A Syntactic Analysis of Sentence Types in a TED-Ed Video Transcript Using Tree Diagrams

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Abstract

Keywords:
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This study analyzed a TED-Ed video transcript to examine the different sentence types used in the video. The study's objectives were to identify the types of sentences and to represent their structures using tree diagrams. The analysis applied Oshima and Hogue's (1998) theory to classify sentence types based on clause structure, and Burton-Roberts' (2016) framework to construct tree diagrams. A qualitative method was employed, as the data were drawn from a text-based transcript. A total of 40 sentences were collected and analyzed. The findings revealed that complex sentences occurred most frequently (23 instances), followed by simple sentences (13 instances), while compound and compound-complex sentences each appeared twice.

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INTRODUCTION

In doing interaction, written communication plays an essential role; however, some people still have lack of knowledge about grammar rules. To minimize the misinterpretation in written communication, it must be clear and concise in writing because sentence arrangement helps people to share clarity and meaningfulness messages. The arrangement of sentences in a language, including its vocabulary and grammar, has a direct impact on how well that language function in communication (Hausser, 2012). The construction of sentences is influenced by grammatical and syntactic rules, which in turn influences communication coherence and clarity. Furthermore, the message's effect and meaning are influenced by the words used and how they are arranged. As a result, a language's structure greatly influences how effective are as a communication tool. Arista & Subandi (2020) stated that one of the tools to communicate and to convey ideas and thoughts is through written language. Consequently, written communication has an important place in conveying messages. However, to make a sentence clear, concise, and easy to interpret, unnecessary words and unnecessary repetitions must be eliminated. Therefore, having an effective written communication, people should aware of the grammar they use to make the sentence comprehensible.

The study of sentence arrangements as constructing sentences is referred to Syntax. Syntax concerns the structure of sentences (Roberts, 2016). The meaning of word order, sentence structure, agreement, clause and phrase, and punctuation are the main thing about syntax and the sentence will be significantly affected by these. The writer's selection of syntax is predicated on the following rationale. Initially, in order to comprehend and offer insight into sentence structure within a transcript, the writer must analyze using syntax. The variety of challenges that people face when construct sentences are errors in word order, subject-verb agreement, tenses, complexity of sentence, and fragments which will make the sentence unreadable.

Sentence might be hard to comprehend when subject-verb agreement is not paired properly and it leads confusion because the sentence is not clear. Although some sentence might be hard to comprehend, knowing how to construct sentence correctly is also important to avoid sentence fragment. "Fragmented sentence is an incomplete sentence (Chandra & Wijaya, 2016, p.14)." An incomplete sentence is characterized by the lack of subject, verb, complete thought, or punctuation. And then, limited vocabulary can also cause problems when create sentences because it might be difficult to express the ideas using the correct words. Moreover, people think that syntax is hard to learn because the rules that should be obeyed to create sentences which is grammatically correct and well-formed. Lastly, the information on classifications of sentences is not widely known to the public; therefore, by studying the structure of sentence and types of sentences might become a guide in making sentences with no errors.

Sentence patterns represent the way words, phrases, and clauses are arranged to form a sentence (Kusnadi, et.al, 2024). Sentence pattern refers to the arrangement of words in a sentence to create a clear and grammatically correct structure. It explains how elements such as the subject, verb, object, and complement are positioned within a sentence. Understanding sentence patterns is essential in English because it helps in constructing accurate and meaningful sentences. There are several common types of sentence patterns, including simple, compound, complex, and compound-complex sentence. Each type is identified based on the number of clauses and the way those clauses are connected. Mastery of sentence patterns supports clearer communication in both spoken and written forms.

The classifications of sentences can be divided into four main categories depending on the structure and the complexity (Sukandi & Merina, 2017). First, simple sentence; it only presents one independent clause and it stands alone and shares a complete thought. Second, compound sentence; it presents two or more independent clauses that combined by coordinators. Third, complex sentence; it presents one independent clause and some dependent clauses. Last, compound-complex sentence; it presents one or two independent clause(s) and it presents one or two dependent clause(s). Dependent clause cannot stand alone because it does not share complete idea. Consequently, the requirements of sentence are subject and predicate then it can express complete idea. However, if one of these components of a sentence is missing, it could not be called as a sentence. Furthermore, to have variations in writing, people should have knowledge about types of sentences and how the sentences are constructed; in that case they must follow the grammar and syntax rules.

The writer intends to conduct an analysis of the study on syntactic analysis through the utilization of a tree diagram. One of the tools that used for analyzing sentence structure is a tree diagram (Suwarti, 2022). By using tree diagram, the writer can be able to show visual representation of a sentence's hierarchy and it can indicate the relationships between words or phrases. Additionally, a sentence that has been selected can be broken down into its constituents and it will help readers to understand how sentences are constructed.

Writing in grammatically correct and structure formed typically can be found in video's transcript that has been published into platform such as YouTube. One of the transcripts that have various types of sentences and free from errors of grammar can be discovered from *TED-Ed*. *TED-Ed*'s mission is to produce and share educational lessons through animated videos which are interactive and informative. Damayanti & Sumarniningsih (2022), states that *TED-Ed*'s videos are created for educational purposes. The materials from video can be used by educators, students, and learners of various ages. The special things from *TED-Ed* are they use experts or educators as a speaker to make the content have a high-quality, use an engaging visual to make the content is accessible, and use variations of topics to make the contents are not monotonous. Consequently, *TED-Ed* is good platform for the reader to learn the sentence structure while watching the videos by downloading the available scripts.

In brief, the writer is interested in choosing syntax and focused in analyzing the types of sentences and how the sentences are formed into a tree diagram. Syntactic analysis has very close relation to written data that has been published to some platforms. One of the data which can be analyzed is a transcript. The writer only uses one transcript that is from *TED-Ed*'s video to do syntactic analysis. In consequence, the writer is concerned in picking this analysis with entitled *A Syntactic Analysis of Sentence Pattern on TED-Ed Video Transcript.*

A syntactic analysis is widely used for analyzing text or any other written media that has been published. In that case, to avoid similarities the writer attaches several previous related studies that have been examined by the researchers. The writer will show the previous related studies to compare with the study that being analyzed and it is presented below.

The first study was examined by Juliarta entitled "The Syntax Analysis in Relative Clause Found in the Novel *The Wonderful Wizard of Oz*." It was published on International Journal of English Learning and Applied Linguistics (IJELAL) volume 3, number 1, December 2022. The purpose of the study consisted two. First, the study was to analyze the types of relative clauses found in the novel entitled "*The Wonderful Wizard of Oz*." Second, the study was to analyze the syntax structure in relative clauses found in the novel. The study used qualitative method since the results were described descriptively. The writer used theories from Brown and Miller in

analyzing syntax structure and from Quirk in analyzing the types of relative clause. The finding of the study had nine cases with one finding which was restrictive relative clause with relative pronoun who as the antecedent.

The second study was examined by Saragih, et.al, entitled "A Syntactic Analysis of Sentence Structure from Native Speaker Captions on Instagram Using Generative Transformational Grammar." It was published on INTERACTION: *Jurnal Pendidikan Bahasa,* volume 10, number 1, Mei 2023. The first objective of the study was to find out the types of sentences used in caption of native speakers on Instagram and the second study was to analyze the sentences using the Noam Chomsky theory on tree diagrams to show the structure. The writers used qualitative method of analysis. There were 14 data collection that was collected by the writers and the results were 13 sentences were simple sentence and 1 sentence was complex sentence.

The third study was examined by Anggoro et.al, entitled "Syntactical Analysis on Sentence Structures Spoken by Joe Biden and Donald Trump in the Election Night Speeches." It was published on Journal of English Education and Teaching (JEET), volume 6, number 2, June 2022. The objective of the study was to investigate the types of sentence structures spoken by Joe Biden and Donald Trump in the election night speech in the year of 2020. Anggoro's study and this study shared similarity which were identifying sentence types and visualizing the syntactic structure through tree diagrams. Furthermore, the writers used qualitative and quantitative methods. Theories that were used in this analysis were Miles, Huberman, and Saldana. There are 101 sentences both Joe Biden and Donald Trump with the results 40% simple sentence, 26.7% complex sentence, 16.7% compound sentence, 16.7% compound complex in Joe Biden's speech and 59.2% simple sentence, 19.7% complex sentence, 15.4% compound sentence, 5.6% compound complex sentence in Donald Trump's speech.

The fourth study was examined by Pamungkas. The title of the study was "Syntactic Analysis on Sentence Patterns in *Bahasa Inggris* Text Book for Senior High School." It was published in State Institute of Islamic Studies Ponorogo on January 2020. The purpose of this study were to find out the sentence patterns used in the written text of *Bahasa Inggris* text book, and the dominant sentence pattern used in the book. This study used theory from Bas Aarts. Furthermore, this study applied qualitative research and used descriptive qualitative design. There were 12 written texts in 9 chapters as the sample of this study. The results of this study were 18 similar sentence patterns of complex sentence in written text and the dominant sentence pattern was pattern 1.

Based on the related studies above, the similarities of those related studies are the scope of linguistics which is syntax and using qualitative method in analyzing the data. However, one of the studies is using both methods that are qualitative and quantitative. There is only slight of similarity due to the differences of the objectives of the study. Nevertheless, the differences in this part are quite many because the object is different. From the three related studies above, there is no similar object. The first study uses novel, the second study uses caption on Instagram, the third study uses Joe Biden and Donald Trump's speech, and the last study uses *Bahasa Inggris* Text Book for Senior High School. The theory that is used in analyzing the object is not the same. Therefore, the overall result will out differently.

METHOD

This study employed a qualitative approach to conduct syntactic analysis. According to Tenny et al. (2022, para. 1), qualitative research explores and provides deeper insights into

real-world problems. Grounded in this definition, a qualitative approach focuses on comprehending human interaction and behavior in depth. To further refine the methodology, the writer adopted a qualitative descriptive design. As cited in Doyle (2020), Kim et al. (2017, p. 23) explain that qualitative descriptive research generates data that describe the "who, what, and where of events or experiences" from a subjective perspective. This approach aims to develop a deeper understanding of contextual information through experiences and personal perspectives. Consequently, qualitative descriptive research was deemed suitable for this study, as the data were derived from written sentences, and the findings are presented in descriptive textual form rather than through numerical or statistical analysis.

The data for this study were drawn from a *TED-Ed* video transcript, accessible through the official *TED-Ed* website. The writer collected the data from the following source: https://www.ted.com/talks/ted_ed_is_it_normal_to_talk_to_yourself/transcript. The video is titled "Is It Normal to Talk to Yourself?" and was published on May 18, 2023, with a duration of 5 minutes and 19 seconds.

The data collection process involved several systematic steps. First, the writer located the video on the *TED-Ed* website. Second, the video was watched multiple times to understand how the sentences were delivered in context. Third, sentences were carefully identified within the transcript. Fourth, the selected sentences were classified based on their sentence types. Fifth and finally, each sentence was constructed into a tree diagram.

The data were analyzed qualitatively in accordance with the two main objectives of the study. To address the first objective—identifying the types of sentences—the writer applied Oshima and Hogue's (1998) theory. Each sentence was examined to determine whether it was categorized as simple, compound, complex, or compound-complex based on its clause structure. To address the second objective—representing sentence structure through tree diagrams—the writer employed Burton-Roberts' (2016) theory. Each sentence was broken down into its constituent parts, including noun phrase (NP), verb phrase (VP), prepositional phrase (PP), adjective phrase (AP), and adverbial phrase (AdvP). Following this segmentation, the hierarchical structure of each sentence was illustrated in the form of a tree diagram.

FINDINGS AND DISCUSSION

This section presents the results gathered from the data collection process, which have been carefully examined. The focuses of this study are to find out the types of sentences and to construct the sentences into tree diagram. The data were taken from *TED-Ed* video transcript. Each sentence was examined based on its clauses in order to categorize it into a sentence type using theory from Oshima & Hogue (1998). These types include simple, compound, complex, and compound-complex. In addition, this chapter also discussed how each sentence can be broken down into its structural components through syntactic tree diagrams. These diagrams are based on the theories from Burton-Robets (2016).

1. Sentence Pattern in *TED-Ed* Video Transcript

Based on the second statement of the problem, the data which was types of sentences were constructed into tree diagram. Below are the tree diagram constructions.

Sentence 1

"As your morning alarm blares, you mutter to yourself, "Why did I set it so early?""

As your morning alarm blares, you mutter to yourself, "Why did I set it so early?"
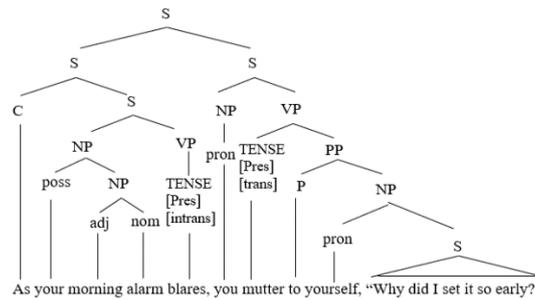
Sentence 1 joins the category of complex sentence. It consists of a single independent and dependent clause. "As your morning alarm blares" is the first dependent clause. There is a subordinating conjunc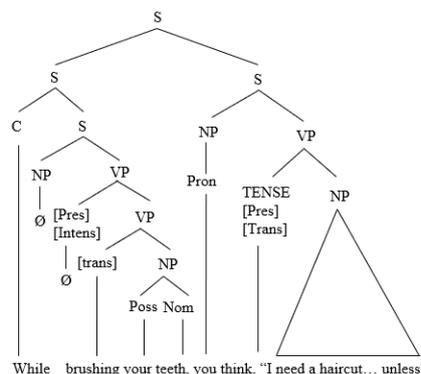tion which is "as" that makes the clause is dependent. So, it does not convey the complete thought. "You mutter to yourself" is the second clause which is independent clause. There is no coordinating or subordinating conjunction and it convey the complete thought. "Your morning alarm" is the subject of the first clause, and its verb is "blares". Then, the subject of the second clause is "you" and its verb is "mutter". Furthermore, the direct question that serves as the verb mutter's object is the sentence "why did I set it so early?"

The tree diagram listed above, the first clause contains conjunction (C), noun phrase (NP), and verb phrase (VP). The conjunction is "as", within this clause, the noun phrase (NP) "your morning alarm" consists of the possessive determiner "your", the adjective "morning" modifying the noun, and the noun "alarm" acting as the head, while the verb phrase (VP) "blares" function as an intransitive verb and it does not need an object. Then, the second clause consists of the noun phrase (NP) "you" as the subject and the verb phrase (VP) "mutter to yourself, why did I set it so early?"" and within this verb phrase, the verb "mutter" is transitive. The prepositional phrase (PP) "to yourself" functions as an adverbial that modifies the verb "mutter" by indicating the recipient of the action. The embedded clause "why did I set it so early?" acting as the direct object of the verb "mutter". The sentence pattern is [S: C + NP (POSS + ADJ + N) + VP] [S: NP + VP + PP + (embedded clause)].

Sentence 2

"While brushing your teeth, you think, "I need a haircut... unless?""

While brushing your teeth, you think, "I need a haircut... unless?

Sentence 2 joins the category of complex sentence because it consists of a single independent and dependent clause. The first clause "While brushing your teeth" is a dependent

clause. There is a subordinating conjunction which is "while" that makes the clause is dependent. So, it does not convey the complete thought. However, the subject and the verb in the dependent clause are implied, not directly stated. This is called as reduced adverbial clause. Since the subject is the same, it can be understood from the main clause. The second clause "you think" is an independent clause. Then, the quoted clause "I need a haircut … unless" is the object of the verb "think." The word "you" is the subject of the independent clause, and "think" is the verb.

The tree diagram listed above, the first clause contains conjunction (C) and verb phrase (VP). The conjunction is "while". The verb phrase (VP) "brushing your teeth" consists of the verb "brushing" and the noun phrase (NP) "your teeth" includes the determiner "your" and the noun "teeth" which serves as the head. Then, the second clause contains noun phrase (NP) and verb phrase (VP). "You" acts as the subject and the verb phrase "think, "I need a haircut… unless?"" functions as the predicate. Within this verb phrase, the verb "think" is transitive, taking the embedded clause as the direct object. In the embedded clause, the noun phrase "I" serves as the subject, and the verb phrase "need a haircut" function as the predicate. The verb "need" is transitive, and the noun phrase "a haircut" serves as the object, consisting of the determiner "a" and the noun "haircut" which acts as the head. The sentence pattern is [S: C + NP + VP + NP] [S: NP + VP + embedded clause)].

Sentence 3

"Rushing out the front door, you reach for your keys and realize they are not there."
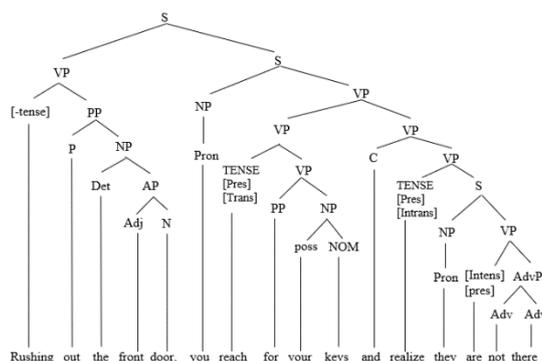
Sentence 3 joins the category of complex sentence because it contains of a single dependent and independent clause. The phrase "rushing out the front door" is a participle phrase which modifies a noun "you". So, the clause "You reach for your keys and realize" acts as independent clause. There is no coordinating or subordinating conjunction and it convey the complete thought. However, the clause "they are not there" acts as dependent clause because it has subordinating conjunction "that" but it is not be implied. The subject of independent clause is "you" its verbs are "reach" and "realize" and the object of the verb "reach" is "for your keys".

The tree diagram listed above, the first clause contains verb phrase (VP) "rushing out" and noun phrase (NP) "the front door." The noun phrase includes the determiner "the" and the noun "door" which serves as the head, modifying the adjective "front." Then, the second clause consists of noun phrase (NP) and verb phrase (VP). The noun phrase "you" acts as the subject, and within the verb phrase, the verb "reach" is transitive, followed by the prepositional phrase (PP) "for your keys." The prepositional phrase consists of preposition "for" and noun phrase "your keys," which includes the determiner "your" and the noun "keys," acting as the head. The conjunction "and" connects to verbs "reach" and "realize." The verb "realize" is intransitive and

it is followed by the dependent clause "they are not there." The sentence pattern is [S: VP + PP + NP + NP + VP + C + VP + embedded clause)].

Sentence 4

"Frustrated you shout, "I cannot do anything right!" just in time to notice your neighbor."

Sentence 4 joins the category of simple sentence because it consists of a single independent clause that serves a complete action or ideas. There is no coordinating or subordinating conjunction. So, it conveys the complete thought. The subject is "you" and the predicate is "shout" and "frustrated" acts as a modifier of the subject. Then, the phrase of "just in time to notice your neighbor" is the adverbial phrase that modifies the predicate. Additionally, "I cannot do anything right!" is quoted speech that acts as an object of the verb.

The tree diagram listed above, the clause contains adjective phrase (AP), two noun phrases (NP), and two verb phrases (VP). The adjective phrase "frustrated" functions as an adverbial modifier describing the subject "you" in the clause. The verb phrase "shout" is transitive verb, followed the direct object "I cannot do anything right" in the form of embedded clause. Within the direct object, noun phrase "I" acts as the subject, "cannot" acts as the modal auxiliary, "do" acts as the main verb, and "anything right" acts as noun phrase. Additionally, the adverb phrase (AdvP) "just in time to notice your neighbor" modifies the main verb "shout." The sentence pattern is [S: AP + NP + VP + embedded clause + AdvP].

CONCLUSION

This study was conducted to analyze the sentence structures found in a *TED-Ed* video entitled "Is It Normal to Talk to Yourself?" The investigation focused on two main objectives: first, to identify the types of sentences used in the transcript, and second, to represent those sentences using tree diagrams. These objectives were supported by the theoretical frameworks of Oshima and Hogue (1998) for sentence type classification and Burton-Roberts (2016) for syntactic tree diagram construction.

A total of 40 sentences were collected and analyzed. The results revealed that all four sentence types—simple, compound, complex, and compound-complex—were present in the transcript. Complex sentences occurred most frequently (23 instances), followed by simple sentences (13 instances), while compound and compound-complex sentences each appeared twice. These findings suggest that the speaker predominantly employs complex sentence structures to explain abstract or detailed ideas clearly, a pattern consistent with educational content. Simultaneously, the use of simple sentences serves to maintain clarity and emphasize key points.

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By applying the theories of Oshima and Hogue (1998) and Burton-Roberts (2016), this study demonstrated how words and phrases are arranged to form meaningful sentences. The findings confirm that both frameworks offer valuable insights into sentence formation and contribute to clarifying complex syntactic structures. Overall, this study advances a deeper understanding of syntax and underscores the importance of theoretical approaches in analyzing sentence structure.

Nevertheless, this study is not without limitations. First, the sample was restricted to 40 sentences from a single video transcript, which limits the generalizability of the findings. Second, the analysis relied exclusively on two theoretical frameworks; the application of additional syntactic theories could yield broader perspectives.

Based on the findings and limitations outlined above, several recommendations are proposed for future research. Subsequent studies should consider analyzing a larger corpus of sentences to obtain more representative and robust results. In addition, incorporating other syntactic theories may provide a more comprehensive understanding of sentence structure. Future research could also extend syntactic analysis to diverse text types—such as literary works, academic writing, or spontaneous spoken discourse—to explore how syntactic patterns vary across different communicative contexts.

Furthermore, the findings indicate that Burton-Roberts' (2016) and Oshima and Hogue's (1998) theories serve as effective tools for understanding and constructing sentences. It is therefore recommended that future researchers apply both frameworks in their analyses of sentence structure. Finally, other areas of syntactic inquiry remain open for exploration by scholars interested in continuing work within this domain.

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