Argument structure and semantic role analysis of English speech act verb order

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Article history:	Abstract
	This study is qualitative descriptive research that examines the English speech act verb "order" in English. The purpose of this study is to analyse the argument structure and its role in semantics. The type of data used in this study is secondary data sourced from the Corpus of Contemporary American English (COCA). The research instrument utilized in this study is a human instrument supported by hardware such as a computer, along with software such as Microsoft Word and Microsoft Excel, as well as note-taking tools like pen and paper. Data for this study was collected using the corpus linguistics method and observation methods with note-taking techniques. The data were analysed by using the macro role theory by van Vallin & Lapolla (1997). The study results indicate that the verb "order" can have two arguments, the actor argument and the undergoer argument, and each argument can have its semantic role. The actor argument can entail the semantic role of the agent, while the undergoer argument can entail the semantic role of the theme.

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1 Introduction

Understanding speech act verbs is very important in all languages in terms of their function as a means in the complex life of modern society, in this case as a means of communication both oral and written (Wierzbicka, 1987). Therefore, Wierzbicka (1987), wrote a semantic dictionary of English Speech Act Verbs. The purpose of writing this dictionary is to define each meaning of speech verbs in natural language (a language that is easier to understand by everyone). According to Brown (2009), the term speech act verb has been defined as a word used to refer to all types of verbal behaviour or to a much smaller subset of verbs that express a certain attitude. Furthermore, Wierzbicka (1987), explains that the main function of speech act verbs is to understand people's speech acts, not doing the speech act. Speech acts should not be considered as a natural conceptual language which is part of the semantic field but rather a language that can provide naming expressions and permanently describe plants and animals following their natural biological conditions (Searle, 1979). Speech act verbs have many different sub-classes, but most of them serve to characterize the information expressed by the speaker and then relate them to common "mental states", such as "wants", "thoughts" and "assumptions". For example, from the sentence "someone ordered me to do something" there are two information that can be drawn, (1) someone has revealed a message with the content "I want you to do this and that", (2) someone said it with the assumption that I do not have a choice but to do it and I realized it (Wierzbicka, 1987). Research on speech act verbs has been a longstanding topic of interest in the philosophy of language. Pioneered by Austin (1975), in his analysis titled "How to Do Things with Words," Austin (1975), explains that certain speech verbs, when used in a particular way, implicitly perform the speech act in question. For example, the verb "promise" in the sentence "I promise to be there tomorrow" implicitly expresses that the speaker has agreed with the listener/recipient of the information. From a linguistic perspective, this kind of explanation is considered incomplete in terms of understanding the meaning of verbs as a whole. However, over time, in-depth research on the meaning of English speech act verbs has not been widely continued (Trosborg, 1995; Tantucci & Wang, 2018). The in-depth research referred to involves examining the correlation between verbs and other linguistic expressions that appear in a sentence. Each meaning of a verb needs to be defined in more detail thus, that understanding and use can be more precise. The statement emphasizes the importance of considering the correlation between verbs and other linguistic expressions in creating a correct and acceptable sentence to ensure that the intended meaning of the sentence is clearly understood by the listener (interlocutor). For example, it is important to explain what kind of important information a verb can convey in a sentence. For instance, the verb "kill" can convey information about the entity that is the killer, the entity that is killed, and the instrument used for killing. Such information is not presented in the English Speech Act Verb dictionary (1987). Many linguists may study various verbs using the same theory of argument structure and semantic roles, but not specifically focusing on English speech act verbs (Roșu & Șerbănută, 2010; Leydesdorff & Welbers, 2011). Therefore, this article will present the meaning of one of the speech act verbs found in Wierzbicka's (1987), dictionary. The verb analysed is "order" as a directive verb. The analysis of the verb "order" will focus on the arguments involved in forming its meaning and their roles (Hartsuiker & Westenberg, 2000; Matthews et al., 2005).

2 Materials and Methods

This study is a semantics descriptive qualitative research. The data is taken from the Corpus of Contemporary American English (COCA) which can be accessed through https://www.english-corpora.org/. COCA is the first large corpus consisting of several languages that have been designed and built from the ground up known as a 'corpus monitor'. This corpus has over one billion text words covering eight genres: spoken, fiction, popular magazines, newspapers, academic texts, TV and movie subtitles, blogs, and other web pages (English-corpora.org). Data in this study were collected using the observation method with note-taking techniques. Data collection was carried out using the KWIC (Keyword in Context) feature on COCA. This feature is used to view concordance lines for each node generated by COCA. First, each verb is entered in the search column using the VERB_v keyword, for example, ORDER_v. A search using capital letters is called a lemma search, which produces various morphological forms of the verb, while _v is a marker for the verb. Thus, COCA only displays concordance lines whose nodes function as verbs. Each verb search is also limited to 500 lines to obtain more in-depth and accurate results. The data analysis method uses the interactive method of Miles & Huberman (1984), where before all the data is analysed, four techniques should be applied first, namely reduction, data display, and conclusion drawing/verification techniques. In

the reduction process, the 500 citations were reduced to 300 citations. This is because many citations were found that could not be considered "directive," for example, in the verb "order" there were citations that meant "request" as in "she is ordering a big jug of beer" and many repeated citations were found or there may be slight differences in the sentences presented, but they have the same source and year of data (identical).

This research aims to examine the valency and semantic roles of the verb "order", thus, this study used argument structure theory and macro role theory (Foley & Van Valin, 1984). In terms of linguistics, an argument is any expression or syntactic element in a sentence that serves to complete the meaning of the verb. Verbs usually require one to three arguments. The number of arguments required by a verb is called verb valency (Van Valin & LaPolla, 1997). Argument structure that constructs a clause consisting of agent and patient, which are marked by grammatical features in a language. Hale & Keyser (2002), explain that argument structure is determined by the lexical properties of items, especially by syntactic configurations. For example, the verb "eat" can involve two arguments, namely agent and patient, even though its appearance is implicit.

Semantic roles refer to the meaning of the elements that fill the functional elements of a sentence (Hung et al., 2010; Cohn et al., 2017). Semantic roles are roles assigned to predicate arguments, typically verbs. According to Frawley (1992), determining semantic roles is not an easy task, because the analysis is usually intuitive. In this regard, Foley & Van Valin (1984), offer the macro role theory, because each role categorizes certain types of arguments (thematic relations). Thematic roles are described as follows:

1) Agent: a role that causes an action or event intentionally or for a specific purpose.
2) Effector: the performer of an action or event who may perform their actions intentionally or unintentionally.
3) Experiencer: one who experiences internal states, such as perception, cognitive, and emotive.
4) Instrument: an inanimate entity manipulated by the actor in acting.
5) Force: something similar to an instrument but cannot be manipulated. Something that resembles a tool but cannot be used as a tool.
6) Patient: something that is in a state or condition, something that changes state or situation.
7) Theme: an entity placed or changing location.
8) Benefactive: a participant who benefits from an action or deed.
9) Recipient: someone who receives something.
10) Goal: target, destination.
11) Source: the starting point of a situation and is used in one case variation.
12) Location: a place or spatial locus of a situation.
13) Path: the route taken by an agent in acting.

3 Results and Discussions

Data 3.1

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I    did  not    order     a    hit,        Louise
N  AUX  NEG     perintah  DET  penyerangan  N
[A-AGT]               V          [U-THM]
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'*saya tidak memerintahkan penyerangan itu, Louise*'

(coca12_tv2016)

In the sentence "I did not order a hit, Louise," the semantic role of the verb "order" is an action performed by the subject of the sentence, "I," denying that he gave an order to attack Louise. The phrase "a hit" is a theme role that is ordered, which in this context refers to the action or attack that is alleged to have been carried out. With the negative particle "not" before the verb "order," the subject explicitly states that he did not give the order for the attack.

The movement or situational change of the theme in this sentence is from the initial state where there is an assumption or accusation that the subject gave the order to attack, to the state described in the sentence, where the subject denies giving such an order. Thus, the movement or situational change of the theme indicates that the subject rejects or denies the role that is alleged to have been given to him. In the context of this sentence, the verb "order"

has a strong connotation, indicating the authority or power possessed by the subject to give such an order. Based on the analysis, two argument structures can be observed in the sentence: the first argument is the [ACTOR] that played a role as an [AGENT] of the action or the one giving the order, and the second argument is the [UNDERGOER] that played a role as [THEME] of the action of the order.

Data 3.2

The court   ordered   a   new trial…
DET N   perintah   DET baru percobaan

'*Pengadilan memerintahkan sidang baru…*'

(coca15_spok1992)

The sentence in data 3.2 above shows that the verb "order" has two core arguments, namely the subject as the first argument and the second argument that acts as the object in the sentence. The sentence "The court ordered a new trial," describes that the court has decided to conduct a new trial in a legal case. In this context, "the court" is the entity that takes action or acts as the order-giver [ACTOR-AGENT]. The verb "ordered" indicates that the court is taking the action of order, while the phrase "a new trial" indicates the object and the second argument [UNDERGOER-THEME] of the order, which is the new trial that must be conducted.

   The meaning of this sentence implies that the court feels the need to repeat the previous trial process, perhaps due to confusion, mistakes, or errors in the previous process. This new trial can be seen as an effort to ensure that the court's decision is based on correct information and fair procedures.

Data 3.3

Nbc took   the extraordinary step   of ordering   a   second pilot
N   ambil DET ADJ   langkah PREP perintah DET   kedua N

'*Nbc mengambil langkah luar biasa dengan memerintahkan pilot kedua*'

(coca19_blog2012)

Based on data 3.3, the meaning of the sentence depicts an extraordinary action taken by NBC in the context of television production. In this sentence, "NBC" acts as the subject and the first argument [ACTOR] acting. The sentence in data 3.3 can be said to have two related phrases. The phrase "took the extraordinary step" provides context or background about the action taken, which is considered unusual or extraordinary. This phrase indicates that the action taken by the subject (NBC) is not normal, but rather an important or special action.

   Meanwhile, the phrase " ordering a second pilot" provides specific information about what was ordered in this extraordinary step, which is the order to create a second pilot. Therefore, both phrases complement each other to present the meaning "NBC has made an unusual or extraordinary decision by ordering the production of a second pilot." This action may have been taken for specific reasons, such as unsatisfactory results from the first pilot. Thus, it can be said that the first argument [ACTOR] of the sentence is NBC acting as the [AGENT], while the second argument [UNDERGOER] is "a second pilot" acting as the [THEME] because it changes location.

Data 3.4

He turned   to   the   next general and   ordered 1   million soldiers to the   front.
PRO balik PREP DET ADJ   N   CONJ perintah NUM NMNL N   PREP DET depan

'*dia beralih ke jenderal berikutnya dan memerintahkan 1 juta tentara ke depan*'

(coca43_blog2012)

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The sentence in data 3.4 is a subordinated clause sentence, as seen from the arrangement of its word classes. The core sentence in data 3.4 is "He ordered 1 million soldiers to the front," while the phrase "turned to the next general" is a prepositional phrase that explains the subject's action of turning to the next general. In this sentence, "ordered" is the main verb because it is the main action carried out by the subject (He). This verb indicates the concrete action taken by the subject towards the object (1 million soldiers), which is giving an order. Although "turned" is also a verb in the sentence, this action is more supportive or complementary to the main action, which is giving an order. Structurally and semantically, "ordered" is the main verb that describes the main action in the sentence. The sentence also contains an adjunct in the form of a prepositional phrase, "to the front," which functions to describe the direction or location where the soldiers are ordered (Hashem & Muhi, 2021).

Based on the analysis of data 3.4, the verb "order" can have two arguments, the subject argument as [ACTOR] and the object argument as [UNDERGOER]. "He" is the first argument and also the subject acting as [AGENT], while "1 million soldiers" is the second argument and also the object of the sentence acting as [THEME].

Data 3.5

…one-day strike ordered   by   islamic militant groups…
   satu hari mogok perintah PREP   N   militan grup
 [U-THM]   V   [A-AGT]

'…satu hari nasional yang diperintahkan oleh kelompok militan islam…'

(coca41_news2001)

In the sentence "...one-day strike ordered by Islamic militant group," the semantic role of the verb "ordered" is the action carried out by the first argument [ACTOR-AGENT], which is the "Islamic militant group," to order a one-day strike. The phrase "one-day strike" is the second argument [UNDERGOER] acting as the [THEME] that is ordered, referring to the planned strike to be conducted for one day. In this context, the verb "ordered" indicates that the Islamic militant group has control and initiative over the action, thus they act as the agents responsible for the order. The movement or situational change of the theme in this sentence is from the state before the order was given, where the strike was not scheduled or planned, to the state after the order was given, where the strike is scheduled and planned to be conducted. In other words, this movement indicates the transformation of the situation from a plan to a concrete action to be taken by the party that is ordered. Data 3.5 is a passive sentence; thus, the focus is on the action that is done/ordered, in this case, the phrase "a one-day strike." The subject in an active sentence, which is the first argument, becomes the second argument in a passive sentence, and vice versa. In other words, in a passive sentence, the subject is the second argument, which is the entity receiving the order, while the object is the first argument that explains who is giving the order (Luzondo-Oyón & de Mendoza-Ibáñez, 2015; Alsina, 2001).

4 Conclusion

The results of the argument structure analysis show that the verb "order" can take two arguments in one sentence. The agent argument or the entity giving the order, is referred to as the actor, and the undergoer argument, is referred to as the theme. Each argument will carry semantic roles that function to understand the semantic relations between various elements in the sentence, such as the relation between the verb and its arguments, or the relation between two phrases in the sentence.

In the analysis of semantic roles, there are two main roles, namely agent and theme. The agent is the role carried by the actor as the one giving the order or instruction, while the theme role is the role held by the undergoer. The theme role is the entity receiving the order and undergoing a change because of that order.

In some cases, for instance, as in the passive sentences the subject in a sentence is not always the agent and the object is not the patient; in other words, the agent and patient of a proposition do not determine the grammatical relation of an argument. According to Van Valin (2001), the primary coding properties are verb agreement, case marking, and (in languages with very rigid word order) the position of an argument in the sentence, which may serve to express a particular grammatical relation.

Moreover, the addition of auxiliaries and modals before the verb, as well as the suffixes -ed and -ing in the verb "order" in a sentence, does not have a significant impact on its meaning. Instead, it can provide clarification or information regarding the timing of when the event occurred.

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