

## **Meaning Properties of Covid-19 Related Terms in Selected Articles**

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### **Abstract:**

*This study aims to see the meaning properties of the Covid-19 terms in six different articles. By seeing the meaning properties of these Covid-19 terms we can find if the terms are used meaningfully in those articles. The basis of meaning properties include being meaningful or meaningless – they are deemed meaningless if the words used contain ambiguity, redundancy, anomaly, and contradiction. In this study, the qualitative method was used. The sources of data are covid-19 related articles from Google Scholar. The articles chosen are free-accessed articles related to covid-19 impacts, pandemic, and its measures to tackle the crisis. The six covid-19 related articles are read through and the covid-19 related words or phrases that occur more than one time in one article and in more than one article are collected as the data, thirty-eight terms are the result of this data collection. The application of the thirty-eight terms is analyzed by their meaning properties. The result shows there are nine phrases or sentences that are anomalies, five redundancies, and two ambiguities in the original articles. The findings show that even in Google Scholar articles, some of the Covid-19 terms are not used meaningfully in the sentences.*

**Keywords:** Covid-19, Meaning Properties, Semantic

## **1. INTRODUCTION**

For the past two years, many scientific writings and articles related to the Covid-19 pandemic have been produced. As a result, many new terms related to the Covid-19 pandemic are used in these articles. Since these Covid-19 related terms are fairly new, they are bound to be mistakes in understanding the meaning of the words. This study aims to see the meaning properties of the Covid-19 terms in six different articles. By seeing the meaning properties of these Covid-19 terms we can find if the terms are used meaningfully in those articles.

The basis of meaning properties include being meaningful or meaningless – they are deemed meaningless if the words used contain ambiguity, redundancy, anomaly, and contradiction (Leech, 1981). First, ambiguity is a word or sentence with several interpretations of meaning, and it means in a word or sentence, there are two or more meanings. Second, redundancy is unnecessary repetitions in a sentence. Third, Anomaly is a weird or peculiar state resulting from a reasonable demand that differs from the general situation. Forth, contradiction is contrary to the general truth. Lastly, a word that is meaningful is the one that contains quality; which has essential value or meaning in a sentence. So by these standards, the study determined if the terms are used correctly, and meaningfully in the sentences where the terms were used in the selected articles.

A lot of previous research on meaning properties focused on the specific types of meaning properties, such as research conducted on analyzing ambiguity in newspapers (Tambunan, 2009; Charmelia, 2014; Kurniati, 2015), students' textbooks (Hakim, 2009; Atik, 2012; Rekha, 2014), online recipes (Prasetyawan, et al 2017) and translated texts (Batu, et al 2014). Others focused on analyzing the anomaly in their research papers, such as anomalies in online data sources (Raz, et al 2002) and in news programs (Gultom, 2009).

From a broader perspective, an analysis of the whole meaning properties was done in articles from *Lingua Journal* (Zakiyah, 2018). However, only repetition was found in the whole data of the journal because of the random pick of the data articles. Thus, in this paper Covid-19 related articles are the main pivot of the research source and data; the covid-19 related terms are fairly new so there's more room for error when the terms are used.

The study is limited to articles that are related to the covid-19 pandemic. There are many covid-19 related articles to choose from, but the ones that are not too technical and the ones that have a lot of terms that we see from news articles and other media are the ones selected. This choice is made so that the study has a use for the public because these recurring terms are the ones we most see and have to understand to fight the Covid-19 pandemic.

## **2. LITERATURE REVIEW**

### **2.1 Meaning Properties**

The basis of meaning properties include being meaningful or meaningless – they are deemed meaningless if the words used contain ambiguity, redundancy, anomaly, and contradiction (Leech, 1981). “Meaning properties is a component that establishes the meaning of the word.” Lyons (1977) stated that “meaning properties is one of several features or components which together can make up the meaning of a word.”

Leech (1981) used to analyze the meaning properties which contain ambiguity, redundancy, anomaly, contradiction, and meaningfulness.

- a. When a term, phrase, or sentence has multiple meanings, it is called ambiguity, or when another word has an unclear meaning. Meaning can be unclear for some reason, such; (a) The phrase or word is widely used (common). For example, the term 'bank' has multiple meanings. (b) the speaker's/writer's intention is viewed differently. Even if the context is ambiguous, the interpretation should be based on it. (c) The distinction between meanings associated with language and meanings associated with non-language is unclear; for example, There is no limit to how clever someone can be at something. (d) the unfamiliar word or phrase to use.
- b. Redundancy is unnecessary repetitions in a sentence. In linguistics, information that is expressed more than once is referred to as redundancy.. It is characterized by amplification, repetition, restatement, or the presence of comparable alternatives. Ignorance could be the source of semantic redundancy. That is to say, the majority of redundancy is unintended. The speaker or writer is unaware that the word used has the same meaning. Redundancy has the disadvantage of reducing efficiency.
- c. Anomaly is a weird or peculiar state resulting from a reasonable demand that differs from the general situation. In another word, an anomaly is an expression when the meanings of its words are incompatible.

It is important to notice that a semantically anomalous expression can be syntactically well-formed, and this may be a major factor that makes it feasible for speakers to invent meaning for such anomalous expression.

- d. Contradictory is contrary to the general truth. In another word, is As a result of the meanings of the words in the phrase, it is unavoidably false.

“Contradictory sentences are just the opposite of analytic sentences. While analytic sentences are necessarily true as a result of the words in them, contradictory sentences are necessarily false for the same reason.” (Bagha, 2011)

- e. Meaningfulness is a property that gives a sentence its basic worth or meaning. An expression must obey the semantic rule of the language in order to be meaningful while following the syntactic rule alone will not result in a meaningful statement that should be conveying its meaning. To put it another way, meaningfulness is a term or phrase that has meaning and is not weird or contradictory.

### **3. RESEARCH METHODOLOGY**

The sources of data are covid-19 related articles from various writers on Google Scholar. The articles chosen are free-accessed articles related to covid-19 impact, prevention, the pandemic, and the virus itself. The articles were carefully chosen to make sure that they are relevant to the study. The six articles were chosen among many others because they contain the most covid-19 related terms compared to the other free-accessed articles.

The data are words, phrases, and sentences related to covid-19 found in the six covid-19 articles from Google Scholar. The six covid-19 related articles were read through and the words or phrases that occur more than one time in one article and in more than one article are collected as the data. The usage of these terms in the articles was analyzed by their meaning properties. Then, the meaning properties of the covid-19 related terms were elaborated on and given corrections.

The selected articles are “Preventing a covid-19 pandemic” (Watkins, 2020), “The impact of the COVID-19 pandemic on the mental health of healthcare professionals” (Ornell, et al. 2020), and “Indonesia in the Time of Covid-19” (Olivia, et al. 2020), “Covid-19 — Navigating the Uncharted” (Fauci, et al. 2020), “New normal “Indonesia” after covid-19 pandemic” (Pragholapati, 2020), “The COVID-19 epidemic” (Velavan, et al. 2020).

In this study, a qualitative method was used. The source data is scientific articles by various writers on Google Scholar and the data are words, phrases, and sentences of recurring covid-19 related terms. The data was then analyzed after it was collected. The method of analyzing data that is used in this research is Creswell's theories by doing the following steps (Creswell, 2009):

Step 1. Prepare the data for analysis by organizing and preparing it. This involves collecting the scientific articles on various Journal websites found on Google Scholar. The selection of the articles is the ones relevant and related to covid-19.

Step 2. Go over all of the data. The first stage is to get a general feel of the articles' content and think about their overall meaning. The selected articles were read and the main ideas were found together with the recurring Covid-19 related terms from the articles.

Step 3. Start with a coding process to have a better idea of what you're analyzing. “Coding is the process of organizing the material into chunks or segments of text

before bringing meaning to information.” (Rossman & Rallis, 1998). In this step, the recurring covid-19 related terms were noted down. Words or phrases in each selected article were noted down and compared with the ones from the other selected articles, if they occur more than once in one article and are found in more than one article, then they are considered recurring terms, and therefore the data of the analysis.

Step 4. To analyze, use the coding process to create a description of the place or people, as well as categories or themes. The covid-19 related terms were looked back in their original articles to see whether they were used correctly by their meaning properties.

Step 5. Plan out how the description and themes will appear in the qualitative narrative. The most common method is to utilize a narrative piece to convey the analyses' findings. The finding then is presented and described in tables. In this step, the analysis and findings were presented

Step 6. Making an interpretation or meaning of the data is the last step in data analysis. A discussion of the finding will be described at the end of the research findings. In this step, a conclusion is drawn.

#### **4. FINDINGS**

In the next section, the six articles are addressed as **article 1** “*Preventing a covid-19 pandemic*” (Watkins, 2020), **article 2** “*The impact of the COVID-19 pandemic on the mental health of healthcare professionals*” (Ornell, et al. 2020), **article 3** “*Indonesia in the Time of Covid-19*” (Olivia, et al. 2020), **article 4** “*Covid-19 — Navigating the Uncharted*” (Fauci, et al. 2020), **article 5** “*New normal “Indonesia” after covid-19 pandemic*” (Pragholapati, 2020) and **article 6** “*The COVID-19 epidemic*” (Velavan, et al. 2020).

The basis of meaning properties include being meaningful or meaningless – they are deemed meaningless if the words used contain ambiguity, redundancy, anomaly, and contradictory (Leech, 1981).

All the thirty-eight recurring covid-19 related terms found in the six articles have were looked up in the usage in the sentences. They are going to be featured in this section if the phrases or the sentences in line with the terms contain ambiguity, redundancy, anomaly, and contradictory in their meaning properties.

##### **4.1. Ambiguity**

When a term, phrase, or sentence has multiple meanings, it is called ambiguity, or when another word has an unclear meaning. Meaning can be unclear for some reason, such; (a) The phrase or word is widely used (common). For example, the term 'bank' has multiple meanings. (b) the speaker's/writer's intention viewed differently. Even if the context is ambiguous, the interpretation should be based on

it. (c) The distinction between meanings associated with language and meanings associated with non-language is unclear; for example, There is no limit to how clever someone can be at something. (d) the unfamiliar word or phrase to use. (Leech, 1981)

According to the International Committee on Taxonomy of Viruses (ICTV), “Coronaviruses are a group of related RNA viruses that cause diseases in mammals and birds. In humans and birds, they cause respiratory tract infections that can range from mild to lethal. Mild illnesses in humans include some cases of the common cold (which is also caused by other viruses, predominantly rhinoviruses), while more lethal varieties can cause SARS, MERS, and COVID-19.” So, we know coronaviruses don't only cause covid-19 infection but also SARS and MERS. When using the term coronavirus without looking at the whole context, we can say that term contains ambiguity as follows:

1. *“The number of **coronavirus** deaths in Indonesia surged to become the highest in Southeast Asia.”* (Olivia, et al. 2020)

*The sentence above can be interpreted with three different meanings as follows:*

- (a) *The number of Covid-19 deaths.....*
  - (b) *The number of SARS deaths.....*
  - (c) *The number of MERS deaths.....*
2. *“But, many still doubt whether the current health system can cope if there is a surge in **coronavirus** cases.”* (Olivia, et al. 2020)

*Same as the previous sentence, the sentence above can be interpreted with three different meanings:*

- (a) *...surge in Covid-19 cases.*
- (b) *...surge in SARS cases.*
- (c) *...surge in MERS cases.*

The use of the term **coronavirus** is unclear because without looking at the whole sentence (context), readers won't clearly know which coronavirus the writer's talking about. Coronavirus itself has many kinds, looking at the whole context we might interpret it as covid-19, but without the context, it is ambiguous. To make the matter clearer, the writer should specify that it is the covid-19.

## 4.2. Redundancy

Redundancy is unnecessary repetitions in a sentence. In linguistics, information that is expressed more than once is referred to as redundancy.. It is characterized by amplification, repetition, restatement, or the presence of comparable alternatives. Ignorance could be the source of semantic redundancy. That is to say, the majority

of redundancy is unintended. The speaker or writer is unaware that the word used has the same meaning. Redundancy has the disadvantage of reducing efficiency. (Leech,1981)

1. “Indonesia is preparing to enter a new normal era where people can move outside the home in the midst of the **Covid-19 coronavirus** outbreak.” (Pragholapati, 2020)

Covid-19 stands for coronavirus disease 2019, the phrase above has repetition in the word *coronavirus*. Covid-19 corona virus = coronavirus disease 2019 coronavirus.

So, instead of (a) ...the midst of coronavirus disease 2019 coronavirus outbreak. The sentence should be (b)...the midst of the coronavirus disease 2019 outbreak.

2. “The **Covid-19 virus** has spread across the world with alarming speed, infecting millions and causing economic disruption on an unprecedented scale.” (Olivia, *et al.* 2020)

The sentence above has repetition in the word *virus*, Covid-19 virus = coronavirus disease 2019 virus.

So, instead of (a) The coronavirus disease 2019 virus has spread.... The sentence should be (b) The coronavirus disease 2019 has spread....

3. “Develop psychoeducational and informative folders promoting mental health care and to the recognition of **signs and symptoms** linked to mental health.” (Ornell, *et al.* 2020)

The word *symptom* means signs and evidence that the body has a disturbance caused by a disease, so the phrase *signs and symptoms* is a repetition.

So, instead of (a) ...the recognition of signs and symptoms.... The sentence should be (b)...the recognition of symptoms...

4. “New Normal with **Mitigation** are actions to reduce or minimize the impact of a disaster on the community, especially the impact of COVID-19.” (Pragholapati, 2020)

*Mitigation* means an action to reduce the severity of a pain, so the sentence above *Mitigation are actions to reduce or minimize* is a repetition.

So, there are two ways to better form the sentence above

- (a) New Normal should also be implemented with mitigation, especially on the impact of Covid-19.
  - (b) New Normal should also be implemented with actions to reduce or minimize the impact.....
5. “Health experts urge **testing, testing, and testing** as the most important way to win the battle against the Covid-19 pandemic.” (Olivia, *et al.* 2020)

The word *testing* is being repeated to emphasize the action of it, but it is a redundancy in the sentence.

### 4.3. Anomaly

An anomaly is a weird or peculiar state resulting from a reasonable demand that differs from the general situation. In another word, the anomaly is an expression when the meanings of its individual words are incompatible. A strange phrase, because it is semantically anomalous. (illogical) it does not make sense. It is important to notice that a semantically anomalous expression can be syntactically well-formed, and this may be a major factor that makes it feasible for speakers to invent meaning for such anomalous expression. (Leech, 1981)

1. “The Indonesian government in its fight against **COVID-19** was carried out in various ways contained in government regulations. At present the government rules against **COVID-19** and the renewal that took place in Indonesia, the Indonesian government issued a New Normal.” (Pragholapati, 2020)

Covid-19 stands for Coronavirus disease 2019, people who get infected fight with covid-19 infection. But, as it has become a pandemic, what people are really fighting with is the spread of covid-19, not merely the virus. So, the sentences above are an anomaly, it's supposed to be fight against covid-19 spread. So, instead of

- (a) fight against Covid-19.....rules against Covid-19, it should be
  - (b) fight against the spread of Covid-19..... rules against Covid-19 spread, or
  - (c) ...fight against Covid-19 pandemic.....rules against Covid-19 pandemic.
2. “At the other end of the spectrum, a trend that in **COVID-19** is more triggered is to give health professionals a status of superheroes, and if on the one hand, it adds value, on the other hand, it has additional pressure, because superheroes don't fail, don't give up or get sick.” (Pragholapati, 2020)

*A trend in covid-19* is an anomaly because it seems to be incomplete therefore illogical, a covid-19 what?. The writer probably meant *a trend during the covid-19 pandemic*.

So, instead of (a) a trend that in Covid-19, it should be

- (b) a trend during the Covid-19 pandemic.

3. “**Corona Virus 2019 (COVID-19)** which hit Indonesia is very important for all major aspects of health and economy.” (Pragholapati, 2020)

Covid-19 stands for Coronavirus Disease 2019. The phrase above is an anomaly because it is missing one-word *disease*. So, the sentence is not

- (a) Coronavirus 2019 (Covid-19), but

(b) Coronavirus Disease 2019 (Covid-19)

4. “Our experience over the past 9 weeks can help shape the response of other radiological services during the rapidly developing global **pandemic COVID-19.**” (Pragholapati, 2020)

A noun adjunct, attributive noun, qualifying noun, noun (pre)modifier, or apposite noun is a noun that modifies another noun in grammar; it is a noun that functions as a pre-modifier in a noun phrase. In the phrase "chicken soup," for example, the noun adjunct "chicken" modifies the noun "soup." In the case above, noun adjunct is “covid-19”, it modifies the noun “pandemic”. The writer probably meant *covid-19 pandemic*. So, it’s not

- (a) Pandemic Covid-19, but
- (b) Covid-19 pandemic

5. “Then, **physical restrictions** will also be carried out. "Businesses have work guides from home.” (Pragholapati, 2020)

The phrase *physical restriction* means restriction of using the body, it is unsuitable to be used in the context of covid-19 pandemic measures. The writer probably means *mobility restrictions* or *social restrictions* and not *physical restrictions*. So, it’s not

- (a) Physical restriction, but
- (b) Mobility restrictions, or
- (c) Social restrictions.

6. “Workplaces are also encouraged to have resources that facilitate quarantine or **independent isolation** for employees. Companies must continue to provide the rights of employees who are undergoing quarantine or **independent isolation** even after the PSBB ends.” (Pragholapati, 2020)

The phrase *independent isolation* is an anomaly, the two words don’t go together. The writer probably meant *self-isolation* not *independent isolation*. If we have to force the two words together independent isolation, it will mean "being far from people without outside control." What kind of "control" is in here? When someone is going on isolation because of covid-19 infection, they are mandated to do that by the government, which means even though someone is doing isolation at home, they are still being controlled by the government's measures. So, it's not

- (a) Independent isolation, but
- (b) Self-isolation

7. “A **pandemic of the scale of Covid-19** creates recessions.” (Olivia, *et al.* 2020)

The phrase above is an anomaly because the word *scale* doesn't go with those prepositions; the writer probably meant *a pandemic at this scale*. So, instead of saying

- (a) A pandemic of the scale of Covid-19
  - (b) A pandemic at the scale of Covid-19
8. "Hospitals and health care workers must always practice infection prevention in routine daily patient care and must be prepared and trained to **negotiate epidemics** that are sure to be repeated regularly. COVID-19 is just the latest example of the need for constant vigilance." (Pragholapati, 2020)

The phrase above is an anomaly, the words *epidemic* and *negotiate* don't go together. If we look at the meaning of *negotiating* is to discuss, you don't discuss the *epidemic*, the whole meaning is just an anomaly. The writer probably meant *to handle epidemics*. So, instead of saying

- (a) To negotiate epidemics, but
  - (b) To handle epidemics.
9. "The only surefire way to handle Covid-19 that can be done to fight the Covid-19 pandemic before a **vaccine is discovered** is to adopt a normal lifestyle in a new (new normal) way. Until now, experts around the world are still working hard to really understand this virus. So that you can then **find** the selected drug and **vaccine** that can be used to bring about immunity." (Pragholapati, 2020)

The phrase above is an anomaly because a vaccine is not discovered or found, but developed or made. If you *discover* something, the object is already developed, made, the existence is there. But, when you *develop* something, you create something new. A vaccine is a substance made specifically to stimulate an immune response; you don't simply *find* a vaccine, it is developed through a lot of processes in a lab. So, instead of saying

- (a) discover vaccines, or
- (b) find vaccines, but develop vaccines.

## 5. DISCUSSION

Shaw (2008) states discussions of semantically anomalous sentences generally center on the question of whether utterances of those sentences create *truth value gaps* that is, whether or not utterances of anomalous sentences are so defective as to be unusable to state claims about how things are. In this study, there are nine anomaly found, however as to these anomaly are defective enough to be considered unusable, it doesn't seem to be the case. As well as the redundancies found in this

study, they are indeed examples of excessive use of words, but they don't necessarily defect the message that the writer meant to deliver.

In the case of ambiguity however, Rodman & Fromkin (1983:172) state that structural ambiguity is the structure of a sentence that permits more than one interpretation rather than the words in the sentence. In this case, it isn't wise if things such as medical text or other important text can't have ambiguity in them.

Being precise and having all meaningful sentences in Covid-19 articles is crucial because, without the right knowledge, it can be difficult to fight the spread of Covid-19 infection. The thirty-eight Covid-19 related terms were looked back to its original articles to see if their application is meaningful and this is determined by their meaning properties and whether or not it contains ambiguity, redundancy, anomaly, and contradiction.

The writer found that there are nine phrases or sentences that are the anomaly, five redundancies, and two ambiguities in the application of the terms in the original articles they are found at. This means other than these, the other terms are meaningful because they do not contain ambiguity, redundancy, anomaly, or contradiction in their application in the original texts.

This finding means even in published scientific articles, some of the Covid-19 terms are not used meaningfully in the sentences.

## **6. CONCLUSION**

Meaning Properties theory has served to determine the error in the articles. Meaning properties consists of ambiguity, redundancy, anomaly, contradiction, and meaningfulness (Leech, 1981). First, ambiguity is a word or sentence with several interpretations of meaning, and means in a word or sentence, there are two or more meanings. Second, redundancy is unnecessary repetitions in a sentence. Third, the anomaly is strangeness or peculiar condition from the reasonable requirement that diverse with the universal condition around. Forth, contradiction is contrary to the general truth. Lastly, meaningfulness is quality, which has essential value or meaning in a sentence.

The study may not have found all types of meaning properties in the articles, but to find three types in the articles shows that future writers need to be more vigilant when writing about new subjects.

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