This is a non-argumental position that can be used with any constituent. The similar form of scrambling was used in Old Romanian during the population split and has been retained in Istro-Romanian, most likely because scrambling is equally fruitful in Croatian (Corbeanu & Geană, 2024, p. 1-2).

In Makassar Language, interrogative words can be used as specifiers. Before digging deeper, this section will explain how to change a declarative phrase into an interrogative one using wh-words. Furthermore, both languages signal the usage of Yes/No or WH-questions; but, in English, WH-words shift to the beginning of a phrase, just like auxiliary verbs, whereas in Rigwe, they might be at the beginning or end of a sentence. The closed interrogative construction and open interrogative construction occupy the complement's function as an interrogative construction in Acehese (Mukramah & Mulyadi, 2022, p. 13). As a result, the meaning is inclusive in positive sentences but exclusive in interrogative and negated clauses (Granath, 2023, p. 89). There are also common homogenous categories that correspond to auxiliaries (73% of the fourth most common induced preterminal and 89% of the seventh most common), common nouns (91% of the fifth most common induced preterminal and 96% of the thirteenth most common), interrogative pronouns (84% of the eighth most common preterminal), prepositions (80% of the ninth most common preterminal), and others (Jin et al., 2021, p. 204). Thus, learning a second language can be challenging especially when the structural rules of the original language differ from those of the target language.

## 6. CONCLUSION

Research findings indicate that the Makassar inquiry sentence form serves specific and complementary purposes. By employing specifiers and complements, Makassar question words can be constructed. The highest level of projection in this sentence structure is the CP/Complementizer Phrase. The Makassar inquiry sentence, functioning as a specifier, exhibits a structure where the question word is positioned on the C branch alongside the IP to form CP. Consequently, it can be described using the rule QW + NP + Predicate + Object (optional). On the other hand, interrogative sentences function as complements. The distinction lies in the placement of the question word, which is situated within the IP derivative. As a complementary function, question words that necessitate an answer after the subject can generate the following structure: NP + Predicate + QW. Every interrogative sentence must conclude with a question mark. The utilization of question words holds great significance in a sentence as the statement would be grammatically incorrect without them. Given the limitations of the scope explored by researchers, future studies should delve into further investigations regarding the construction of various other forms of interrogative sentences in the Makassar language.

## 7. REFERENCES

- Adiantika, H. N. (2020). Contrastive Analysis between Indonesian and English Declarative Sentences. *ELT in Focus*, 3(1), 15–25. <https://doi.org/10.35706/eltinf.v3i1.3695>
- Al-Enezi, A. S. (2018). The Constraints Governing Multiple Wh-Questions in Kuwaiti Arabic: A Syntactic Study. *Advances in Language and Literary Studies*, 9(4), 8–12. <https://doi.org/10.7575/aiac.all.v.9n.4p.8>
- Ali, Z., Azam, M., Asadullah, & Zafarullah. (2021). A morphological analysis of transitive and

- intransitive verbs in Lasi. *Harf-o-Sukhan*, 5(3), 346–356. <https://www.harf-o-sukhan.com/index.php/Harf-o-sukhan/article/view/449>
- Azam, M., Ali, Z., & Shahida. (2022). Subject-Verb Agreement in Lasi and English: A Morphosyntactic Analysis. *Global Language Review*, VII(II), 37–54. [https://doi.org/10.31703/blr.2022\(vii-ii\).04](https://doi.org/10.31703/blr.2022(vii-ii).04)
- Bello, I. M. (2021). A study of grammatical case forms and their directionality in fulfulde: The transformational generative approach. *RUDN Journal of Language Studies, Semiotics and Semantics*, 12(2), 514–525. <https://doi.org/10.22363/2313-2299-2021-12-2-514-525>
- Carnie, A. (2006). *Syntax A Generative Introduction 2nd Edition*. Blackwell Publishing.
- Celle, A. (2023). Surprise questions in English and French. *Open Linguistics*, 9(1), 1–17. <https://doi.org/10.1515/opli-2022-0261>
- Chomsky, N. (1993). *A Minimalist Program for Linguistic Theory (The view from Building)* (Hale and K). MIT Press.
- Cook, V. J. (1996). *Chomsky's Universal Grammar: An introduction* (Second). Blackwell Publishers Ltd.
- Corbeanu, R. C., & Geană, I. (2024). Wh-Interrogative Clauses in Istro-Romanian. *Languages*, 9(64), 1–10.
- Cox, R. (2020). Bromberger on the syntax of why-interrogatives. *Lingua*, 247.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.)*. Sage Publications Ltd.
- Divany, A., Sihotang, Z. S., Tambunan, R. L., Zahara, K., Ismahani, S., Fadhillah, Y., Fauziah, H. A., & Hafiz, M. (2024). Sentence Analysis in Syntax. *Jurnal Pendidikan Tambusai*, 8(1), 2032–2037.
- Ermolaeva, M. (2023). Evaluating syntactic proposals using minimalist grammars and minimum description length. *Journal of Language Modelling*, 11(1), 67–119. <https://doi.org/10.15398/jlm.v11i1.334>
- Fitriyani, D. Z., & Mulyadi. (2017). Interrogative Sentence in Minangkabau Language: X-Bar Theory. *RETORIKA: Jurnal Ilmu Bahasa*, 3(1), 188–200. <https://doi.org/10.22225/jr.3.1.229.188-200>
- Fong, S., & Ginsburg, J. (2023). On the computational modeling of English relative clauses. *Open Linguistics*, 9(1), 1–35. <https://doi.org/10.1515/opli-2022-0246>
- Gapur, A., & Pujiono, M. (2018). Konstruksi Interogatif Polar Dalam Bahasa Jepang. *Ranah: Jurnal Kajian Bahasa*, 7(1), 1–15. <https://doi.org/10.26499/rnh.v7i1.477>
- Granath, S. (2023). The Syntax and Semantics of the Double-faced Prepositions besides and beyond. *NJES Nordic Journal of English Studies*, 22(2), 81–100. <https://doi.org/10.35360/njes.819>
- Haegeman, L. (1994). *Introduction to Government and Binding Theory*. Blackwell Publishers Ltd.
- Hassanein, H. (2021). Oppositions in Arabic Proverbs: A Lexicosyntactic Perspective. *GEMA Online Journal of Language Studies*, 21(4), 1–20. <https://doi.org/10.17576/gema-2021-2104-01>
- Imamah, F. Z., & Subiyanto, A. (2021). The Translation Text of Drama “Macbeth”: Grammatical Transformation of Adjunct in Noun Phrase. *Jurnal Ilmiah Lingua Idea*, 12(2), 196–206. <https://doi.org/10.20884/1.jli.2021.12.2.2762>
- Isac, D. (2024). Daco-Romanian Definite DPs at the Syntax-Phonology Interface. *Languages*, 9(67), 1–27. <https://doi.org/10.3390/languages9030067>

- Jin, L., Schwartz, L., Doshi-Velez, F., Miller, T., & Schuler, W. (2021). Depth-bounded statistical pcf induction as a model of human grammar acquisition. *Computational Linguistics*, 47(1), 181-216. [https://doi.org/10.1162/COLI\\_a\\_00399](https://doi.org/10.1162/COLI_a_00399)
- Kaneko, M. (2024). Two past forms inducing conjectural or non-intrusive questions. *Open Linguistics*, 10(1), 1-22. <https://doi.org/10.1515/opli-2022-0274>
- Kato, Y. (2023). Puzzles in exploratory practice: The role of why questions. *Language Teaching Research*, 1-24. <https://doi.org/10.1177/13621688231220447>
- Mayasari, M., & Mulyadi, M. (2020). Question Words in the Interrogative Construction in Javanese: in X-Bar Theory. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 4(1), 145-152. <https://doi.org/10.30743/ll.v4i1.2217>
- Morley, D. G. (2000). *Syntax in Functional Grammar (An Introduction to Lexicon grammar in Systemic Linguistic)*. Paston Pre Press Ltd.
- Mukramah, M., & Mulyadi, M. (2022). Konstruksi Interogatif dalam Bahasa Aceh: Teori X-Bar. *Ranah: Jurnal Kajian Bahasa*, 11(1), 13-25. <https://doi.org/10.26499/rnh.v11i1.2114>
- Munaro, N., & Poletto, C. (2023). Towards a Typology of wh-Doubling in Northern Italian Dialects. *Languages*, 8(24), 1-25. <https://doi.org/10.3390/languages8010024>
- Muthalib, K. A., Rahmah, S., & Aziz, Z. A. (2022). Acehese Lexical and Grammatical Collocations of the North Aceh Dialect. *Studies in English Language and Education*, 9(2), 832-850. <https://doi.org/10.24815/siele.v9i2.22680>
- Nurmala, D., & Mulyadi. (2022). Interrogative Construction in Javanese: X-Bar Theory Analysis. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 5(2), 186-196. <https://doi.org/10.33258/birle.v5i21.5389>
- Pasaribu, G. R., & Mulyadi. (2023). Malay Interrogative Sentences: X-Bar Analysis. *RETORIKA: Jurnal Ilmu Bahasa*, 9(1), 43-53. <https://doi.org/10.55637/jr.9.1.6191.43-53>
- Paul, I., & Potsdam, E. (2024). Malagasy framing demonstratives and the syntax of doubling. *Glossa: A Journal of General Linguistics*, 9(1), 1-37. <https://doi.org/10.16995/glossa.9794>
- Rafat, M. (2022). Inner Dynamics of Syntax in Mohsin Hamid's "Of Windows and Doors" and "A Beheading." *Literature and Linguistics Journal*, 1(1), 27-41.
- Sa'adiyah, E. N., & Reztia, D. (2019). A Syntactical Analysis of Simple Sentences in Kembang Babur. *Premise: Journal of English Education*, 8(2), 163-175. <https://doi.org/10.24127/pj.v8i2.2112>
- Sneddon, J. N. (1996). *Indonesian: A Comprehensive Grammar*. Routledge.
- Trinh, T., & Bassi, I. (2023). Excursive questions. *Open Linguistics*, 9(1), 1-13. <https://doi.org/10.1515/opli-2022-0232>
- Udoeyo, U. I., & Enang, V. S. (2018). Wh-Question Formation in Èkìd. *ERUDITE (Journal of Linguistics and Languages)*, 3(1), 57-69.
- Uktolseja, L. J., Sujaja, H., & Matinahoru, M. F. (2019). A Contrastive Analysis Between English and Indonesian Kinds of Sentences. *IJET (Indonesian Journal of English Teaching)*, 8(1), 54-61. <https://doi.org/10.15642/ijet2.2019.8.1.54-61>
- Valentino, Y. B. (2023). English for Business and Professional Communication: A Syntactic Ambiguity Analysis of a Study Program's Name. *International Journal of Humanity Studies*, 7(1), 53-71.
- Van Eecke, P., Nevens, J., & Beuls, K. (2022). Neural heuristics for scaling constructional language processing. *Journal of Language Modelling*, 10(2), 287-314. <https://doi.org/10.15398/jlm.v10i2.318>
- Van Valin, R. J. (2004). *An Introduction to Syntax*. Cambridge University Press.

*Aisyah Tiara Rahmah, Agus Subiyanto*

- Walker, K., & Faghiri, P. (2023). Introduction to Lexical constraints in grammar: Minority verb classes and restricted alternations. *Open Linguistics*, 9(1), 1-12. <https://doi.org/10.1515/opli-2022-0271>
- Wittaningsih, A. (2018). English Passive Voice: An X-Bar Theory Analysis. *Indonesian Journal of English Language Studies (IJELS)*, 4(2), 68-75. <https://doi.org/10.24071/ijels.v4i2.2305>