

### Logico-Semantic Relation in The World Health Organization's Covid-19 Myth-Busters

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#### **Abstract**

In delivering the contents of the World Health Organization's Covid-19 Myth-busters, the creator realized clause complexes besides clause simplexes. This research focuses on analyzing logico-semantic relation of clause complex. Thus, it can reveal the creator's intention in realizing the clause complexes when conveying the myth-busters to the people of the world. This research utilizes a qualitative-descriptive research method. There are 48 expansion relationships in the myth-busters. They include one elaboration relationship, 22 extension relationships, and 25 enhancement relationships. Enhancement is the most-realized clause relationship in the myth-busters. This means that the creator intended to convey complementary ideas in the clause complexes by referencing time, condition, reason, purpose, and cause related to managing misinformation about Covid-19.

#### 1. Introduction

During the pandemic of Covid-19, lots of misinformation with low credibility has arisen and may potentially turn into myths related to the virus. Consequently, this situation has triggered scientists, librarians, and professionals encounter myths by providing mythbusters from credible sources (Naeem & Bhatti, 2020). The World Health Organization, having the role as the director and coordinator on international health, has been managing the myths related to Covid-19 through a wide range of methods (World Health Organization, 2020). One of the methods carried out by the World

Health Organization is launching a myth-busters website. The mythbusters website created by the World Health Organization can hopefully debunk the myths related to Covid-19 (Vraga & Bode, 2021). It is the World Health Organization's effort deliver good information over misinformation through an accessible website for the people of the world. In delivering the contents of the myth-busters about Covid-19, the creator used verbal language to the medium to convey the organization's intention the people of the world. As the medium, language is constructed the relationship of function and structure (Fontaine, 2013:4). They both work together since language



structure is needed to express language function. For that reason, the combination of function and structure of language gives people meaning. Thus, language helps us to understand what is contained in a spoken or written discourse (Iqbal et al., 2023). Talking about meaning in language, Halliday (in Fontaine, 2013:5) says that language is a kind of semiotic system. It means that system language is a and representation of resources speakers to create meaning. This view gives a rise to an approach that intends towards meaning and aims to show how meanings are expressed in language based on speakers' goals. It the approach of Functional Grammar or also known as Systemic Functional Linguistics. Bloor and Bloor (2013:2) adds that in Systemic Functional Linguistics, language is a kind of meaning system. It means that each language can construct meaning. Systemic **Functional** Linguistics sees that how people use language is classified into three strands of meaning or technically known as metafunctions, namely ideational metafunction.

interpersonal metafunction, and textual metafunction (Halliday & Matthiessen, 2014:30-31). In ideational metafunction, language is used to construe experiences of human. This kind of metafunction is then distinguished into two subcomponents. Those are experiential metafunction and logical metafunction. Experiential metafunction is mainly concerned with the contents or ideas in a clause. Nguyen (2012) adds that the essence allows humans language represent a picture based on what is around and inside them. That is to say that humans need language to communicate their ideas (Maulidyanti et al., 2023). While experiential metafunction relates to contents or ideas, logical metafunction relates to the relationship between them. In expressing experiences, human speakers can realize them into a clause simplex or combine some clauses into a clause complex (Nasution, 2019). A clause complex results when people project expand their statements of the original clause to another related



clause into a group of clauses 2013; (Nguyen, Wang, 2020). Therefore, clauses relation of clause has semantic function complex making up a language logically (Ngongo et al., 2023). According to Halliday & Matthiessen (2014:33), clause complex involves systems. Those are taxis and logicosemantic relation. Taxis specifies types of clauses' interdependency relationship in a clause complex, namely parataxis and hypotaxis. Meanwhile, the logico-semantic relation specifies types of clauses' meaning relationship. It consists of expansion, where the meaning of a clause expands in another clause, and projection, where the meaning of a clause projects in another clause by the occurrence of verbs of saying or thinking. Thus, the logico-semantic relation can describe the speakers' intention in combining ideas of clauses into a logical clause complex. Ideas of clauses in the World Health Organization's Myth-busters about Covid-19 are frequently expressed in clause complexes besides clause simplexes. This occurrence certainly has meaning that needs to

through the explained logicosemantic relation of clause complex. this Accordingly, research is conducted to analyze clause relationship through the logicosemantic relation of clause complex in the World Health Organization's Myth-busters about Covid-19. It can reveal the creator's intention in realizing the clause complexes when conveying the myth-busters to the people of the world. There are several pieces of research concerning logico-semantic relation. They are provided to be the comparisons for this research. First, Yuniar (2018) analyzed logico-semantic relation in exposition written by analytical students. Similarly, Hasrimarta & Tiarina (2022) analyzed logicosemantic relation on the thread about vaccines on Twitter. Furthermore, Agustin (2023)analyzed logico-semantic relation in novel entitled "Meet Me Istanbul". By the pieces of research presented above, this research attempts to fill the gap by focusing on analyzing logico-semantic relation of clause complex in a people's health guide in which the research



analyzing this kind of object has not been conducted. Furthermore, this research is worth conducting to contribute to the research novelty focusing on Systemic Functional Linguistics and is expected to provide an overview of the realization of logical meaning in the World Health Organization's Mythbusters about Covid-19 to the readers for managing the misinformation about Covid-19.

#### 2. Research Methods

This research utilizes a qualitativedescriptive research method. According to Creswell & Creswell (2017:234),researchers using qualitative methods tend to collect data by focusing on the following questions what, why, and how rather than how many or how much. Moreover, this research is carried out as a descriptive case study, which is a part of qualitative research methods. Ary et al. (2014:43) state that qualitative research focuses on providing rich verbal descriptions to analysis. This research focuses on analyzing types of logico-semantic relation. Thus, the main data of this

research must be in the form of clause complex. The data used in this research were collected using documenting technique.

The data were taken from https://www.who.int/emergencies/ diseases/novel-coronavirus-2019/advice-for-public/mythbusters, then their logico-semantic relation were studied and analyzed based on the theories of logical metafunction by Halliday & Matthiessen (2014),Thompson (2014),and **Eggins** (2004).Therefore, the creator's intention in realizing clause complexes in the World Health Organization's Mythbusters about Covid-19 can be revealed.

#### 3. Discussion and Results

There are 48 clause complexes found in the World Health Organization's Myth-busters about Covid-19. The type of logico-semantic relation found in those clause complexes is only expansion. The expansion covers one elaboration relationship, 22 extension relationships, and 25 enhancement relationships. Based on the findings, the creator of the World



Health Organization's Myth-busters about Covid-19 tended to enhance the meaning of clauses in realizing the clause complexes. The detailed frequency distribution is presented in the table below.

Logico-Semantic Relation	Markers	Total	
Elaboration	;;	1	
Extension	'and'	14	48
	'or'	8	
Enhancement	'and therefore'	1	
	'once'	2	
	'to'	7	
	'while'	2	
	'until'	1	
	'when'	4	
	ʻif'	5	
	'as soon as'	1	
	'since'	1	
	'because'	1	

Table 1: Frequency Distribution

The discussions of logico-semantic relation are presented by the types of expansion found in the World Health Organization's Myth-busters about Covid-19. Those are elaboration, extension, and enhancement.

#### 3.1. Elaboration

Halliday & Matthiessen (2014:444) explain that a clause expanding

another by elaborating intends to restate in other words, specify, comment, or exemplify in a greater detail. This means that the secondary clause does not establish something new but presents a further element (Eggins, 2004:280). The symbol '=' ('equals') is used to elaborate a clause. World In the Health Organization's Myth-busters about Covid-19, there is only one clause elaboration complex with relationship. It is built by the conjunctive markers The discussion is briefly explained below.

#### • Data 1

"Medical masks are flat or pleated; they are affixed to the head with straps." In the data above, the semicolon ';', interpreted as a conjunctive expression 'indeed' and placed between the first clause "Medical masks are flat or pleated" and the second clause "they are affixed to the head with straps or have ear loops",



signals that the second clause elaborates (=) the meaning of the first clause by providing a clarification; the creator expressed the second clause to clarify the thesis of the first clause by backing it up with a form of explanation.

#### 3.2. Extension

In extension, one clause expands another to add some new information or establish an alternation (Halliday and Matthiessen, 2014:444). Similarly, Thompson (2014:196) states that extension simply provides addition or replacement. The symbol used in extension is '+' ('added to'). In the World Health Organization's Mythbusters about Covid-19, there are 22 clause complexes with extending clauses. They are linked by the 14 conjunctive markers 'and', and 8 conjunctive markers or'. The discussion of extension is briefly explained by several examples below.

### 3.2.1. Conjunctive Marker 'And' Data 2

"Avoid crowds, and maintain at least a 1-metre distance from others." In

the representative data above, the conjunction 'and' placed between the first clause "Avoid crowds" and the second clause "maintain at least a 1-metre distance from others" signals that the second clause extends (+) the meaning of the first clause by giving an addition; the creator simply added and adjoined the second clause to the first clause to provide additional information.

#### 3.2.2 Conjunctive Marker 'Or' Data

3

"Do not spray or introduce bleach or any other disinfectant into your body" In the example above, the conjunction 'or' placed between the first clause "Do not spray" and the second clause "introduce bleach or any other disinfectant into your body" signals that the second clause extends (+) the meaning of the first clause by adding an alternation; the creator presented the second clause as an alternative to alternate with the prohibition in the first clause.

#### 3.3. Enhancement

Halliday and Matthiessen (2014:444) explain that enhancement expands a clause by embellishing it with some



circumstantial features, such as cause, condition, place, manner, or time. The symbol used to show enhancement is 'x' ('multiplied by'). In the World Health Organization's about Myth-busters Covid-19, enhancement is the most-found clause relationship. There are 24 enhancement relationships found in the clause complexes. They are built by various markers, such as one conjunctive marker 'and therefore', two conjunctive markers 'once', seven infinitive markers 'to', two conjunctive markers 'while', one conjunctive marker 'until', four conjunctive markers 'when', five 'if', conjunctive markers one conjunctive marker 'as soon as', one conjunctive marker 'since', and one conjunctive marker 'because'. The discussion of enhancement is briefly explained by several representative data below.

### 3.3.1. Conjunctive Marker 'And therefore'

Data 4

"Covid-19 is caused by a virus, and therefore antibiotics should not be used for prevention or treatment." In the representative data above, the combination of conjunctive 'and therefore' placed between the first clause "Covid-19 is caused by a virus" and the second clause "antibiotics should not be used for prevention or treatment" signals that the second clause enhances (x) the meaning of the first clause; the creator presented the second clause as an effect resulted by the cause in the first clause.

#### 3.3.2. Conjunctive Marker 'Once'

Data 5

"Once your hands are cleaned, you should dry them thoroughly by using paper towels or a warm air dryer." In the example above, the conjunction 'once' is placed in the first clause "Once your hands are cleaned". It signals that the creator presented the first clause to enhance (x) the meaning of the second clause "you should dry them thoroughly by using paper towels or a warm air dryer" by providing an event that happened as soon as the event in the second clause happens.

#### 3.3.3. Infinitive Marker 'To' Data 6



"Apply a palmful of alcohol-based sanitizer to cover all surfaces of your hands." In the representative data above, the infinitive marker 'to' is placed in the second clause "to cover all surfaces of your hands". It signals that the creator presented the second clause to enhance (x) the meaning of the first clause "Apply a palmful of alcohol-based sanitizer" by providing a purpose resulted from the cause in the first clause.

## 3.3.4. Conjunctive Marker 'While' Data 7

"The Covid-19 virus does not transmit through water while swimming" In the example above, the conjunction 'while' is placed in the second clause "while swimming". It signals that this clause is presented to enhance (x) the meaning of the first clause "The Covid-19 virus does not transmit through water" by providing an event that happened at the same time as that in the first clause.

### 3.3.5. Conjunctive Marker 'Until' Data 8

"Rub your hands together using the right technique until they are dry" In

the representative data above, the conjunction 'until' is placed in the second clause "until they are dry". It signals that this clause is aimed to enhance (x) the meaning of the first clause "Rub your hands together using the right technique" by providing an event used as the end point of the event that happened in the first clause.

# 3.3.6. Conjunctive Marker 'When' Data 9

"Wear a mask when you're not in the water and you can't stay distant."

In the example above, the conjunction 'when' placed at the beginning of the second clause "when you're not in the water and you can't stay distant" signals that this clause is presented to enhance (x) the meaning of the first clause by providing an event happening at the same time with that in the first clause.

### 3.3.7. Conjunctive Marker 'If' Data 10

"Stay at home if you are unwell."



In the representative data above, the conjunction 'if' is placed in the second clause "if you are unwell". It signals that the creator presented this clause to enhance (x) the meaning of the first clause "stay at home" by providing a conditional event.

### 3.3.8. Conjunctive Marker 'As soon as' Data 11

"Always change it as soon as it gets damp."

In the data above, the conjunction 'as soon as' placed in the second clause "as soon as it gets damp" signals that this clause is intended to enhance (x) the meaning of the first clause "always change it" by providing an event happened immediately before the event in the first clause happens.

## 3.3.9. Conjunctive Marker 'Since' Data 12

"You may receive antibiotics since bacterial co-infection is possible." In the data representative above, the conjunction 'since' is placed at the beginning of the second clause "since bacterial co-infection is possible". It signals that this clause is presented to enhance (x) the meaning of the first clause "you may receive antibiotics" by providing a reason resulted from the cause in the first clause.

### 3.3.10. Conjunctive Marker 'Because' Data 13

"WHO does not advise the use of corticosteroids for patients with nonsevere Covid-19 because they may increase the risk of complications or adverse effects." In the example above, the conjunction 'because' placed in the second clause "because they may increase the risk of complications or adverse effects" signals that the creator presented this clause to enhance (x) the meaning of the first clause "WHO does advise not the use of corticosteroids for patients with nonsevere Covid-19" by providing reason resulted by the cause in the first clause.

#### 4. Conclusions

Based on the findings, all the 48 clause complexes constitute expansion type. The creator of the



World Health Organization's Mythbusters about Covid-19 realized those clause complexes to expand the meaning of idea in the primary clause to another clause. The expansion covers one elaboration relationship, 22 extension relationships, and 25 enhancement relationships. In the myth-busters, the elaboration relationship established to provide clarification. the Moreover, extension relationships presented are to provide addition and alternation. Meanwhile, by realizing lots enhancement relationships in the clause complexes, this means that the creator of the myth-busters intended to convey complementary ideas to the people of the world by referencing time, condition, reason, purpose, and cause related managing misinformation about Covid-19. This occurrence is reasonable since the pandemic of Covid-19 involves various ideas in people's daily life.

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