

# Constructing Double Modals in English Modality on Corpus Linguistics: Syntactic and Semantic Studies

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The current development of the industrial revolution is accelerating with the existence of digital technology that has a major impact on human life throughout world. The latest industrial revolution is the fourth generation; it's a system automation in all processes of human life activities. Internet technology is not only connecting millions of people throughout the world but also becoming the basis for language research through the corpus linguistics. One of the typical difficulties posed by double modals verbs are the multiplicity of meaning. Most double modal verbs have more than one meaning or function. By using descriptive method, this research describes the double modals construction Must + adverb in English modality and Indonesian based on its meaning. The data was taken from corpus linguistics, that is Corpus of Contemporary American English (COCA). The results showed that the types of meanings for double modals construction, Must + Adverb, exist in epistemic and deontic modalities.

**Key words:** *Double Modals, Must, Corpus Linguistics, Modality.*

## Introduction

In the development of modern linguistics there is the emergence of a relatively new branch of science, that is the corpus linguistics. This science specifically examines language through a set of natural data, real according to its use, not only written data but also oral data transcribed. Shirazizadeh (2017:2) states that corpus linguistics has defined itself, in the past two decades, as an innovative and sophisticated data –driven approach to the analysis of language. According to Adolphs (2006:137) in Collins (2019:15) the corpus is a collection of data, both

ordinary data and digital data, in a form that contains various kinds of linguistics information, start from words, structures, meanings, and discourses, which can be used for research.

In Cheng's view (2012: 6), corpus linguistics works by analyzing data through a compilation process based on categories and units of analysis. In the next stage, the most important categories and units of analysis in the corpus linguistic scope are lists of words, keywords, and concordances. The word list contains a large number of words contained in linguistic data and the number of frequencies that appear in the source text. In addition to the list of words, there are also keywords which are a collection of words with the highest frequency of occurrence that are assumed to represent core topics in text, while concordance is a list of words that collocate in other words and form new meanings based on context and context (Adolphs, 2006: 136) Before the discovery and development of computer technology, all language data in written form was still in the form of ordinary manuscripts or writing on paper or other objects. Since the invention of computer technology and the beginning of the digital era, linguistic data in the form of writing or text and oral languages that are converted into digital writing can be stored and processed more easily. This is where the linguistic corpus takes part, namely to process digital language data.

The corpus is produced through a digitization process and can then be utilized in various fields of linguistics, such as morphology, syntax, semantics, lexicology and other linguistic fields such as translation, literature, and so on. In many world languages, various form and variety of linguistic data are available. In other languages, corpus linguistics utilization is very widely practised in other sciences. Lynne (2018:370) assume that corpus linguistics techniques also have the potential to be exploited more fully in library and information science research that involve a higher degree of automation (e.g. recommender systems, knowledge discovery systems, and text mining).

Language as a communication tool has a very important role because almost no human activity takes place without the presence of language. The role of language is key to the ability to transfer the desires, ideas, hope and emotions of one human to other humans. In other words, language allows humans to transfer ideas and knowledge from one language to another. Nugraha *et al.* (2018:2) stated that in various literature and comparative studies between languages, there are many similarities and differences in languages however world languages also have universal equations commonly referred to as language phenomena.

In its development, language as a medium of communication has experienced rapid progress as the development of science and technology in parts of the world, including in Indonesia. This is indicated by the number of publications in Indonesia written in foreign languages, especially in English. Therefore, Indonesian people who follow the development of science and technology, at least can master English as well as the national language, Indonesian.

English and Indonesian are historically two languages originating from different clusters and both of them have diverse and interesting characteristics to be studied more extensively and studied in more depth. The peculiarity of a language is felt when a word, phrase or sentence is searched for in a different language. In terms of inter-language matching, the mind will be focused on the translation of a text from one language to another which involves both language and meaning. In other words, not only is the language of the source replaced with the target language but also the transition of meaning from the source language to the target language, even though the form changes but the meaning remains the same.

One branch of Linguistics is semantic which discusses aspects of meaning in language that includes descriptions of the meaning of words and the meaning of sentences. Language users will be greatly influenced by the situation when the language is used, both for communication and simply expressing themselves. If the user of the language has used a personal perspective to see the situation or event that happened, indirectly, it expresses the attitude of subjectivity. (Mărăscu, 2016: 104; McWaters & Hawkins, 2018).

In Linguistic studies, this is known as modality. According to Saba & Mamuna (2019:144) modality is the semantic domain, closely related to elements of meaning that languages express. In line with to Saba & Mamuna (2019:144), Saeed (2008:10) states that modality is a grammatical category for talking about the commitment of speakers. With the existence of this modality system, speakers can give a sign of receiving strong or weak commitment to factual statements. Modalities remain a less clear concept among linguists, both in terms of theory and matter, especially in terms of limits of understanding and forms of disclosure of modalities in English and their equivalents in Indonesian.

Language users in everyday life will be greatly influenced by the situation when the language is used, both for communication and simply expressing themselves. If the language user has used a personal point of view to see the situation or event that occurred, the sentence used is an opinion whose possibility of truth is very relative because it is influenced by subjective personal elements. This research study has dual purpose. First, the element of modality is interesting to discuss because it refers to the attitude of the speaker and is found in all languages. Second, the forms of disclosure of modalities in English include several classes of words and can also be in forms of modal (modal auxiliaries) which are considered special verbs or special class of verbs.

Bashir *et al.* (2018: 61) stated that one of the typical difficulties posed by double modals verbs are the multiplicity of possible meanings. Most double modal verbs have more than one meaning or function. The discussion of modalities, although it has been done in many previous studies, still leaves gaps and problems that need to be studied more deeply. Some of the

previous research about modality has been discussed by Suzuki (2018). *The semantics and pragmatics of modal adverbs: Grammaticalization and (inter) subjectification of perhaps*. Krapivkina (2017). *Semantics of the verb shall in legal discourse*. Mandelkern (2019). *Bounded Modality*. Diane, (2018). *Modality and contextual salience in co-sign vs. co-speech gesture*. In other languages this topic has also been discussed by Chen *et al.* (2019) *Mandarin Chinese modality exclusivity norms*. Imaizumi (2019) *Typological study on expressions of possibility and their related meanings in English, Chinese and Japanese—How modality and voice intersect*. Jonathan (2018). *The psychological representation of modality*. Ding *et al.* (2019) *Missing Modality Transfer Learning*. In: *Learning Representation for Multi-View Data Analysis*. Björn (2018) *Evidentials and Epistemic Modality*.

In this research, problems focused on double modals construction *Must + Adverb* in English modality. The problems discussed in this study can be formulated as follows: What types of meanings exist in double modals Construction *Must + Adverb* in English?

## Method

In this research, the method used is descriptive research method. According to Gay & Diehl (1992: 217), descriptive research involves collecting data in order to test hypotheses or to answer questions concerning the current status of the subject of the study. A descriptive study determines and reports the way things are. Descriptive research is scientific research that describes about event, phenomena or fact systematically dealing with certain area or population. The data is analyzed by revealing both syntactic and semantic aspects. Based on the method used, the interpretation of data used various techniques, such as deletion, substitution and transfer techniques. The data was taken from Corpus of Contemporary American English (COCA).

## Theoretical Framework

### *Corpus Linguistics*

Corpus linguistics is seen by some as a new study in linguistics due to its development which began rapidly in the 1960s along with the development of the use of computer technology. However, the corpus itself is not a new term because historically the method of searching the meaning of words and phrases in various contexts involving a very large amount of text has been conducted since the 13th century, but the process was done manually (McCarthy & Okeeffe, 2010: 3). Now the corpus linguistics is known as the study of language data (written and spoken texts transcribed) analysed on a large scale by computers. Corpus linguistics is also referred to as an area that focuses on a series of procedures or methods for studying language (McEnery, T. & Hardie, A., 2012). Svartvik (in Facchinetti, 2007) further argues that corpus linguistics is the study of the use of language in reality that is observed by collecting data from

written and spoken languages, then analyzed using a computer (corpus software) and described based on specific points of view and goals.

Based on the definitions above, in this study, corpus linguistics is referred to as a representation of the actual use of language from a society. This is in line with what was stated by Tognini-Bonelli (2010), who suggest that the corpus linguistics tends to study language that focuses on the performance level rather than competence. In this understanding, corpus linguistics is intended to describe the use of language rather than identifying universal linguistics. Tognini-Bonelli (2010) also added that quantitative elements are considered very important because they are the basis for determining language description categories. In addition, McEnery & Wilson (in Baker *et al.*, 2006: 50) says that corpus linguistics is a study of language based on examples of 'real life' language use and a methodology rather than language explanation or description. Based on this opinion, corpus linguistics is a language study based on examples obtained from the use of language in real terms and as a methodology from aspects of the language that need explanation or description.

### ***Syntax***

Syntax is derived from Greek which consists of two words “sun” which means “with” and “tattein” which means “placing”. Etymologically syntactic means putting together words into groups of words or sentences. O’Grady in Nugraha (2016:102) said that syntax is the system of rules and categories that underlies sentence formation in human language.

### ***Semantic***

O’Grady in Nugraha (2016:103) states that semantics is the study of meaning in human language, while Saeed (2003: 3) in Nugraha (2018:84) states that semantics is the study of the meaning communicated through language". From the above it can be concluded that semantics are generally defined as the study of the meaning communicated through language.

### ***Modality***

According to Huddleston (2002:172) the distinction between mood and modality is like that between tense and time, or aspect and aspectuality: mood is a category of grammar, modality a category meaning. Mood is the grammatic representation of modality within the verbal system, while Sadia *et al* (2019:1) stated that Modality is a comprehensive term to describe propositions regarding the speaker’s attitude towards a situation. Modality is considered an important linguistic device to express social roles and relationship between speaker/writer and hearer/reader.

Semantically, the meaning types of modalities that will be used in this study are based on the theory by Huddleston (2002: 177-179) which consist of two categories, there are epistemic modalities and deontic modalities. Huddleston (2002:178) stated that the term “Epistemic’ is derived from Greek for ‘knowledge’: this kind of modality involves qualifications concerning the speaker’s knowledge”; while “Deontic’ is derived from the Greek for ‘binding’ so that here it is a matter of improving obligation or prohibition, granting permission and the like. The person, authority, convention, or whatever from which the obligation, etc, is understood to emanate is referred to as the “deontic source”.

### ***Double Modals***

Double modals refers to the term of Huddleston (2002: 179) called modal harmony, which is the suitability of modals. This means that there is a combination of lexical modal and grammatical elements in a sentence. The most common forms in modal harmony can be found in a combination of modal verbs and adverb. Semantically, the combination of lexical and grammatical modal expresses the meaning of single modal.

Huddleston (2002:173) states that “*we use this term for items expressing the same kind of meaning as the modal auxiliaries, but which do not belong to the syntactic class of auxiliary verbs. It covers adjectives like possible, necessary, likely, probable, bound, supposed, adverbs like perhaps, possibly, necessarily, probably, certainly, surely, verbs like insist, permit, require, and nouns like possibility, necessity, permission, and similar derivatives.*”

## **Results and Discussion**

### **Data 1**

She **must slowly** lift herself from her chair onto the shower bench.

*‘Dia perlahan-lahan harus mengangkat dirinya dari kursinya ke bangku shower’*

Syntactically, the word ‘must’ is modal, and ‘slowly’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is an expression of necessity that is based on an authority and belongs to a deontic modality that has a subjective command meaning. The source of deontic in the data above is a source of deontic based on social rules in the form of official authority. With social rules, a person's interpretation of something he faces is based on the provisions or regulations that apply to regulate human life.

### **Data 2**

As engineers, professors **must carefully** construct meaningful and updated course syllabi that can be viewed as the product design.

*‘Sebagai insinyur, profesor **harus hati-hati** membangun silabus kursus yang bermakna dan diperbarui yang dapat dilihat sebagai desain produk’*

Syntactically, the word ‘must’ is modal, and ‘carefully’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is an expression of necessity that is based on an authority and belongs to a deontic modality that has a subjective command meaning. The source of deontic in the data above is a source of deontic based on social rules in the form of official authority. With social rules, a person's interpretation of something he faces is based on the provisions or regulations that apply to regulate human life.

### **Data 3**

They **must carefully** consider their levels of achievement in formulating their goals

*‘Mereka **harus hati-hati** mempertimbangkan tingkat pencapaian mereka dalam merumuskan tujuannya’*

Syntactically, the word ‘must’ is modal, and ‘carefully’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is a logical conclusion and belongs to an epistemic modality that has subjective certainty.

### **Data 4**

To positively impact behavioral and academic outcomes, teachers **must carefully** shape instruction to meet the needs of their students.

*Pengaruh positif terhadap hasil perilaku dan akademik, guru **harus hati-hati** membentuk instruksi untuk memenuhi kebutuhan siswa mereka.*

Syntactically, the word ‘must’ is modal, and ‘carefully’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is a logical conclusion and belongs to an epistemic modality that has subjective certainty.

### **Data 5**

I have intended writing you that we **must surely** change our remarks on this fruit.

*aSaya bermaksud menulis kepada Anda bahwa kami harus mengubah komentar kami tentang buah ini.*

Syntactically, the word ‘must’ is modal, and ‘surely’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is a logical conclusion and belong to an epistemic modality that has subjective certainty.

#### **Data 6**

The most effective way of managing behavior problems **must surely** be to work to prevent them arising, and to prevent them arising.

*Cara paling efektif untuk mengelola masalah perilaku **pastinya harus** bekerja untuk mencegah timbulnya masalah.*

Syntactically, the word ‘must’ is modal, and ‘surely’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is a logical conclusion and belongs to an epistemic modality that has subjective certainty.

#### **Data 7**

Every student **must obviously** meet the requirements of each course as set down by the Quebec Ministry of Education.

*Setiap siswa **jelas harus** memenuhi persyaratan setiap mata pelajaran sebagaimana ditetapkan oleh Kementerian Pendidikan Quebec.*

Syntactically, the word ‘must’ is modal, and ‘obviously’ is an adverb of manner. Semantically, based on the context of the sentence, the word ‘harus’ is an expression of necessity that is based on an authority and belongs to a deontic modality that has a subjective command meaning. The source of deontic in the data above is a source of deontic based on social rules in the form of official authority. With social rules, a person's interpretation of something he faces is based on the provisions or regulations that apply to regulate human life.

#### **Conclusions**

This research can be seen as an effort to strengthen, complement and develop and criticize existing theories. The results achieved are a contribution to linguistic development, especially concerning Double Modal Verbs in English Modality on Corpus Linguistics and semantically, the types of meanings modal must + adverb include dynamic and deontic modalities. Dynamic modality is the attitude of the speaker towards the actualization of events based on circumstances, whereas deontic modalities are subjective because speakers are involved in an authority relationship or dependent on the attitude of the speaker and relevant social rules. The



social rules can be effected either by personal authority or official authority. Personal authority is caused by differences in age, position, or social status between people, while official authority comes from mutually agreed provisions or regulations to regulate the livelihoods of the community concerned.

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