

ARTICLE SENTENCE ANALYSIS: USE OF CLAUSES AND PHRASES IN SCIENTIFIC SENTENCES

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Abstract

Sentence analysis in scientific articles is a literature study that can improve students' ability to think critically. Especially in articles that use English. Syntax analysis is the first step in reading writing before the reader can understand the meaning implied in an English sentence as a whole. This research is literature review research that aims to analyse sentence structure and determine the types of sentences, clauses, and phrases. By selecting the title of the article from the accredited journal Sinta, a search is carried out on each sentence and then classifying sentences and word combinations according to the character and type of sentences, clauses, and phrases.

Keywords: *Clauses, phares, sentence analysis, syntax*

INTRODUCTION

Every language in the world has its own characteristics. In English there are four skills and four components, which have to be mastered. The skills, they are listening, speaking, reading, and writing and the components consist of phonology, grammar (structure), vocabulary, and fluency, which are different with our native language for example: in English grammar they have determiners before the head of noun phrase to indicate, possess, demonstrate, interrogate, numerate, and quantify the head of noun, phrase, but in Indonesian we don't have it. There are no certain directions as how, grammar must be taught or learnt. The role of grammar is in part due to changing attitude toward the language itself that make them find difficulties to remember the grammar rules (Bochari et al., 2022). Sometimes, the use of language will be ambiguous which causes the meaning of the sentence cannot be easily understood (Putri et al., 2022). In this case, studying syntax is important since it studies how sentences are formed and arranged based on the grammatical rule.

The syntax is the science that deals with the arrangement of words into sentences. This science focuses on combining words to produce grammatically correct sentences in a particular language (Putri et al., 2022). Therefore, we must have a good understanding of grammar and its units—words, phrases, and sentences—to understand syntax. Syntactic research in a particular language, as its aim, must have a grammatical structure that functions as a kind of tool for producing sentences in that language (Idawati, 2019). This will help us determine the rules that can determine whether a word combination is grammatically correct or not.

Based on the explanation above, it is interesting to do research on clauses and phrases analysis in articles, because in this study it can be analyzed sentences, how the writer formed the words into clauses and phrases. This research will focus on analyzing sentence structure in the Journal Article of the International Journal of Evaluation and Research in Education (IJERE) entitled Evaluation of Structural and Measurement Models of Student Satisfaction in Online Learning which is based on the functions and categories contained in each sentence.

RESEARCH METHODOLOGY

Data analysis Technique of collecting data is how to collect the data from the sources. The data was collected from English Language articles. The process of collecting data in this study was particularly concern with library research (Zed, 2014). Library research was used in this study, because the data was taken from some literatures such as physical (theory book, the other thesis) and digital materials (e-book, information from website).

In order to collect the data of this study, there are some steps.

First, reading the data source intensively then followed with scanning all noun phrases in the novel. Second, making some note taking. Here the process was done by writing down noun phrases found on the paper. And finally, the data were selected based on the classification structures and their function. Qualitative method was used to analyze the data, since the data was classified into syntactic patterns by using the theory of tree diagram in order to find the syntactic patterns (function and structure). The collected data were analyzed by using descriptive qualitative method classified based on the theory applied in this study. The classified data was elaborated by using the main theory and supporting theory to complete the analysis.

FINDINGS

After identifying the data, the researcher takes (at least) two samples for each sub-type of each sentence type. The structure of each sample is analyzed in a tree diagram and its functions and categories are analyzed based on the theory of Aarts & Aarts. The researcher chose this theory because Aarts & Aarts offers an easier way to analyze sentences than other theories. Based on the sentence analysis that has been carried out in the Journal Article of the International Journal of Evaluation and Research in Education (IJERE) entitled Evaluation of Structural and Measurement Models of Student Satisfaction in Online Learning, the categorization of clauses and phrases is as follows:

Table 1. Results of the Analysis of Determining Examples of Clauses and Phrases in Scientific Sentences

Numb.	Sentences	Independent Clause	Dependent Clause	Clause/Phrase	Information
1	The existence of a pandemic has an impact on learning, which is usually done face-to-face, now has to turn online.	The existence of a pandemic has an impact on learning	which is usually done face-to-face, now has to turn online	which is usually done	noun clause
2	In these results, information is obtained that all loading factors are at medium to high levels.	In these results, information is obtained	that all loading factors are at medium to high levels	that all loading factors are	noun clause
3	Figure I show that there is one path which is not significant.	Figure I show that there is one path	which is not significant	which is not significant	adjective clause
4	LMS has an effect that should be considered based on the indirect effect through the performance of the facilitator lecturers and admin services.	LMS has an effect	that should be considered based on the indirect effect through the performance of the facilitator lecturers and admin services.	that should be considered	adjective clause

5	Since being fully implemented online, this program has received various notes and input from various parties for further improvements.	this program has received various notes and input from various parties for further improvements	Since being fully implemented online	Since being fully implemented	adverb clause
6	This test is carried out after eliminating the direct effect between the learning management system on the student satisfaction variable.	This test is carried out	after eliminating the direct effect between the learning management system on the student satisfaction variable	after eliminating	adverb clause
7	The findings of this study indicated that the facilitator lecturer performance is the variable that has the greatest effect in increasing student satisfaction in online learning.	The findings of this study indicated	that the facilitator lecturer performance is the variable that has the greatest effect in increasing student satisfaction in online learning	the facilitator lecturer performance	noun phrase
8	Some of the things that have been complained about are the difficulty of taking full online lectures, the preparation of schedules that are considered very busy.	Some of the things that have been complained	about are the difficulty of taking full online lectures, the preparation of schedules that are considered very busy	the difficulty of taking full online lectures	noun phrase
9	This needs to get serious emphasis because this is the strongest predictor for achieving a good level of satisfaction in students.	This needs to get serious emphasis	because this is the strongest predictor for achieving a good level of satisfaction in students	a good level of satisfaction	adjective phrase
10	At this stage, a model is presented that shows the complete latent variables with operational variables.	At this stage, a model is presented	that shows the complete latent variables with operational variables	the complete latent variables	adjective phrase
11	The measurement model is used to test latent variables with their indicators, while structural models are used to describe the relationship between latent variables or the relationship between exogenous variables and endogenous variables.	The measurement model is used to test latent variables with their indicators	while structural models are used to describe the relationship between latent variables or the relationship between exogenous variables and endogenous variables	are used to describe	verb phrase
12	This study evaluated structural models and measurement models that have been developed based on theoretical considerations.	This study evaluated structural models and measurement models	that have been developed based on theoretical considerations.	have been developed	verb phrase
13	Positive classroom management practices from lecturers create an atmosphere that motivates students to respond positively to learning, support each other, love their own learning environment, and are willing to collaborate positively with both lecturers and other students.	Positive classroom management practices from lecturers create an atmosphere	that motivates students to respond positively to learning, support each other, love their own learning environment, and are willing to collaborate positively with both lecturers and other students	with both lecturers and other students	preposition phrase
14	LMS is used to disseminate knowledge, assessment of student competencies, record student achievement, support for online social communities, communication tools, and important for security systems in online learning.	LMS is used to disseminate assessment of student competencies, record student achievement, support for online social communities, communication tools	and important for security systems in online learning	for online social communities	preposition phrase

The collected data in table 1 was analyzed by using descriptive qualitative method classified based on the theory applied in this study. The classified data was elaborated by using the main theory and the analysis of the structure of noun phrase is based on the theory proposed (Mair & Leech, 2020). Three elements of noun phrase; the head, the pre-modifier, and the post-modifier used to elaborate every structure more clearly. The head of noun phrase maybe built up with a noun, a pronoun, an adjective, an enumerator and genitive phrase. There-modifier may be built up with a determiner, an adjective, an enumerator, a genitive phrase and noun. The post-modifier may be built up with a prepositional phrase, a relative clause, an adverb, and an adjective. Based on the explanation above, there is the example of analyze: Noun is the most common word that becomes a head of a noun phrase. When nouns act as the head, it is the core of the phrase.

There are some syntactic functions of noun phrase in the sentence or clause, a noun phrase can act as a subject (S), object (O), complement (C) and adverbial (A), in adverbial, Sub ordinate NPS can act as modifiers (M) in other NPS the functions above can be illustrated. Noun Phrase as Subject Nouns and noun phrases first function as the subject of clauses (Maillart & Parris, 2018). The subject of a sentence is one of the basic parts of a sentence which performs the action of or acts upon the verb.

There are 4 types of sentences according to Nelson (2019), as follows: 1) Simple Sentence (sentence consists of only one clause, namely the main (independent) clause can only have one subject and predicate only. Clause is a grammatical unit in the form of a combination of words which at least consists of a subject and a predicate. That clause or combination of words has the potential to become a sentence. This means that the clause is a combination of several words in which there is a subject and predicate, but objects and information can also be added, be it information of place, manner, time and so on to form a sentence. One clause consists of only one predicate. 2) Compound Sentence. In Indonesian, it is called an equivalent compound sentence, which is a combination of two simple sentences or two or more main clauses. In this sentence there are two clauses, each clause has only one predicate, but the most important thing here is that even though it has two clauses, the two clauses are of the same type. Usually joining two or more clauses uses conjunctions, for example and, or, but and others. 3) Complex sentences. Analyzed from the function of each clause which includes one main clause and one or more subordinate clauses including adjective clauses, and adverb clauses. 4) Compound complex sentence, a sentence consisting of two independent clauses and a dependent clause.

Dependent clauses can function as nouns, adjectives or adverbs. Dependent clauses that function as nouns are called Noun Clauses, those that function as adjectives are called Clauses, and those that function as adverbs are called Adverb (Adverbial) Clauses. All

types of dependent clauses cannot stand alone as complete sentences, but must be supplemented with independent clauses so that they can become a sentence and can provide clear information. Noun clauses and adverbial clauses begin with subordinate conjunctions such as that, whether/if, why and how for noun clauses and because, before, after, as soon as, while, and meanwhile for adverbial clauses. Meanwhile, adjective clauses use relative pronouns, such as who/that, which, whose, and whom. Therefore, adjective clauses are also called relative clauses.

CONCLUSIONS AND FURTHER RESEARCH

In analyzing the data, the researcher uses a tree diagram method based on the Aarts (2018), theory with a few modifications to make it easier for readers to understand. The analysis process is only carried out at the level of the internal structure of the sentence. Except for subtypes of simple sentences (simple sentences) which contain clauses, where the analysis is carried out to the level of the internal structure of the phrase. This is done so that the status of the clause that is "attached" to the internal structure of the phrase can be identified clearly.

Based on the results of identification, it was found that all types of sentences and their subtypes contain subject and predicate functions. In addition, some of the identified sentences also contain adverb functions (adverbs). Adverbs or adverbs are not mandatory elements in a sentence, their position is also not bound. Adverbs can be placed in front of the subject or after the predicate. In addition, its presence also does not affect the meaning of a sentence.

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