

ANALYSIS OF SENTENCE STRUCTURE BASED ON SYNTACTIC FUNCTIONS IN THE EXPLANATORY TEXT "TORNADO" AND ITS RELEVANCE TO THE DEVELOPMENT OF STUDENTS' LANGUAGE LITERACY

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Abstract

This study aims to analyze sentence structure based on syntactic function in the explanatory text “Angin Puting Beliung” and to examine its relevance to the development of students’ language literacy. This study employs a qualitative approach using a descriptive research design through a literature review. The research data consist of all sentences found in the explanatory text “Angin Puting Beliung”. Data collection was conducted using the read-and-record technique, while data analysis was carried out in three stages: data reduction, presentation of data in tabular form, and drawing conclusions. The results show that 17 sentences were analyzed, forming five syntactic function patterns: S–P, S–P–O, S–P–Pel, S–P–K, and S–P–O–K. The S–P–K pattern was the most frequently found, appearing in 7 sentences, followed by the S–P–O pattern, which appeared in 5 sentences. Meanwhile, the S–P–Pel pattern was found in 3 sentences, while the S–P and S–P–O–K patterns each appeared in 1 sentence. The results of this study indicate that syntactic function analysis can help students understand sentence structure more systematically and can be utilized as an alternative learning resource in Indonesian language instruction to support the development of language literacy.

Keywords: syntactic function, sentence structure, explanatory text, language literacy

I. INTRODUCTION

Language is an important part of human daily life. People always use it in their various activities. (Mulyaningsih et al., 2022). Language is a very important communication tool for disseminating ideas, information, and knowledge (Luhur Wicaksono, 2016). When a person learns Indonesian, their ability is not only determined by the amount of vocabulary they know, but also by their ability to understand and compose sentences according to the rules of the language. Properly composed sentences will make the information clear, effective, and easy to understand. Therefore, an understanding of sentence structure is one of the skills that students must have to develop their language skills, both verbally and in writing.

Ramlan (2009: 18) argues that syntax is a part of linguistics that studies discourse, sentences, clauses, and phrases in a unit of sentence. Etymologically, syntax means forming a collection of words or sentences. A sentence is an organized collection of words that incorporates a complete mind. (Budiman et al., 2021). Syntax includes combinations of words, phrases, clauses, and sentences that have a special meaning in communication. By having an understanding of this structure, students can use language logically and in accordance with grammatical rules both in writing and speaking. Syntax is a field of linguistics that studies how words are formed into meaningful clauses, sentences, and phrases. Forming a sentence structure that is in accordance with the rules of the Indonesian language requires syntax. (Rahmaasharihamzah & Muh. Ibn Sina, 2025).

Syntax is a field of linguistics that studies how phrases, clauses, and sentences develop. One part of this field is the research on sentence structure (Mayani Mayani et al., 2025). Syntax functions, which include subjects, predicates, objects, complements, and adverbs, are used to

perform sentence structure analysis. These five components are interconnected to form a whole meaning, so their existence is essential to understanding how sentences are structured. Mastery of syntactic functions helps students understand language structure and read critically and compose writing according to Indonesian language rules (Irmainsyah et al., 2024).

Syntax structure is the sequence of language elements that make up a whole sentence. This structure includes relationships between words, phrases, clauses, and syntax functions that are systematically arranged so as to produce logical and easy-to-understand sentences (Ramadhani et al., 2025). Understanding syntactic structure is essential in learning Indonesian because it helps students understand sentence formation patterns and prevents language misuse. By understanding the syntactic structure, students can create sentences that are more in accordance with the rules of the Indonesian language (Ayu et al., 2026).

One of the important skills that is very important for education is literacy. Students' ability to write, read, and understand texts effectively is critical to their academic and personal success (Mustafa et al., 2025). Language literacy is a person's ability to understand, use, and communicate language appropriately, both through reading, writing, speaking, and listening. In learning Indonesian, language literacy not only emphasizes the ability to understand the content of reading, but also the ability to analyze language structure and use it according to applicable rules (Wulansari et al., 2023).

As a result, the development of language literacy is an important component that must be considered during the learning process. Learning that teaches students to understand linguistic components, including sentence structures based on syntactic functions, can aid in this development. By understanding the functions of subjects, predicates, objects, complements, and captions, students will more easily understand the relationships between ideas in the text, better understand information, and create effective and communicative sentences. As a result, syntax learning not only improves students' understanding of the rules of the Indonesian language, but also improves their language literacy, which helps them use the language correctly and according to the context (Navida et al., 2023).

Explanatory texts describe the process of the occurrence of an event or phenomenon. One type of text that requires the precision of sentence structure is explanatory text (Purwo & Utomo, 2025). Syntax function analysis in explanatory texts is essential to understand how sentence-forming elements are used to convey information in a sequential and easy-to-understand manner to the reader. This is because the delivery of information in explanatory texts is highly dependent on how sentence structure is used correctly so that the reader can understand the relationships that exist within it.

Previous researchers have done a lot of research on syntax. Research results (Esra Manik et al., 2023) shows that the analysis of syntactic functions, categories, and roles in the exposition text in the science book of Junior High School Class VII of the Independent Curriculum shows that each sentence has various syntactic functions that include subjects, predicates, objects, complements, and captions, and different syntactic categories are fulfilled by each sentence.

Other similar research results (Ravindra & Pata Muslim, 2013) examine explanatory texts in the PJOK Class XII textbook of the Independent Curriculum and analyze its syntax. This study found that sentence structures in explanatory texts have various functions, categories, and syntactic roles that help convey information to students. According to the analysis, syntax studies have the ability to support the Indonesian language learning process and provide an overview of the linguistic characteristics of texts.

Based on the above two studies, it is clear that syntax research has been conducted significantly on different types of learning texts. However, there is still little research done on

sentence structure that is based on syntactic functions in explanatory texts as a whole, especially in explanatory texts that focus on natural events. In addition, there has not been much discussion about how syntax analysis can be used as a basis for improving students' language literacy. The result, however, focuses more on the introduction of syntactic elements. This condition shows that the analysis of sentence structure in explanatory texts still needs to be done. By doing so, we can gain a better understanding of sentence structure patterns and help students learn Indonesian.

Therefore, the purpose of this study is to analyze sentence structures based on syntactic functions found in the explanatory text "Tornado" and evaluate its relationship with the development of students' language literacy. It is hoped that the results of this research will increase knowledge about the syntax of the Indonesian language and become one of the alternative learning resources that can be used to teach Indonesian, especially regarding sentence structure and text materials

II. RESEARCH METHODS

This research uses a qualitative approach and is included in the category of qualitative research called descriptive research. This is in line with the opinion (Scott, 2022) which states that qualitative research methods are research methods used to research the condition of natural objects, where researchers are the key instruments. This method was also chosen because this study aims to systematically explain the sentence structure in the explanatory text of Tornadoes which is based on syntactic functions. According to (Joseph, 2024), syntax is a field of linguistics that studies how words interact to create phrases, clauses, and sentences. This idea became the basis for analyzing syntax functions, which consisted of Subject (S), Predicate (P), Object (O), Complement (Pel), and Description (K).

Text analysis is the research design used. The explanatory text entitled "Tornadoes" is the object of research. Concentrate on analyzing the sentence structure present in the text by identifying the syntactic function of each of the elements that make up the sentence. In addition, the results of the analysis are associated with the progress of students' language literacy, especially in understanding and preparing explanatory texts in accordance with the rules of the Indonesian language.

The data in this study was obtained from written sources, so a literature study was used. The research data consists of all sentences in the explanatory text "Winds of Tornado", and this research was conducted on June 22, 2026, and utilizes various sources, including syntactic books, scientific articles, and journals related to syntactic functions and Indonesian language learning.

Data is collected by reading and taking notes. After reading the text thoroughly, the researcher found each sentence. Then, sentences are recorded and arranged according to their syntactic functions: subject (S), predicate (P), object (O), complement (Pel), and caption (K). Furthermore, the collected data is compiled for analysis.

The interactive analysis model proposed by Miles and Huberman has been used in data analysis techniques. The model includes four stages: data collection, data reduction, data presentation, and conclusion drawn. At the data collection stage, all sentences in the editorial text are collected to be used as research data. Furthermore, the data was reduced by selecting and grouping sentences according to the focus of the research, which is the sentence structure based on syntactic functions. Furthermore, in the final stage, the pattern of syntactic functions found is used to draw conclusions and determine what patterns are present in the table.

III. RESULTS AND DISCUSSION

Results

This study analyzes sentence structure based on syntactic functions in the explanatory text "Tornado". According to the analysis carried out, there are 17 sentences that are the researcher's data. All sentences in the text identify syntactic functions consisting of subject (S), predicate (P), object (O), complement (Pel), and adverb (K). The results of the analysis show that the explanatory text forms several varied sentence patterns, namely S–P, S–P–Pel, S–P–O, S–P–K, and S–P–O–K. Each pattern shows that the sentence arrangement in the text has followed the rules of Indonesian syntax so that it is able to convey information about the tornado phenomenon in a sequential and systematic manner.

Overall it was found that the subject's function was dominated by nominal phrases that refer to the object or phenomenon described, such as Tornadoes, Causes of Tornadoes, Processes of tornadoes, and Most tornadoes. The function of predicates is mostly in the form of verbs or copulative verbs, such as is, appear, cause, occur, have, move, and cause. Meanwhile, the functions of objects, complements, and descriptions are used to provide additional information about the characteristics, causes, processes, and impacts of tornado phenomena. The results of the analysis of the function on the syntax of each sentence are presented in Table 1.

Table 1. Analysis of Sentence Structure Based on Syntactic Functions in Tornado Explanatory Texts.

Yes	Sentence	Syntactic Function Analysis	Pattern
1	A Tornado is a column of air that spins fast.	S = tornado; P = is; Mop = a column of air that rotates fast	S–P–Pel
2	Tornadoes appear in many sizes.	S = tornado; P = appear; K = in many sizes	S–P–K
3	Tornadoes are generally in the form of a clearly visible condensation funnel.	S = tornado; P = shaped; Mop = clearly visible condensation funnel	S–P–Pel
4	The cause of the occurrence of a tornado is caused by hot and cold air meeting.	S = Cause of the occurrence of tornadoes; P = caused; K = because hot and cold air meet	S–P–K
5	Hot air and cold air collide with each other.	S = Hot air and cold air; P = colliding with each other	S–P
6	The meeting of the two air masses formed a tornado.	S = The meeting of the two air masses; P = shape; O = tornado	S–P–O
7	The process of tornadoes usually occurs during the pancaroba season.	S = The process of tornadoes occurring; P = occurs; K = usually in the pancaroba season	S–P–K
8	Black clouds gather due to solar radiation.	S = Black clouds; P = assemble; K = due to solar radiation	S–P–K
9	The air currents rise and fall at high speed.	S = Air current; P = up and down; K = at high speed	S–P–K
10	Air currents hit the earth's surface randomly.	S = Air current; P = hit; O = the earth's surface; K = randomly	S–P–O–K
11	Most tornadoes have wind speeds of about 175 km/h.	S = Most tornadoes; P = have; O = wind speed of about 175 km/h	S–P–O
12	Tornadoes can move several kilometers.	S = Tornado; P = can move; K = several kilometers	S–P–K
13	Some tornadoes have wind speeds of up to 480 km/h.	S = Partial tornado; P = have; O = wind speed up to 480 km/h	S–P–O

14	Tornadoes caused damage to homes and infrastructure in the area.	S = Tornado; P = result; O = damage to houses and infrastructure in the area	S–P–O
15	Tornadoes cause casualties, damage to gardens, and material losses.	S = Tornado; P = give rise; O = casualties, garden damage, and material losses	S–P–O
16	Tornadoes often occur at the same time as heavy rain and lightning.	S = Tornado; P = frequent; K = equivalent to heavy rain and lightning	S–P–K
17	Many lives were victims of tornadoes.	S = Many lives; P = be; Mel = tornado victim	S–P–Pel

Based on the results of the analysis in Table 1, 17 sentences were obtained that became the object of analysis. These sentences show the existence of five patterns of syntactic functions used in explanatory texts. The S–P–K pattern is the most commonly found pattern because explanatory texts function to explain the process of occurrence of a phenomenon so that it requires a lot of information about the time, place, cause, and way an event occurs. In addition, the S–P–O pattern is also quite dominant because it is used to explain the consequences or impacts caused by the tornado phenomenon.

Other findings show that the subject function in the text is dominated by nominal phrases that are directly related to the topic of discussion, while the predicate function is dominated by active verbs and passive verbs that describe the process, circumstances, and consequences of an event. The complementary function is more used in the definition of the phenomenon, while the description function is used to clarify information about the cause, process, location, time, and impact that occurs. The variation in the use of syntactic functions makes the explanatory text have a flowing flow of information so that it is easier for the reader to understand the cause-and-effect relationship conveyed.

Overall, the results of the study show that the sentence structure in the explanatory text "Hurricane Tornado" has met the syntactic rules of the Indonesian language. The diversity of syntactic function patterns found shows that each sentence has a different communicative function in accordance with the purpose of the text composition, namely providing an explanation of the meaning, causes, process of occurrence, characteristics, and impact of tornadoes in a systematic manner. These findings are the basis for further discussion about the characteristics of sentence structure and its relevance to the development of students' linguistic literacy in the next part of the discussion.

Discussion

Based on the results of the study, there are 17 sentences in the explanatory text of Tornadoes that are analyzed based on syntactic functions. The results of the analysis showed that the seventeen sentences formed five syntactic function patterns, namely S–P, S–P–O, S–P–Pel, S–P–K, and S–P–O–K. Each pattern has a different frequency of occurrence. Of all the patterns found, the S–P–K pattern was the most dominant pattern with a total of 7 sentences, while the S–P–O pattern ranked second with a total of 5 sentences. Meanwhile, the S–P–Pel pattern was found in 3 sentences, while the S–P and S–P–O–K patterns were found in 1 sentence each. The difference in the number of occurrences of each pattern shows that the arrangement of sentences in explanatory texts is adjusted to the needs of conveying information in each part of the text.

The dominance of the S–P–K pattern shows that explanatory texts use more elements of information to explain the time, place, process, cause, and effect of an event. The presence of information elements makes the information conveyed more detailed so that readers can understand the process of the phenomenon occurring in sequence. Meanwhile, the S–P–O pattern, which is the second most widely used pattern, shows that the text also emphasizes the actions imposed on an object so that the relationship between events and their impact can be understood more clearly. The S–P–Pel, S–P, and S–P–O–K patterns are used according to the needs of information delivery in certain parts of the text.

The results of this analysis show that each syntactic element has a complementary function in forming a sentence structure. The subject functions as the subject of the conversation, the predicate expresses the action or situation, the object is the object of the action, the complement completes the meaning of the predicate, while the caption provides additional information that clarifies the content of the sentence. The relationship between these functions makes each sentence in the explanatory text arranged logically, systematically, and easily understood by the reader.

The results of this study also have relevance to the development of students' language literacy. Through the activity of analyzing sentence structure based on syntactic functions, students not only learn to recognize the elements that form sentences, but also understand how information is arranged sequentially in a text. This ability can help students when identifying key ideas, understanding cause-and-effect relationships, and interpreting the content of the text more deeply.

The findings have similarities with previous research (Esra Manik et al., 2023) which states that syntax functions play a role in building systematic sentence structures in various types of texts. Research on the analysis of syntax functions, categories, and roles in exposition texts shows that the proper use of syntactic functions results in effective and easy-to-understand sentences. Another study on syntactic analysis in explanatory texts also explains that syntactic functions are an important element in building relationships between sentences so that the information conveyed becomes more coherent. These findings strengthen the results of this study that syntactic functions have a very important role in shaping sentence structure in explanatory texts.

Sentence structure analysis based on syntactic functions in explanatory texts also has a close relationship with the development of students' linguistic literacy. Through the activity of analyzing subjects, predicates, objects, complements, and descriptions, students not only understand the content of the reading, but also understand how a sentence is constructed so that it is able to convey information clearly. This understanding helps students when identifying the main ideas, cause-and-effect relationships, and relationships between sentences in explanatory texts. Thus, reading ability not only focuses on understanding the content of the text, but also understanding the structure of the language used.

In addition, the ability to analyze syntactic functions can support students' writing skills. Understanding sentence patterns allows students to compose sentences that are more effective, coherent, and in accordance with the rules of the Indonesian language. When students understand the function of each sentence element, they will more easily develop ideas into logical and communicative forms of writing. Therefore, the results of sentence structure analysis in the Tornado explanatory text can be used as an alternative learning resource for sentence structure materials and explanatory texts to support the development of students' linguistic literacy.

Based on this discussion, it can be understood that the use of syntactic functions in the explanatory text "Tornado" has formed a systematic and easy-to-understand sentence structure.

The variation in the pattern of syntactic functions found shows that each sentence element has a role in building information cohesion. Therefore, the analysis of sentence structure based on syntactic functions is not only useful in linguistic studies, but can also be one of the efforts to improve students' linguistic literacy skills, especially in understanding and compiling explanatory texts in accordance with the rules of the Indonesian language.

IV. CONCLUSION

Based on the results of the research, it can be concluded that the Tornado explanatory text has 17 sentences that form five syntactic function patterns, namely S–P, S–P–O, S–P–Pel, S–P–K, and S–P–O–K. Of the five patterns, the S–P–K pattern is the most dominant pattern, while the S–P–O pattern is the second most common pattern. S–P–Pel, S–P, and S–P–O–K patterns were also found, but fewer in number. The difference in frequency shows that the arrangement of sentences in explanatory texts is adjusted to the needs of information delivery so that the process, causes, and consequences of an event can be explained sequentially. The results of this study show that the analysis of sentence structure based on syntactic functions can provide an overview of the use of subject elements, predicates, objects, complements, and descriptions in forming a complete sentence. In addition, the results of this study also have relevance to the development of students' linguistic literacy because it can help them understand sentence structure, identify relationships between ideas in the text, and compose sentences more effectively in accordance with the rules of the Indonesian language. Thus, the results of this research can be used as an alternative learning resource for sentence structure materials and explanatory texts in learning Indonesian.

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