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Cognitive Construction of Pandemic: A Corpus-based Study of Conceptual Metaphors of Covid-19 in Pakistani English Newspapers

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ABSTRACT

Conceptual metaphors are quite common in our everyday discourses. They are used to express abstract and complex concepts in term of concrete entities. Conceptual metaphors help us understanding how language and cognition intersect to frame our understanding of the abstract concepts. COVID-19, in recent times, has severely affected the world has caused millions of deaths. The study explores how "Covid-19, Corona, and Coronavirus" terms are used for source domain mappings and metaphorical representations in Pakistani English newspapers. For this purpose, the data was collected from the sub-corpus "Coronavirus Corpus" of a web-based Corpus "English-Corpora" (https://www.english-corpora.org/). The researcher applies a modified version of the metaphor Identification Procedure (MIP), originally proposed by Group (2007), on the collected corpus data. The findings of the study indicate that, in Pakistani newspaper discourse, Covid-19 is mapped onto different source domains like, animal, threat, enemy, tsunami, etc.

| **Keywords:** | Conceptual Metaphor Theory, Conceptual Metaphor, Coronavirus, Corpus, Covid-19, MIP (Metaphor Identification Procedure) |

Introduction

Interest in studying and using metaphors in discourse is not new. Aristotle says, "The greatest thing by far is to be a master of metaphor" (Aristotle, 1942). Metaphors are the language structures that highlight similar characteristics of two things, ideas, or concepts. By linking similar ideas implicitly, metaphors can potentially convey complex and abstract ideas in an understandable manner. There are different types of metaphors, all with linguistic and conceptual dimensions (Lakoff, 1993). The cognitive dimension of metaphors is more dominant in conceptual metaphors (Rymond, 2011; Nguyen, 2019; Lakoff, 1993). So, conceptual metaphors don't only perform referential functions, but they also unearth the thought patterns of the human mind. For instance, in the conceptual metaphor ARGUMENT AS WAR, the idea of taking arguments as war is deeply rooted in our socio-cultural perceptions and thought domains. This conceptual construction of ARGUMENT AS WAR is also present in utterances like *He never won an argument with her,* and *His defense was impeccable. No one could shoot down his claims.* This suggests that conceptual metaphors are not used randomly, rather there exist some cognitive structures and mental frames that make us think in the same way about arguments.

We can see from this given example how metaphors can be and are conceptual in nature. These metaphors shape our thinking and even our actions. Köveceses (2018) explains that conceptual metaphors are a systematic set of correspondences between two domains of experience. This is why, in conceptual metaphors, we conceptualise the domains we are talking about and treat them as the same. In ARGUMENT AS WAR, both domains, i.e., 'war' and 'arguments' overlap conceptually and help us understand the arguments in terms of war.

The current study is a corpus-based study of COVID-19 metaphors and it focuses on the expressions used in everyday life by people for the research data. The study will focus on real-life instances of language use reported in the newspapers. COVID-19 is an acronym for the deadly virus that spread in the latter half of 2019. It stands for Corona Virus disease 2019 ("Covid-19 — Navigating the Uncharted | NEJM", 2021). The study will focus on the use of the three expressions *Covid-19, Corona,* and *Coronavirus,* as these expressions are more frequently used to represent COVID-19 in the newspaper corpus. It was expected that these expressions functioning as target domains would potentially map onto different source domains.

Furthermore, as mentioned, the focus will be on the three keywords, i.e., *Corona, Coronavirus,* and *Covid-19*; the lexical manifestations used to refer to the novel coronavirus. In this study, wherever the word COVID-19 is mentioned in capital letters, it is used to refer to the disease and not the lexical expression, which is the focus of the study. So, the lexical expressions are in the usual format, and the disease is in all capitals.

Literature Review

Gibs (2013) has worked on conceptual metaphor theory; he declares that metaphor is an aspect of language and the most crucial thought of a human being. Furthermore, the most crucial part of CMT (conceptual metaphor theory) is that it can structure many concepts by many conceptual metaphors.

Lakoff and Johnson (1980) proposed the concept of Conceptual Metaphors in their seminal work "*Metaphors We Live by*". According to Lakoff and Johnson (2008), Metaphors are universal. They are present in almost all kinds of works, are not just restricted to literature, and can be found in everyday life. There are conceptual metaphors in newspapers, advertisements, broadcasts, and everyday conversations. There is a plethora of conceptual metaphors employed in our day-to-day life, and we have long taken their use for granted.

As explained by Lakoff and Johnson (2008), metaphorical inferences are significant in understanding abstract meanings and complicated expressions. Kövecses (2017) believes that native speakers internalise conceptual metaphors, which are a part of their linguistic competence. This can be proof of the universality of the conceptual metaphors. Though the phenomenon of conceptual meaning is universal, the meanings of metaphors may vary because of some cultural and language differences. Cameron (2008) claims that the construction of conceptual metaphors depends upon the thought processes shaped by an individual's real-life experiences and observations.

This theory has undergone numerous changes over the years and has become more advanced and complete in explaining the phenomenon known as Conceptual Metaphors. To put it simply, although it still means the 'understanding one idea or concept in terms or about another idea or concept'; however, this statement can also be rephrased technically as the understanding of one conceptual domain in accordance with another one (Kövecses, 2017). Other terms are also used to describe this overlapping and intermixing of domains, such as "mapping" or "correspondence". That is because one domain's characteristics are mapped onto the second domain. It is done from the "source domain" to the "target domain". We say that conceptual metaphors are systematic because of this; the mapping of characteristics of the source domain to the target domain. For example, in the conceptual metaphor THEORIES ARE BUILDINGS, buildings are the source domain while theories are the target domain. Grady (1997) comprehensively explains the structure of the conceptual framework of THEORIES ARE BUILDINGS. Grady (1997) claims we can form the following conjectures and propositions from this conceptual metaphor;

- *Foundations* of a theory are formed by facts.

- The *framework* of a theory is the major claim.

- The *supporting pillars* or materials of theories are the facts and figures.

- Arguments are *supported* by facts.

- Claims are *supported* by arguments and facts.

- The *design* of theories is comprised of the logical structure, organisation and form.

- The *builder* or maker is the one who develops and 'makes' the theory.

- The *strength* of a theory is its ability to withstand criticism.

- The *collapse* or crumbling of a theory is the failure.

In all these conjectures Buildings are the source domain and Theories are the target domain

Since Conceptual metaphors employ elements from one concept or idea to another, sometimes the ideas will be concrete, and sometimes they tend to be rather abstract. In Conceptual metaphor source and target domains, it is easy to imagine an abstract domain in terms of a concrete domain since it helps in conceptualising a concrete frame of reference for the abstract one. For example, in the above example, "theories are buildings, " theories are the 'target' domain while buildings are the 'source' domain. In it, theories are from the 'abstract' domain and are conceptualised with the help of buildings 'concrete' domain. So, the 'source' domain will almost always be 'concrete' while the 'target' domain will be 'abstract'. However, exceptions are always there, and it depends on the imagination and creativity of those involved.

Many studies have been conducted to explore the conceptual metaphors used in various forms and modes of communication. The newspaper discourse has also remained a major focus of these studies because of the nature of authentic language used in them. One of the advantages of using newspaper discourse is that, in modern times, it is relatively easy to access the large archives of data through the internet to conduct a more reliable study. Furthermore, this machine read-able data may be analysed with the help of certain corpus-based tools to identify targeted metaphorical expressions and achieve other research objectives.

In 2011, Sabbah collected newspaper data and designed a study to discover the conceptual metaphors of war used in the news reports covering Iraq's conquest in 2003. The study discarded the non-linguistic aspect of metaphors and focused on the cognitive aspect of metaphors of war. The sample used was 90 news reports from *The New York Times* (USA) and *The Daily Star* (Lebanon). The unique point of this research is that the researcher employed a different approach to analyzing the war metaphor. Unlike other studies on conceptual metaphors, this study used logical entailments and the metaphorical relationship between war and war metaphors. Interestingly, the findings reflect that despite the two newspapers mentioning the same events, they use a wholly different conceptualisation for those involved in it i.e., the people of Iraq, the Iraqi seat of power, the government, and the alliance against them.

Similarly, using a cognitive-pragmatic approach, Molek-Kozakowska (2014) studied coercive metaphors in news headlines. She also used a discourse analysis approach to studying news discourse to discover the deeper meaning behind words and innuendos. The researcher's view was that the news outlets are propagating certain propaganda that is more beneficial to them rather than the critical and direct representation of reality. This

study analysed metaphors from a compiled corpus of the most viewed and read newspaper headlines of *The Daily Mail* via a mixed method. The results showed that there is indeed a coercive application in using metaphors by using different techniques such as imaging, simplifying and legitimising, along with using emotional triggers. The important aspect of the results showed that it is possible and applicable to shape ideology through figurative language techniques such as the use of metaphors.

Material and Methods

The researchers used the mixed-method approach (Quan+Qual) for this study. The quantitative approach was used to collect and analyse data from a web-based corpus (English-Corpora) offering a specialised Coronavirus corpus. Later, a qualitative approach was used for the identification and structural explanation of the conceptual metaphors of COVID-19. For this qualitative analysis, the researchers followed the guidelines central tenants of Conceptual Metaphor Theory as presented by Lakoff and Johnson (2008). Both quantitative and qualitative approaches were mixed according to the guidelines of MIP (Metaphor Identification Procedure) as proposed by the Pragglejaz Group (2007) and Steen (2007).

English-Corpora

The English-Corpora is a web-based corpus with several representative and specialised sub-corpora (https://www.english-corpora.org/). The web interface was designed by Mark (2019), a Brigham Young University (BYU) professor specialising in Corpus Linguistics. It also provides advanced tools and an increased number of queries per day for subscribed users. The English-Corpora website is free to use, with some restrictions for unsubscribed users.

Coronavirus Corpus

Following the Coronavirus Pandemic, a new sub-corpus named 'Coronavirus Corpus' was added to the English-Corpora website in May 2020. The corpus consists of 1085 million words and grows further by the day. It is a collection of news articles on the Coronavirus from 20+ countries. The researcher selected this corpus for this study as this corpus provides the best results, and the data collection procedure is not overly complex for the average layman.

Data Collection Procedure

As specified earlier, the researcher collected the data from the web-based corpus. In total, 1500 concordances with the keywords *Covid*-19, *Corona*, and *Coronavirus* were selected for the analysis from this corpus. The step-by-step procedure for the selection of these keywords is as follows:

KWIC: Corona

1. Login to a free account on the English-Corpora.org website.

2. Go to the 'Home' or starting page of the website.

3. Select 'Coronavirus Corpus' from the list of Corpora.

4. Create a personalised 'Virtual Corpus'.

    a. Click on the 'Create Corpus' option from the 'Texts/Virtual' tab.

b. Enter the article title "Corona" in the 'Article Title' box. This is used to specify the corpus that will be created and for the sake of researcher's ease.

c. Select the "Pakistan" country from the list of countries in the 'Country' box.

d. Enter the starting date "04/01/2020" and the ending date "03/01/2021" in the 'Dates' box.

e. Enter the word 'Corona' in the 'Words in text' box. This will be our KWIC (key word in context) for this compiled corpus.

f. Set the number of max texts generated to "500" from the Coronavirus corpus.

g. Hit the 'Submit' button.

h. Enter the name "Corona" in the 'Save as' box and hit 'Submit' again. In this way, the corpus is compiled and saved in the account.

i. Refresh the page. The corpus should now show up on the 'Texts/Virutal' menu.

j. Enter the keyword 'Corona' in the search bar. Select the newly generated personal corpus in the 'Texts/Virtual' menu and click 'Find matching strings' below the search bar.

k. Click "Corona" on the newly generated web-page. You should now see all the instances of use of the KWIC "Corona". Click on the '500' option in the 'Find Sample' option at top left of the page. Now all 500 instances will be shown on one page.

5. Copy the 500 sentences and paste them onto an excel file named 'Corona'.

KWIC: Coronavirus

1. Repeat all the above steps with the exception that the KWIC will be replaced by "Coronavirus". The same goes for the article name as well.

2. Copy the 500 sentences with the Coronavirus KWIC and paste them onto a separate   excel file named 'Coronavirus'.

KWIC: COVID-19

1. Repeat all the steps once with the exception being the different KWIC; COVID-19.

2. Copy the 500 sentences and paste them in a separate excel file named 'Covid-19".

Data Analysis Procedure

After the corpora are compiled into different Excel sheets, they can be collected in a single Excel file but within different Excel worksheets.

A Modified MIP (metaphor identification procedure) is used to analyse further the grouped words and their meanings (literal and contextual). This is the primary analysis stage. The researcher employed a modified MIP as the original MIP was less suitable for the web-based metaphor analysis, especially in our context. The original MIP states that each

word's basic and contextual meaning is to be compared and analysed. Nevertheless, the data collection is enormous in our case, and each word's meaning cannot be compared and analysed individually. Therefore, the procedure was modified to check the meanings of only three (i.e., *Covid*-19, *Corona*, and *Coronavirus*) marked metaphorical (MREs) words. The following stages of modified MIP were involved in the qualitative data analysis.

Thematic Coding

Thematic coding was used to analyse all the sentences with the occurrence of the keywords. Thematic coding is a well-known and researched method of qualitative analysis in which different texts are analysed and grouped based on a common thread linking them. It can be an idea or a common theme that is present in the texts (Gibbs, 2007).

First, all the data was read thoroughly to understand the words used and their context. Secondly, some specific words were highlighted within the data where applicable, based on them being potentially metaphorical. We will refer to these words as *Metaphor Related Expressions* or MREs. It is important to note that the words classified as MREs have a frequency of 2 or more in the collected corpus. Thirdly, these MREs were categorised into different categories based on the common theme or idea (e.g., enemy, force, storm, etc.) linking them, and this was done by grouping these potentially metaphorical words into different categories of source domains. The metaphorical mapping of these words was then qualitatively checked and analysed. These potential metaphorical words were flagged as metaphorical and grouped into a final source domain category if the mappings fit. The words whose mappings did not meet the conceptual metaphors criterion were discarded.

Results and Discussion

As mentioned earlier, the corpus compiled from Coronavirus corpus consisted of 1500 concordances where the lexical items, *Corona, Coronavirus, and Covid-19* were used. From these 1500 concordance lines, over 300 sentences were identified by the researcher as potentially having Metaphor Related Expressions (MREs). After careful analysis and revisions, the researchers identified a total of 230 sentences which are detailed in Table 1 below.

Table 1
Number of Identified MREs from the sheets

Sr. No	Keyword	Total sentences	Identified sentences with MREs
1	Covid-19	500	67
2	Coronavirus	500	99
3	Corona	500	64
	Total	1500	230

After identifying the MREs from each KWIC (keyword in context) compilation, The MREs were grouped into different categories based on the correspondences. The MREs belonging to a similar conceptual domain (source domain) were grouped to form an overall conceptual and cognitive model.

Each source domain can be seen as a larger structure that is made up of several smaller structures. The smaller structures or mappings correspond to similar characteristics between the source and target domains. A total of 10 Source domain models were identified, and there are 3 target domains. The three target domains (*Corona, Coronavirus,* and *Covid-19*) are just different names, but all represent the same thing, i.e., COVID-19, the disease. The identified source and target domains from the sentences are shown in Table 2 below.

Table 2
Mapping from Target domain go source domain

Source domain	Target domain
Animal	
Colliding object	
Enemy	
Person	Corona, Coronavirus, Covid-19
Tsunami	
Others (Graphical, Threat, Plant, Weapon)	

Corona is an Animal

Metaphors, generally, involve mapping from an abstract target domain to the concrete source domain. In our data, numerous examples were found where the selected representative expressions Corona, Coronavirus, Covid-19 were mapped onto some animal characteristics in order to explain the threat of COVID-19 in a more concrete form. The conceptual metaphor of COVID AS AN ANIMAL cognitively presents COVID-19 as having a predatory nature that needs to be controlled.

Conceptual Metaphors of Animal

Most people own pet animals: if they don't, we can confidently say that they must come in contact with animals daily. The conceptual metaphors of Animals are one of the many such cognitive constructions as every one of us is familiar with the concept of animals and their behaviour. Animals, whether pet or wild, are generally not dangerous, but some animals have an extensive tendency to violence and chaos. Such animals are therefore controlled, contained, put down, caged etc. In Pakistani newspapers, Coronavirus is depicted as an animal off the leash, dangerous, running around wreaking havoc, endangering the peace and lives of people.

Examples

1. We have been able to successfully **control Coronavirus** under the leadership of Prime Minister Imran Khan.

2. There is still a "significant risk" that **Coronavirus** could "**run out of control** again ".

3. It's clear that to bring **COVID-19 under control** and to save lives, we need effective vaccines.

Mappings

- Animal >> Coronavirus

- A caged animal >> Corona's halted spread

- Free animal >> outbreak of Coronavirus

- Controlling the animal >> Controlling/Containing the spread of Coronavirus

Discussion: Corona is an Animal

The MREs (threat, control, etc.) occur with Covid-19, Corona, and Coronavirus keywords. Importantly, these MREs do not occur independently but as a part of the context of the situation and they are understood without any major ambiguity in the meaning.

From the comparison of the literal meaning and the implied meaning, we can see a difference in the literal meaning of the MREs and the implicated meaning; however, it can still be understood in terms of the basic meaning. According to the MIP, we can call these MREs as metaphorical. The expression 'control' is frequently used in constructing COVID-19 as a threat that must be kept under control. Here, keeping COVID-19 in control means keeping the infection caused by COVID-19 in control. We all know that infection is not as concrete an entity as the animals. Therefore, the cognitive representation of COVID-19 as an Animal makes us think about the disease as a real concrete threat.

Corona is a Colliding/Moving Object

Another interesting model that was identified was CORONA AS A COLLIDING OBJECT. The model comprises several mappings from the source domains of a hitting or colliding object, such as hitting, impacting, and shaking onto the target domain of Covid-19, Corona, and Coronavirus. The cognitive construction of Corona is that of an object that is on the move, and it is the object of collision that is having a showdown with the countries, and it is either hitting the countries of the world or impacting the economy of the country or the situations.

Examples

1. The second wave of Coronavirus **hits** Abbottabad, Mansehra hard.

2. He said Covid-19 has **hit** business activities all over Pakistan.

3. If we look at the economic **impact** of Corona on traders, many of them have been ruined already.

4. Be able to brave the tides and then continue right where he left off before Corona **shook** the world.

5. Coronavirus, and its **impact** across the world, will **push** a great number of people.

Mappings

- A hitting/Colliding Object >> the start of spread of Coronavirus

- Objects hit by the Moving Object >> Institutions and things affected by Coronavirus

- The impact of the Collision >> the result of the spread of Coronavirus

Discussion: Corona is an Object

The MREs of the conceptual metaphor CORONA AS A MOVING/COLLIDING OBJECT are Hit, Shake, and Impact. These MREs belong to a physical structure. The image schema of these MREs is of a nature that is purely physical and not conceptual. These Metaphor Related Expressions represent a physical structure, and Coronavirus is being understood with the help of this physical structure even if it is not physical. The literal and primary meaning of the MREs is quite different and belongs to different domains (conceptual vs. physical). The schema mapping for 'Contact' is also identified in this Conceptual metaphor (Johnson, 1987). Given the above evidence, we can safely conclude that the two meanings of the MREs contrast each other, and this conceptual metaphor of CORONA IS A MOVING/COLLIDING OBJECT is a valid conceptual metaphor.

Corona is an Enemy

CORONA IS AN ENEMY conceptual metaphor that belongs to the category of ontological metaphors. It is classified as an ontological conceptual metaphor because it involves personifying the Coronavirus as an enemy, and personifications are the most direct and apparent forms of ontological metaphors. The conceptual metaphor CORONA IS AN ENEMY is entailed by the conceptual metaphor CORONA IS A PERSON. Personification is where the qualities or characteristics of a human being are assigned to a non-human or non-living entity. These characteristics can be actions, emotions, or behaviours. So, in the conceptual metaphor, CORONA IS AN ENEMY; Corona is personified as a person who is an enemy.

Examples

1. Of the Corona Tiger Relief force that comprised of youth volunteering in the **battle against Coronavirus.**

2. Testing and contact tracing are the most effective policy options **to combat Covid-19**.

3. Khan says Pakistan stands at a juncture where we can **defeat the corona** virus if people strictly follow the SOPs.

4. Pakistanis **have faced Corona** virus with the same national spirit

5. He told that they are calling upon volunteers to help win the **fight against the Coronavirus**.

6. The Coronavirus **has killed** 58 people in Thailand.

7. Please don't delude yourselves into thinking like this. **Corona won't spare anyone**.

8. Doctors, journalists and security forces **against Coronavirus** and hoped that we would **win against Corona** with the joint efforts.

Mappings

- Battle against enemy>> Battle against the coronavirus disease

- Defeating the Enemy>> Halting the spread of the virus

- Facing the enemy >> emerging healthy after suffering from Corona

- Casualties in the fight >> Deaths due to the Coronavirus

- Enemy sparing the soldiers>> People not being affected by Coronavirus

Discussion: Corona is an Enemy

From comparing the contextual meaning of the MREs and their basic meanings, we come to the final decision that the basic meanings and the meanings of the MREs in the context differ a lot. Due to this, we can claim that the MREs are indeed metaphorically used in the context of Coronavirus and Coronavirus is indeed personified as a person and as an enemy to the and humans. This conceptual metaphor also is the source of certain emotions of fear (see Crawford, 2009).

Corona is Person

As discussed in the previous conceptual metaphor CORONA IS AN ENEMY, we discussed that the ontological metaphor is realized by the means of personification. The cognitive metaphor CORONA IS AN ENEMY entails the concept CORONA IS A PERSON, to be more specific. This is the basis for this conceptual metaphor. Here, Corona is again personified. In the previous conceptual metaphor, it was personified as an enemy, a hostile entity. But here, it is personified as behaving like a normal person. The former is more aggressive, while the latter is rather neutral in nature.

Examples

1. Amidst the darkened clouds of uncertainty and disorder in various parts of the world, **corona virus came as a bolt from the blue** which has further slumped the economies.

2. Now we need to **learn living with corona** like people are living and adjusting with other diseases.

3. **Corona is serious**, and no one paid me to become COVID positive.

4. People are no longer **afraid of Corona**; they understand that Corona is gone.

5. He said the Coronavirus is not going to **go away** any time soon.

Mappings

- Arrival of Person>> Arrival of Coronavirus

- Living with a Person>> living with the outbreak of Coronavirus

- A serious Person>> Coronavirus: a deadly and serious disease

- A Person going away>> Departure/End of the Coronavirus Pandemic

Discussion: Corona is a Person

From the contrast of the contextual meaning and the literal meaning of these examples, we can assert strongly that here the virus corona is metaphorically presented as a person. The virus is personified and given human qualities & capabilities better to explain its nature and danger to the general public. So, the MREs of CORONA IS A PERSON are metaphorical.

Corona is a Tsunami

According to the Oxford Learner Dictionary, A tsunami is a wave of water that is very large is stature and height and is caused by some natural phenomenon in the sea such as earthquakes. Tsunamis can be extremely destructive and can bring a city to ruins in a very short time. Barusch (2013) did a study on the use of Tsunami metaphor and found that there has been an increase in the usage of the Tsunami metaphor since the 1980s. However, this metaphor was employed in the context of an 'age wave' and the tsunami metaphor was used to refer to population aging, which was portrayed as something very harmful, destructive, and unstoppable like a tsunami. According to Brusch, this metaphor has outlived its contemporary metaphors and it is hey time it is also replaced. However, to date, no other compelling and appropriate metaphor has been used in its place. With the advent of the Coronavirus, we see the extensive use of this age-old metaphor once again, and this metaphor was found the most in this study. The conceptual metaphor of Tsunami is the most prevalent one discovered in this study. The second most used metaphor was that of CORONA

IS AN ENEMY, which had 58 hits in 1500 sentences, but this metaphor topped at staggering 80 hits in the 1500 sentences.

Examples

1. Yusuf said Pakistan has acted in the most responsible manner to contain **the spread of Covid-19**.

2. Syed Murad Ali Shah said that in terms **of local spread of COVID-19** Karachi was worst affected.

3. The National Assembly and Senate health committees to review the situation due **to spread of Covid-19**.

4. Sunday in a statement said that the Citizens are not taking the **second wave of** COVID-19 seriously.

5. He said that in view of the threat of the **second wave of Covid-19** in winter, precautionary measures must be taken.

6. Earlier this week, the Pakistan Medical Association had warned that a **second coronavirus wave** could hit the country this winter.

7. 6,521 cases have been confirmed in Lahore alone, which has become an **epicenter** of Coronavirus.

Mappings

- Spread of Wave >> Spread of Coronavirus disease

- 1st wave >> Coronavirus being active for the first time (Peak of reported cases)

- 2nd wave>> A second increase in coronavirus cases

- Epicenter of the wave>> Hotspot of the Coronavirus's spread

Discussion: Corona is a Tsunami

If we look at the basic meaning and the meaning in a contextual setting, we discover a difference between what is said and what is meant. Corona is neither a tsunami nor a wave but rather a virus on the rise and extremely contagious. Due to the difference in the literal and contextual meanings, we can assert that Tsunami is used as a conceptual metaphor in reporting the Coronavirus and its further spread and effects. So, the Conceptual metaphor of CORONA IS A TSUNAMI is valid and correct (see Barusch, 2013). The Metaphor Related Expressions are "wave", "epicenter", and "spread," etc.

Conclusion

The three expressions (i.e., Coronavirus, Covid-19, and Corona) were selected as our target domain for the study as the researchers believe that these keywords in our corpus represent the COVID-19 disease in "Coronavirus Corpus". The findings of this study indicate that the keyword "Coronavirus" was metaphorically used with the highest frequency while the keyword "Covid-19" ranked second and the last "Corona" keyword. Their frequencies were 99, 67, and 64, respectively. Overall, a total of 230 metaphor-related words were identified after discarding those words which were not found to be metaphorically used. The total sample number was 1500 sentences, and the total number of Metaphor Related

Expressions was 230. This indicates that 15.33% of the reported news employ different conceptual metaphors to conceptualize and construct a unique image schema about certain phenomena, whether consciously or unconsciously.

The study results indicate that the following conceptual metaphors are used recurrently in Pakistani English Newspapers for almost a year.

- CORONA IS AN ANIMAL

- CORONA IS A MOVING/COLLIDING OBJECT

- CORONA IS AN ENEMY

- CORONA IS A PERSON

- CORONA IS A TSUNAMI

The identified source domains were "Animal, Moving/Hitting Object, Object/Commodity, Enemy, Person, Natural force/Threat, and Tsunami". These were the domains that were mapped onto the target domain of Corona/Coronavirus/Covid-19.

The source domain with the highest frequency was [Tsunami] (80) and the source domain with the lowest frequency was [Object/Commodity] (10). Some Metaphor Related Expressions also didn't fit into a specific category. These were grouped into a collective junk category of [Others] (13).

Another interesting finding of the study is that all these conceptual metaphors fall into the "Ontological Metaphors" category, as Navarro i Ferrando (2017) characterized. All these metaphors express something abstract into something more concrete and far easier to understand. Under the findings, we can thus conclude that in Pakistan, and Pakistani English Speakers' reports (in media), there is a tendency to use the ontological types of metaphors far more than any other type of conceptual metaphors. This gives us insight that using ontological metaphors to explain abstract things, ideas, and feelings regarding some concrete domain is far easier.

The study is limited because a rather small sample was used; only 1500 sentences were analysed. Another aspect worth noting is that only three keywords were chosen for the purpose of this study. Other keywords, such as virus or infection, could also be chosen, reported with a decent frequency. The sample number could be higher, and the collected data can be from any language other than English. Another option is a comparative analysis of both English and any native language in this regard. The study's timespan could also be higher as the span of almost one year was the criterion set for this study. This criterion can be expanded to cover the whole timespan when Coronavirus is/was active and cases are/were being reported for future studies.

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