

CHAPTER I

INTRODUCTION

1.1 Background of the Study

A simple sentence in English at least has a clause, with a subject and a verb. A minimum linguistic unit which is used to fulfill a proposition is a clause. A clause at least consists of a subject and a verb. According to Quirk (1985: 719), a simple sentence consists of a single independent clause. In other words, a simple sentence consists of a single clause and a single clause consists of at least a subject and a verb. A subject can be occupied by a NP, and the verb is occupied by a VP. If the NP stands by itself, it will not exemplify a complete proposition, and so does the VP. Although the VP can stand itself within an imperative mood of a sentence, like “get out of here”, it is implied that the subject is you. In relation to the previous clause, the concept is that a complete meaningful proposition can be conveyed by a single clause.

Proposition can also consist of more than one clause, which can be connected by a conjunction. In relation to the conjunction, connected clauses is a scope of coordination or subordination. Coordination is associated with compound sentences. In relation with coordinators, there are several units that behave similarly, including conjunct and subordinator. However, in general there are two types of coordinators, syndetic and asyndetic coordinators, and these are the indicators which classify the type of compound sentence.

Compound sentences can vary depends on what connects the clauses and how they are connected. Based on Greenbaum & Nelson (2002:125) Compound

sentence is a multiple sentence that contains one or more clauses (structures that can be analyzed elements such as subject and predicate). According to Quirk (1985), compound sentence has two or more main clauses, each with independent status. As compound sentence has more than one clause, it is important to provide understanding about how these units are connected. Moreover, each clause also has smaller units which can have different syntactic category. Therefore, it is necessary to provide an understanding of the constituent structure of each clause.

Each clause consists of smaller units including phrases and words. It is necessary to identify the structure. According to Kroeger (2005:38), an important part of analyzing the grammatical structure of a sentence is to identify the constituent parts from which the sentence is formed and the order in which these constituents occur. In other words, it is necessary to provide information from the smallest unit within the constituent, including word class, phrasal unit, and how these units are connected. However, based on Carnie (1992), constituent structure refers to the hierarchical word and phrase arrangement of sentences. It describes how sentences are constructed into nested parts or components rather than being merely linear string of words.

The realization of linguistic theory is reflected on the real use of language, including spoken and written form of language. One of the written forms of language is articles. The current issue which updates is economy, and one of them is cryptocurrency. Information related to cryptocurrency can be obtained from CoinDesk platform.

CoinDesk is an award-winning media outlet covering the cryptocurrency industry. While previous studies have examined coordination in diverse contexts. For example, Krismayanti et al. (2024) found a predominance of *and* in Wattpad narratives, while Budiarta et al. (2024) reported similar patterns in CBS News articles. Other works have analyzed coordination in literary texts (Winarta et al., 2022; Pertiwi et al., 2022). Wiguna (2021), meanwhile, identified syndetic, asyndetic, and combined coordination in TripAdvisor reviews, highlighting its role even in informal online discourse. Collectively, these studies confirm the value of coordination analysis in enhancing clarity and coherence, showing that compound sentences contribute to effective communication across various written genres. However, studies specifically focusing on compound sentences in financial news articles about cryptocurrency, particularly in CoinDesk articles are still limited.

Compound sentences are commonly used in CoinDesk articles to connect multiple ideas clearly and logically. The platform consistently delivers informative and formal content, such as explaining market trends, regulatory changes, or technical aspects of blockchain in a single, coherent statement, making it an ideal context for syntactic analysis. Since financial and technical news requires both detailed explanations and readability, CoinDesk's use of compound sentences helps convey cause-and-effect relationships, contrasts, and in-depth analysis without oversimplifying complex information. In this context, compound sentences play an important role because they enable journalists to connect related ideas, such as causes and effects, comparisons, or simultaneous events, within a single coherent structure. By coordinating independent clauses, compound sentences help maintain

logical flow and informational depth without fragmenting the text into too many short sentences. This makes them particularly suitable for financial and cryptocurrency reporting, where accuracy, clarity, and efficiency of information delivery are essential.

1.2 Problems of the Study

Based on the background of the study, the problems of the study are formulated as follows.

1. What types of compound sentences are found in CoinDesk articles?
2. How is the constituent structure of compound sentences found in CoinDesk articles?

1.3 Objectives of the Study

In accordance with the problems of the study, the objectives of the study are presented as follows.

1. To identify the types of compound sentences in CoinDesk articles.
2. To analyze the constituent structure of compound sentences found in CoinDesk articles.

1.4 Limitation of the Study

The scope of the study involves the types of compound sentences found in CoinDesk articles and the constituent structure of the cited sentences. The data are limited to 38 articles published from May to June 2025. The discussion involves

the framework of Quirk (1985) in regards to the compound sentence and the framework of Kroeger (2005) about the constituent structure of the cited sentences.

1.5 Significance of the Study

This study is expected to contribute both theoretically and practically to the study of English syntax, particularly in the analysis of complex sentences and their constituent structures. The significance of this study is divided into two parts: theoretical significance and practical significance.

1.5.1 Theoretical Significance

This study is expected to provide better understanding related to the topic of compound sentences and their constituent structure. Moreover, it is aimed at facilitating theoretical explanation to the audiences who read the news.

1.5.2 Practical Significance

Moreover, it is also expected to provide a reference for the other students who were seeking for a topic of study. Moreover, it is become tool for students to gain deeper understanding of compound sentence and the constituent structure, especially in journalistic writing.

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CHAPTER II

REVIEW OF RELATED LITERATURE, CONCEPTS AND THEORIES

This chapter consists of several previous studies which have some correlation with current undergraduate thesis. Moreover, the concept and theories which are become the framework of this undergraduate thesis is provided within this chapter.

2.1 Review of Related Literature

Several studies are reviewed in order to provide insight in relation with current study. Moreover, it is also necessary to identify gap among studies. Within this undergraduate thesis proposal, there are three journal articles and two undergraduate theses which have been presented within this following review.

There are some previous studies that related to the topic of this study. The first study was conducted by Pradevi & Maharani (2024), entitled “*Construction of Compound Sentence Phenomenon in Agoda.com Reviews.*” That study aimed to analyze the coordination and constituent structure of compound sentences in Agoda.com reviews of The Apurva Kempinski Bali (April–July 2024). The data were analyzed using observation and qualitative descriptive methods. The study applied theories from Quirk and Greenbaum (1973) to analyze the types of coordination in compound sentences and from Brown and Miller (1991) to analyze tree diagram structures. The researchers identified three coordination types: syndetic, asyndetic, and mixed. Of 40 compound sentences, 21 were syndetic, 15 asyndetic, and 4 mixed, indicating that syndetic coordination was the most dominant. Both studies focus on syntax as the topic of the study. The previous study

is focused on analyzing the coordination and constituent structure of compound sentences, while this study is focused on analyzing the types and constituent structure of compound sentences. The previous study used theories proposed by Quirk and Greenbaum (1973) and Brown Miller (1991) while this study is used Quirk (1985) and Kroeger (2005) as the theories of the study. The data source of the previous study used Agoda.com reviews of The Apurva Kempinski Bali while this study is used CoinDesk articles as the data source of the study.

The second study was conducted by Agus et al. (2024) and is entitled “*The Syntactical Analysis of Compound Sentences Found in Crazy Rich Asians Novel.*” This research aimed to analyze the types and constituent structures of compound sentences found in the novel. The study employed a qualitative method and utilized theories from Oshima and Hogue (1998) for sentence types and Brown and Miller (1991) for tree diagram analysis. A total of 38 compound sentences were identified and categorized into three types: those connected by coordinating conjunctions, conjunctive adverbs, and semicolons/commas. The findings revealed that coordinating conjunctions were the most commonly used. This study is relevant to the current research as both analyze the types and constituent structures of compound sentences. The data source of the previous study used a novel entitled “Crazy Rich Asians” while this study use CoinDesk articles as the data source of the study. The previous study used theories proposed by Oshima and Hogue (1998) and Brown Miller (1991) while this study is used Quirk (1985) and Kroeger (2005) as the theories of the study.

Safitri and Utami (2023) wrote a research entitled “*the Study of the Compound Sentence Structure in The Ephemeral: Breeder.*” This research aimed to analyze the base structure of compound sentences in the Wattpad story *The Ephemeral: Breeder*, using tree diagram analysis. Data were collected through observation, and a qualitative method was used to describe the base sentences in compound structures. The study employed theories from Moeller (2021) to analyze base sentences and from Brown and Miller (1991) for constituent structures via tree diagrams. The researchers identified 88 data points across 13 selected chapters. Coordinating conjunctions were the most commonly used in compound sentences. Both this and the current study focus on syntax as the topic of the study. The previous study focused on analyzing base structure and constituent structure of compound sentences while this study is focused on analyzing the types and constituent structure of compound sentences. The previous study used theories proposed by Moeller (2021) and Brown Miller (1991) while this study is used Quirk (1985) and Kroeger (2005) as the theories of the study. The data source of the previous study used Wattpad story entitled “*The Ephemeral: Breeder*” while this study is used CoinDesk articles as the data source of the study.

The fourth study was conducted by Krismayanti (2022) and is titled “*A Syntactical Analysis of Compound Sentences Found in The Bucket List Story on Wattpad by Neve Adams.*” This study aimed to identify the types of coordination and analyze the constituent structures of compound sentences. A qualitative method was used, with theories from Quirk and Greenbaum (1973) on coordination types and Brown and Miller (1991) on constituent structure through tree diagrams. The

analysis revealed 110 compound sentences: 78 syndetic (marked by *and*, *but*, *or*, and *so*), 24 asyndetic (using commas and semicolons), and 9 mixed. The structure most commonly observed was $S = \text{Leftmost } S + \text{Coordinator} + \text{Rightmost } S$, with occurrences of ellipsis involving nouns, verbs, and auxiliaries. This study is relevant to the current research as both focus on syntax, specifically the types of coordination and constituent structures in compound sentences. However, the previous study used a Wattpad story as data, while the current research is used CoinDesk articles. The theoretical frameworks differ as well.

Datu (2024) also analysed compound sentences in his research entitled *“Compound Sentences Found in an Article Entitled ‘Titanic.’”* The study aimed to examine the use of coordinating conjunctions in sentences related to the Titanic, sourced from Britannica.com. It focused on identifying and categorizing various types of coordination in compound sentences. The qualitative method was used, and the analysis was based on theories by Quirk and Greenbaum (1973) on coordination and Brown and Miller (1991) on constituent structure. The dataset included 49 compound sentences categorized into syndetic, asyndetic, and mixed types. Syndetic coordination was the most prevalent, with 26 instances—“and” appeared in 21 instances, “but” in 4, and “so” in 1. Asyndetic coordination accounted for 17 instances, primarily using commas (14) and semicolons (3). The remaining 6 sentences demonstrated mixed coordination. The findings show a flexible and nuanced use of conjunctions in discussing historical events like the Titanic. This previous study and the current one both analyze coordination types and constituent structures. However, they differ in data sources and theoretical frameworks. The

former used a Britannica article on the Titanic, while the current study is used CoinDesk articles. Additionally, the current study is employed theories from Quirk (1985) and Kroeger (2005).

Based on those literature review, the current study tried to identify the types of compound sentence and how the constituent structure is operated within the coordinated clauses. There are several framework which were adopted within the previous studies, and those are in line with the current study; however, there are some differences in terms of data source, method, and even the theoretical framework as well.

2.2 Concept

The concept within this study consists of four terms, including clause, sentence, compound sentence, and sentence structure. The following sections are provided in order to provide information about each term.

2.2.1 Sentence

Sentences are either simple or multiple. According to Quirk (1985: 719), a simple sentence consists of a single independent clause. In other words, a simple sentence consists of a single clause and a single clause consists of at least a subject and a verb. On the other hand, a multiple sentence consists of one or more clause considered as its immediate constituents. Multiple sentences are considered either compound or complex. In a compound sentence, the immediate constituents are two or more coordinate clauses. In a complex sentence, one or more of its elements, such as direct object or adverbial, are realized by a subordinate clause

2.2.2 Compound Sentence

According to Quirk (1985: 987), the major types of multiple sentences are the compound and the complex sentence. A compound sentence consists of two or more coordinated main clauses. In other words, a multiple sentence contains more than one clause, and the two main types are compound and complex sentences. A compound sentence consists of two or more coordinated main clauses, where each clause can stand alone as a complete thought but is linked to express a relationship. These clauses are usually connected by coordinating conjunctions or punctuation such as a semicolon. Compound sentences enhance writing by creating smooth connections between ideas, improving clarity and coherence while avoiding choppy sentence structures.

Instead of directly going into the terms compound and complex, Kroeger (2005:218) stated that there are two basic ways in which one clause can be embedded within another: coordination vs. subordination. A coordinate structure (here compound sentence) is defined as two constituents belonging to the same category which are conjoined to form another constituent of that category. Conceptually, it has the same understanding.

2.2.3 CoinDesk Articles

CoinDesk is an award-winning media outlet covering the cryptocurrency industry. It emphasizes the editorial independence and integrity of its journalism, stating that CoinDesk follows strict editorial policies to ensure unbiased reporting. The text also mentions that CoinDesk is part of the Bullish group, which invests in

digital asset businesses and that CoinDesk employees, including journalists, may receive equity-based compensation from Bullish. Additionally, it notes that Bullish was incubated by Block.one, a technology investor.

2.3 Theories

The theory that are applied as a framework in mapping the problems of the study is presented in following sections. In order to classify the types or categories of the compound sentences, understanding related to compound sentence from Quirk (1985) is adopted; moreover, in order to map the constituent structure of the compound sentence, the framework of constituent structure of Kroeger (2005) is presented as follows.

2.3.1 Clause

Kroeger (2005:32) defines a clause as one very important unit, which is sometimes defined as a “simple sentence.” In other words, an easier way to understand the definition would be to say that a clause is the smallest grammatical unit which can express a complete proposition. This understanding identifies each property and relationship among properties within a clause. Moreover, the element of meaning which identifies the property or relationship is called the predicate. On the other hand, the individuals (or participants) of whom the property or relationship is claimed to be true are called arguments. In short it is possible to conclude that referred grammatical unit which express a single predicate and its arguments is defined as a simple sentence, or clause.

Sentences are either simple or multiple. According to Quirk (1985: 719), a simple sentence consists of a single independent clause. In other words, a simple sentence consists of a single clause and a single clause consists of at least a subject and a verb. On the other hand, a multiple sentence contains one or more clauses as its immediate constituents. Meanwhile, multiple sentences can be either compound or complex. The immediate constituents in compound sentences are two or more coordinated clauses. However, in a complex sentence, one or more of its elements, such as direct object or adverbial, are realized by a subordinate clause

2.3.2 Compound Sentence

Before knowing the definition of compound sentence, it is necessary to recognize that there is another type of sentence, complex sentence. The major types of multiple sentences are compound and complex sentences. According to Quirk and (1985:987), compound sentence consists of two or more coordinated main clauses. Meanwhile, a complex sentence is similar to a simple sentence in which it consists of only one main clause, but unlike a simple sentence it has one or more subordinate clauses which function as an element of the sentence. In relation with Kroeger's definition regarding coordinate clauses and subordinate clause, it is in line that compound sentence in Quirk (1985) is also classified based on its coordinator or the coordination relationship between clauses.

2.3.3 Syndetic and Asyndetic Coordination

Quirk (1985:918) classifies coordination as syndetic coordination (linked) and asyndetic coordination (unlinked). In other words, it clearly provides information

that syndetic has overt coordinator and asyndetic does not. Moreover, syndetic coordination is indicated by overt signals of coordination, such as *and*, *or*, *but*. Furthermore, syndetic coordination is the more usual form. Therefore, it is possible to exemplify coordination with a presence of coordinator. On the other hand, asyndetic coordination is not overly marked.

(2-1) *John plays the guitar, and his sister plays the piano*

(Quirk, 1985:921)

This sentence exemplifies syndetic coordination. This grammatical structure joins two independent clauses "*John plays the guitar*" and "*his sister plays the piano*" using the coordinating conjunction "*and*." The "*and*" clarifies the relationship between the clauses.

(2-2) *He tried hard, but he failed*

(Quirk, 1985:921)

This sentence connects two independent clauses, "*He tried hard*" and "*he failed*," using the coordinating conjunction "*but*." The conjunction "*but*" indicates a contrasting relationship between the clauses.

(2-3) *They are living in England, or they are spending a vacation there*

(Quirk, 1985:921)

The grammatical structures join two independent clauses "*They are living in England*" and "*they are spending a vacation there*,". These clauses are joined by the coordinating conjunction "*or*," which indicates a choice. The use of "*or*" to connect clauses is a defining characteristic of syndetic coordination in this compound sentence.

(2-4) *John plays the guitar, his sister plays the piano*

(Quirk, 1985:921)

The sentence "*John plays the guitar, his sister plays the piano*" is an example of asyndetic coordination, where two independent clauses are joined without a connecting conjunction like "and" or "but".

2.3.4 Coordination and Subordination

It is necessary to highlight that the scope of this study is only to identify compound sentence which is connected by coordinator(s). However, discussing coordinator is associated with subordinators; therefore, there would be a little discussion regarding subordination within this section.

2.3.4.1 Coordinators

This sub chapter consists of explanation about coordinators, and there are also some samples provided in order to present a clear understanding related to coordinators.

(2-5) *He tried hard, but he failed*

(2-6) *Although he tried hard, he failed*

(Quirk, 1985:921)

These samples provide information about how coordination and subordination is distinguished. The sentence (2-6) shows that the information in a subordinate clause, *although he tried hard*, is placed in the background with respect to the superordinate clause, *he failed*. Both samples illustrate concessive relationship between clauses. However, the position (syntactically) in (2-6) displays an information of subordinate clause as a background. On the other hand, both clauses in (2-5) have same hierarchical position.

A + conjunction + B = B + conjunction + A

According to Quirk (1985: 920), it is sometimes said that an important difference between coordination and subordination is that only in the former case can the relation between the two linguistic units be reversed without a change of meaning. However, in identifying coordinator among other connectors (conjunct, and subordinate) it is important to recognize a gradient which becomes the indicators classifying each. Within this framework, it is regarded that these conjunctions are clear coordinators: *and*, *or*, and *but*. *And* and *or* are central coordinators, but *but* differs from them in some respects. On the gradient between 'pure' coordinators and 'pure' subordinators are *for* and *so that* (meaning 'with the result that'). There is also a gradient relating coordinators to conjuncts: for example, *yet* and *so* are two words which we shall classify as conjuncts, but which nevertheless resemble coordinators in some respects.

The table displays the gradient from the central coordinators *and* and *or* to subordinators like *if* and *because*, with *but*, *for*, and *so that* on the gradient. The conjuncts *yet*, *so*, and *nor* are added to the table, because, as we have seen, they in some respects resemble coordinators. If an item satisfies a criterion, this is indicated by a '+' in the relevant cell. If it fails to satisfy the criterion, '-' is entered. The combination '+' takes care of cases, where the item satisfies the criterion only under certain conditions. The six criteria to be applied to each item are:

- a) It is immobile in front of its clause.

- b) A clause beginning with it is sequentially fixed in relation to the previous clause, and hence cannot be moved to a position in front of that clause.
- c) It does not allow a conjunction to precede it.
- d) It links not only clauses, but predicates and other clause constituents
- e) It can link subordinate clauses.
- f) It can link more than two clauses, and when it does so all but the final instance of the linking item can be omitted.

Tabel 2. 1 Coordination - conjunct-subordination gradients

		(a)	(b)	(c)	(d)	(e)	(f)
Coordinators	And, or	+	+	+	+	+	+
	But	+	+	+	+	±	-
Conjuncts	Yet, so, nor	+	+	x	+	-	-
	However, therefore	-	+	-	-	-	-
Subordinators	For, so that	+	+	+	-	-	-
	If, because	+	±	-	-	-	-

This section will provide information about linguistic evidence used to identify constituents (group of words) and categories as it is necessary when representing the group of words and its order within a 'tree' diagram. According to Kroeger

(2005:38), an important part of analyzing the grammatical structure of a sentence is to identify the constituent parts from which the sentence is formed and the order in which these constituents occur. The words within a phrase or sentence are organized into sub-groups (or constituents), and that these group-ings are often crucial in determining what the sentence means. Once the fact a practical question which arises is accepted, namely how are we to identify these significant sub-groups.

2.3.5 Constituent Structure

Instead of using the term of sentence structure, it is more appropriate to use the term constituent structure. According to Kroeger (2005:38), an important part of analyzing the grammatical structure of a sentence is to identify the constituent parts from which the sentence is formed and the order in which these constituents occur. In other words, it is necessary to provide information from the smallest unit within the constituent, including word class, phrasal unit, and how these units are connected.

Before moving deeper into constituent structure, it is necessary to provide the definition or the conception of the constituent and any partial or smaller units inside the constituent. The words of any language can be classified according to their grammatical properties, and these classes are usually referred or termed as parts of speech (noun, verb, etc.); however, it is also possible to refer to them as syntactic categories. To describe constituent order and word order, it is important to refer to syntactic categories to list possible combinations of particular words. Furthermore,

the words in a sentence are not organized as a simple list as words clustered together to form groups of various sizes, and these groups are referred to as constituents.

2.3.5.1 Hierarchy (Clause, Phrase, and Words)

Kroeger (2005: 32) states that a clause is the smallest grammatical unit which can express a complete proposition. The grammatical unit which expresses a single predicate and its arguments is called a simple sentence, or clause. Moreover, it also presented that the important elements of a clause are: (i) a word (frequently a verb) expressing the predicate; and (ii) phrases expressing the appropriate number and type of arguments for that predicate. Dixon (2010:4) describes a clause as a unit which involves a predicate and a number of core arguments. In other words, the predicate is the head or the centre of the clause. Moreover, the ways in which words are joined together, to form a clause, is generally called syntax. In relation to this, it is important to underscore that predicate is an obligatory within the clause. In short, it is easier to describe that a clause consists of phrases, and a phrase consists of words.

(2-7) *[The coach's wife] introduced [her little sister] [to [the captain [of [the football team]]]]]*

(Kroeger,2005:32)

According to Kroeger (2005: 38), the sentence (2-7) illustrates how a sentence consists of a single clause consisting of several phrases. The noun phrases or constituents are highlighted in order to identify them easier. However, it does not end with the phrasal unit as it is also necessary to provide information about the category of each word or each phrase (e.g. noun, verb, adjective, adverb, etc.).

Analyzing sentence structure requires identifying the constituent parts from which the sentence is formed and the order in which these constituents occur. Simple sentences can be described verbally, but for complex sentences this approach rapidly proves to be inadequate. A hierarchical approach is necessary because larger constituents are made up of smaller ones. Tree diagrams are a common method for representing this hierarchical structure, showing constituents and their linear order. (2-8) provides a sample of a simple tree diagram, and this tree consists of three nodes, in which the top-most node, *A* is the mother of the two lower nodes, *B* and *C*. *B* and *C* are daughters of the same mother, and so we refer to them as sister nodes. Straight lines are employed to get mothers and their daughters connected.

(2-8)



(Kroeger,2005:39)

If this kind of tree diagram is used to present the structure of a grammatical unit, a phrase or a sentence, the larger unit is represented by the mother node. Meanwhile, the constituents are represented by the daughter nodes (or sub-parts). The linear order of the constituents is depicted by the left-to-right order of the corresponding nodes. The lines from mother to daughter represent the whole relationship. Therefore, a partial interpretation of the diagram in (2-8) could be stated as in (2-8’):

(2-8') *Unit A is composed of two constituent parts, B and C, which occur in that order.*

(Kroeger,2005:39)

In tree diagrams, labels at each node don't simply name the units; they represent the grammatical category (e.g., Noun, Verb, Phrase) of that unit. They show the class of each unit, not just its name.

(2-8'') *A unit of category A is composed of two constituent parts, one of category B and the other of category C, occurring in that order.*

(Kroeger,2005:39)

Within tree diagrams those are used to represent linguistic structures, node labels provide two types of information: (i) the syntactic category (e.g., Noun, Verb) and (ii) the “size” or level in the grammatical hierarchy (e.g., word, phrase, clause). The list in (2-9) shows commonly used category symbols, and a simple tree structure in (2-10) demonstrates a prepositional phrase, composed of a preposition and a noun phrase. The noun phrase, in turn, consists of a determiner and a noun.

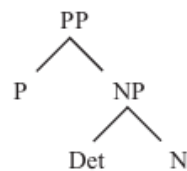
(2-9)	Word level	Phrasal
	N =Noun	NP =Noun Phrase
	A =Adjective	AP =Adjective Phrase
	V =Verb	VP =Verb Phrase
	P =Preposition	PP = Prepositional Phrase
	Adv =Adverb	S =Sentence or Clause

Det =Determiner

Conj = Conjunction

(Kroeger,2005:40)

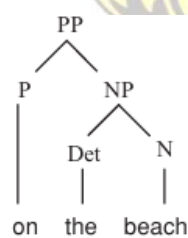
(2-10)



(Kroeger,2005:40)

The tree in (2-10) shows a prepositional phrase with no visible words, so a method is needed to represent the words and their parts of speech. This is done by using daughter nodes labeled with lexical categories, as shown in (2-11).

(2-11)



(Kroeger,2005:40)

Terminal nodes, like “on,” “the,” and “beach,” are the end points of a tree structure and do not have daughters. The sequence of terminal elements at the bottom is called the Terminal String (e.g., “on the beach”). Non-terminal nodes

dominate their daughters and all subsequent levels of nodes. A mother node Immediately Dominates its daughters.

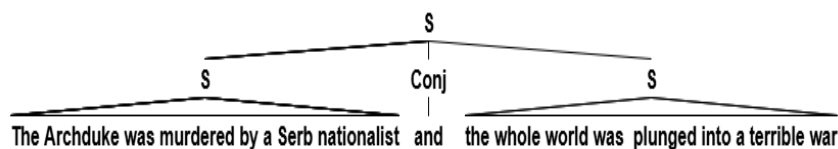
(2-12) *A Constituent is a string of words which is Exhaustively Dominated by some node.*

(Kroeger,2005:40)

“Exhaustively dominated” means a node covers all and only the relevant terminal elements in a string. While phrase structure diagrams represent constituents visually, the actual linguistic data is primary. Following standard usage the symbol “S” stands for either “sentence” or “clause.” The highest node in a sentence's tree is typically labeled "S" as the sentence is considered as a grammatical constituent, and all the words in the sentence must be exhaustively dominated by this node. It is possible for a sentence to contain multiple clauses, in which case the highest “S” node will dominate several other “S” nodes.

The top-most node in a tree diagram is called the root node, while the terminal nodes at the bottom are called leaves. In a sentence, “S” is the root node, and the individual words are the leaves. A Phrase Structure tree is essentially upside down, with the root at the top, leaves at the bottom, and branches in between.

(2-13) Tree Diagram of Compound Sentence



2.3.5.2 Constraints On Tree Structures

According to Kroeger (2005:41), phrase structure diagrams in human languages must adhere to two main constraints:

1. The No Crossing Constraint: Lines from a mother to a daughter must not cross, meaning no word from one constituent can be embedded within another constituent.
2. The Single Mother Constraint: Each node, after the root, must be the daughter of exactly one other node.

These constraints prevent the creation of overly complex structures that are not found in real languages. While some languages may present data that could tempt violations of these rules, alternative methods can be used to address these cases without adding unrealistic complexity to the system.

