VITAL RELATIONS IN THE METAPHORS OF COVID-19 IN LUKABARAS

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Abstract

Since the emergence of Covid-19 pandemic in late 2019, the metaphorical framing of this respiratory disease also known as the Corona Virus, has been manifested variedly in different social contexts and discourses. The pandemic offered an opportunity to explore the cultural framing of abstract concepts through conceptual mappings. Hence, the purpose of this article was to examine the extent to which vital relations accounted for the metaphors of Covid-19 pandemic in Lukabaras, a Bantu language spoken in Western Kenya. The study relied on the tenets of Conceptual Integrated Theory (CIT) to examine vital relations as one of the components in the cognitive operations in conceptual metaphors of Covid-19 in Lukabaras. The study established and described the following vital relations; Analogy, Disanalogy, Cause-Effect, Part-Whole, Identity, Uniqueness and Similarity. The findings also revealed that the most prevalent vital relation was Disanalogy. However, it was established that vital relations such as Intentionality, and Representation, Role, Time and Change were not present in the metaphors of Covid-19 in Lukabaras. Nevertheless, the study revealed that vital relations played a role in the metaphorical conceptualization of

Covid-19 pandemic. This had implications on community-based health communication and interventions to prevent future disease out breaks.

Key-words: Conceptual integration, Covid-19, Lukabaras, Vital relations.

Introduction

The World Health Organization declared Covid-19 pandemic a health emergency on 11 March 2020 since the pandemic was wreaking havoc across the globe (Orangi et al.,2021). Due to the pandemic's rapid onset, spatial extent and complex consequences, there was a global health crisis that had never been witnessed before (Kroumpouzos et al.,2020; Cheval et al., 2020). Consequently, Kenya was not spared the ravage of this disease as the first case was confirmed on 13 March 2020 (Macharia et al.,2020; Barasa et al., 2020; Karijo et al., 2020). Okaka and Omondi (2021) argue that Kenya had the highest number of recorded cases of Covid-19 in East Africa and, despite various confinement measures, infection numbers were yet to be contained. In the health sector, essential health service delivery was assigned to county governments while the national government was charged with health policy, technical assistance, and management of national health facilities (Chau, 2021 pp 214).The Kenyan government response teams were at the forefront in leading the Covid-19 response by developing and adopting certain ways of talking about the action taken to combat Covid-19 in the process of shaping public perceptions of the disease (Ojwang', 2022). For instance, President Uhuru Kenyatta recounted the loss of 1,879 Kenyans due to Covid-19 and referred to the struggle with the pandemic as a "fog of war," an enemy unseen and undefined (Chau,2021 pp 213).

Apart from reports and updates about the disease through the media and national government agencies, the county governments also made a lot of effort to curb the spread of the pandemic (MOH, 2020). Local television stations also reported that although the leadership through religious leaders, health care workers and traders urged the public to observe the set measures in order to protect themselves, most individuals still perceived the disease as a myth (Kagwe, 2020). Various sources confirmed that indeed what was once heard in Wuhan, China, Covid-19, was now in Kenya, among the speakers of Lukabaras. Residents in the Kabras region are said to have taken the matter lightly claiming the disease was a passing cloud and mist that would soon clear

(Kagwe,2020). In this perspective, the metaphorical conceptualization of Covid-19 is cognitively relevant to various socio-cultural contexts insofar as the source domains are familiar in such contexts. As such, the speech community is able to unpack the target domains that constitute the abstract concept. Whereas it emerges that the discourse on Covid-19 and its global spread has motivated both theoretical and empirical studies, the focus has been from a metaphor analysis framework (Schôneborn, 2020; Siexas,2021 & Semino,2021). Therefore, there was need to explore the conceptual integration of the disease with regard to the role of vital relations in the metaphors used to talk about the pandemic.

Set of sources can be mapped onto the same target but the metaphorical meaning of the conceptual product is shaped by only those features of the target that are relevant for cognitive and communicative purpose in a given social cultural context (Grady, 2000; Kövecses, 2002). In this case, the background knowledge about the target and the source that is not engaged immediately can be inferred. Such inferences are called metaphorical entailments and are made available through cognitive operations in the mental spaces which give rise to a conceptual metaphor in the inner space (Ungerer & Schmid ,2006). In view of this, there was need to investigate the unpacking of Covid-19 through metaphor with regard to implications on risk communication messages that may be out of step with the interventions to prevent the spread of the pandemic. Such messages through metaphorical language may have been based on misinformation, myth, trivializing the disease or magnifying it.

The paper, therefore, argues that since some of the source domains were non-tangible and invariant with the target domain, (Covid-19 pandemic), the plausible explanation of the vital relations that applied in the conceptualization of the pandemic was determined by the cultural context of the metaphors utilized as demonstrated in the case of Lukabaras. The principle of vital relations is one of the components of Conceptual Integration Theory (CIT) (Fauconnier & Turner,2002). CIT employs a four-space approach to explain the cognitive operations in conceptual metaphors. The four-space approach includes four mental spaces which are input space 1, input space2, generic space and the blended space.

The conceptual integration of the mental spaces involves several principles such as blending processes, blending networks, optimality principles and vital relations. According to Fauconnier and Turner (2002) vital relations are multiple connections that exist in mental spaces and connect various entities within the mental spaces. As such they are best understood as cross-space mappings that link or connect input spaces which feed or supply the necessary projections to the blended space. In order to establish the blend, the actions of the input spaces are projected on the blended space through the process of composition, completion and elaboration (Fauconnier & Turner, 1998). However, in order to reduce the conceptual complexity of the inputs, the actions of the spaces undergo compression to form an integrated conceptual structure that is cognitively manageable because in compression it is presumed that there is hiding of sub-events (Geeraerts, (2006). Since it is argued that CIT is a broad theory with various notions, the study did not utilize notions like cognitive blending networks, blending processes and optimality principles in relation to the conceptual metaphors of Covid-19 in Lukabaras.

Furthermore, Harder cited in Gathigia (2014) argues that CIT introduces complexity into relatively simple linguistic processes therefore the study limited itself to the notion of vital relations. The common vital relations that are used to describe conceptual integrations in mental constructions include; Analogy, Disanalogy, Cause-Effect, Part-Whole, Similarity, Category, Intentionality, Uniqueness and Representation. The principles of CIT have been applied and their findings revealed that not all the examples of vital relations can be present in understanding metaphors (Gathigia ,2014); Anudo, 2018). Those that were not manifested in the metaphors included Change, Role, Time, Space and Property vital relations. The study thus relied on CIT to examine the extent to which the vital relations account for the metaphors of Covid-19 among speakers of Lukabaras as well as the possible compressions of these vital relations.

The study adopted a qualitative research design. The participants were Lukabaras people, an ethnic group and cluster member of the Luhyia, a Bantu speaking language of Western Kenya (Ethnologue,2022). The people who speak Lukabaras are known as the Kabras who live in the northern part of Kakamega. The data for this in study was derived from metaphors collected among Lukabaras

respondents aged (30-39 years) and (above 60 years) using Metaphor Identification Procedure (MIP) (Gibbs,2017). Analysis of data relied on the tenets of Conceptual Integration Theory (Fauconnier & Turner (2002). The analysis focused on the notion of vital relations to investigate their role in the metaphors of Covid-19 pandemic in Lukabaras.

Vital Relations in Metaphors of Covid-19 in Lukabaras
This study discusses the vital relations in the metaphors of Covid-19 in Lukabaras based on already identified categories of generic level metaphors. The common source domains that formed the basic experiences from which the conceptual metaphors were generated included organisms, objects, events, actions, natural occurrences and states. The findings established that from these basic experiences, Covid-19 in Lukabaras was metaphorically conceptualized as a person, an animal, an object, an event, an action, a natural occurrence and a state or condition. Since the concept of vital relations is one of the conceptual processes that connected the input spaces in the mapping of these metaphors, the study established the following vital relations as presented in Table 1.

Table 1: A Summary of Vital Relations in Metaphors of Covid-19 in Lukabaras

Conceptual Metaphor	Gloss	Vital Relations
COVID no mundu	COVID IS A PERSON	Analogy
COVID no munyama	COVID IS AN ANIMAL	Analogy
COVID ne shindu	COVID IS AN OBJECT	Analogy
COVID no muyimo	COVID IS AN EVEN	Similarity
COVID ne shikhole	COVID IS AN ACTION	Cause-effect
COVID ne shikholwa sha Nyasaye	COVID IS A NATURAL OCCURRENCE	Uniqueness
COVID ne liiba	COVID IS A STATE	Category

Source: Fieldwork (2021)

As shown in the data in Table 1, the vital relations which were evident in the metaphors of Covid-19 in Lukabaras included: Analogy, Disanalogy, Cause-effect, Uniqueness and Category. However, according to Fauconnier &Turner (2002) the vital relations can be scaled into sub types through compression. For instance, Analogy can be compressed to positive analogy or negative analogy and on the same hierarchy with analogy is vital relation of disanalogy (Gathigia,2014). The study thus utilized the CIT to explain the cognitive processes through which these vital relations manifested in the metaphors of Covid-19 in Lukabaras and further described the interrelatedness of the vital relations.

The Analogy Vital Relation

Bowdle and Gentner (2005) describe an analogy as a mapping between two represented situations in which common relation structure is aligned. It is therefore a form of alignment between structures where we think of one thing as the other. Bowdle & Gentner (ibid) further argue that an alignment consists of an explicit set of correspondences between the representational elements of the two situations with an emphasis on relational matches. The relationship can be applied to most relevant elements or there can be a relationship between the target and source domains. There has to be structural consistency based on one-to one correspondence between the mapped elements in the source and target domains. As such people do not just import random facts from the source to the target but project inferences that complete the common system of relations. Since not all metaphors are analogies, it is argued that they range from purely relational comparisons to purely attributional comparisons Bowdle & Gentner (2005).

The findings established that the manifestation of analogy as a vital relation in the metaphors of Covid-19 in Lukabaras included *COVID no mundu* (COVID IS A PERSON), *COVID no munyama* (COVID IS AN ANIMAL) and *COVID ne shindu* (COVID IS AN OBJECT). This was presented as shown in the linguistic data in Table 2.

Table 2: Metaphors of Covid-19 in Lukabaras Based on Analogy

No.	Lukabaras	Gloss
1.	*COVID no mucheni wakana*	COVID is a strange visitor
2.	*COVID no musuku*	COVID is an enemy
3.	*COVID no muchesi*	COVID is a harvester
4.	*COVID ne shiniamuliro*	COVID is a troublemaker
5.	*COVID ni bwononi*	COVID is a spoiler
6.	*COVID ne yimbulu*	COVID is a monitor lizard
7.	*COVID ni kwamachenga*	COVID is coal fire
8.	*COVID ne yimbaale*	COVID is a pebble
9.	*COVID ne yingaka*	COVID is a hook
10.	*COVID ne shimanulwa*	COVID is a weapon
11.	*COVID no lubala*	COVID is a sting

Source: Fieldwork (2021)

As shown in the data in Table 2 above, the analogy in the metaphors was based on the tangibility of the elements and whether the perceptual experience in the source domains was positive or negative. It was further deduced from the findings that all the metaphors that were analogous derived from concrete elements such as person, animal and object. Furthermore, the relational or attributional comparisons between source elements and Covid-19 were motivated by negativity. For instance, the analogy drawn between the target (Covid-19) and the source 'an enemy' highlights the fact that a person who is an enemy is usually perceived negatively. The pandemic was thus conceptualized as it were for a person whose presence posed insecurity or danger. In the analogical projection, the source domain is mapped onto the target so that only those features that are easily available in the source are exported to the target. Moreover, the metaphor in example 11 in Table 2, (*COVID no lubala*) "COVID is a sting", conceptualized the pain that comes with a bee sting. Whereas bees are known to make honey which is sweet, they are also very dangerous and their sting is very painful. The analogy of the sting did not include other features associated with bees such as honey making.

The findings observed that Covid-19 was compared specifically to the sting to explain the harrowing experiences that people went through when they were infected. This was therefore a negative attribution of the object to which the pandemic was compared. The ontological nature of the Analogous metaphors whereby we explain our understanding of an abstract concept such as Covid-19 in terms of physical objects reemphasizes the fact that it is not all the aspects of the target domain that are usually compatible with those in the source domain because conceptual metaphors involve many spaces and many mappings. For instance, in example 10, Covid-19 is conceptualized as a WEAPON (*COVID ne shimanulwa*). However, in the domain of illnesses not all pandemics are perceived as weapons neither are all objects comprehended as weapons. The findings observed that Covid-19 was projected first onto an object that is used to harm another person. The mapping in the outer spaces therefore involved parallel aspects that were comparable and further compressed in the blend through conceptual integration networks to produce a structure that was cognitively easy to understand the pandemic in Lukabaras as similar to any one of the available objects one can use to attack.

Compression of the Analogy Vital Relation
Compression over vital relations is one of the central notions through which we gain insight and understanding of phenomena where the source domains characteristically carry a lot of information about a given element (Fauconnier & Turner,2002). For instance, a person has various attributional and relational features and we perceive the person in relation to those features. In this view, when the features of a known entity such as a person are projected to an unknown entity such as Covid-19, it is assumed that the conceptual complexity of the elements mapped in the outer space relations undergo compression in order to form a structure that is cognitively manageable in the inner space. Compression therefore presumes that vital relations can be scaled into sub categories through cognitive operations that yield compressed forms (Fauconnier & Turner, 2002). As such the present study revealed that Analogy as a vital relation could be scaled to identity, part-whole and uniqueness vital relations. For instance, it was observed that whereas the conceptualization of Covid-19 was analogous to a person. The findings observed that we could further connect mental spaces in which the

person is perceived with relations of identity such as stranger, enemy, spoiler, troublemaker and harvester.

Despite the noticeable differences in the framing of the same entity, the findings of the study revealed that these identity connections related further to other vital relations such as Part-whole and Uniqueness. The identities were observed to link specific attributes of the source domain (person) to the target domain (Covid-19). Through the principles of CIT, it was inferred that we can construct a network in which the person is mapped to the character that seemed to be the most observable attribute or relation. In this case, the study deduced that the enemy identity was projected from the whole person and manifested uniqueness in the inner mental space. The linguistic data in Table 3 presents instantiations of analogical metaphors of Covid-19 that were scaled to the Part-Whole, Identity and Uniqueness vital relations.

Table 3: Metaphors of Covid-19 in Lukabaras Based on Part-Whole, Identity and Uniqueness

No.	Lukabaras	Gloss
1.	*COVID no omucheni wamakana*	COVID is a strange visitor
2.	*COVID no musuku*	COVID is an enemy
3.	*COVID no muchesi*	COVID is a harvester
4.	*COVID ne shiniamuliro*	COVID is a troublemaker
5.	*COVID ni bwononi*	COVID is a spoiler
6.	*COVID no lubala*	COVID is a sting

Source: Fieldwork (2021)

The manifestation of the metaphors shown in Table 3 as the most noticeable elements that were mapped from the generic mental space conceptualized through a person showed the relatedness of vital relations in mental spaces. For instance, the metaphor (*COVID no muchesi*) COVID is a HARVESTER is conceptualized through four mental spaces which include the input spaces, the generic space and the inner space. Since Conceptual Integration Theory argues that the cognitive operations in the mental spaces are connected through multiple cross space mappings based on the notion of vital relations, the findings

inferred   from example 3 of the data in Table 3 that the mapping of Covid-19 occurred from input space 1 and projected onto input space 2 through the vital relation of Analogy. Given that the most available element of perceiving Covid-19 in the source domain was a person, this was compressed from the outer spaces to other related notions in the inner space. As such, the Analogy vital relation of Covid-19 as a PERSON was related to Part-Whole vital relation in which the most specific attribute of the person (harvester) was projected to the target (Covid-19).

The person as a whole was identified by various features which were separately related to the target (Covid-19). The findings further observed that each of the identities became a uniqueness because the role value of the various features of the person implied different conceptualizations of the same target (Covid-19). For instance, the metaphor (*COVID no omucheni wamakana*) COVID is a STRANGE VISITOR, compared the manner in which the disease came. However, unlike a visitor who may be expected to behave well, the pandemic came along with a lot of problems. In this view, if it were a visitor then such a visitor was indeed strange. On the other hand, the metaphor in example 3 in Table 3 (*COVID no muchesi*) COVID is a HARVESTER, conceptualized a particular action carried out by the person. A harvester would get on to the farm and harvest all the crops once their maturity is due. The notion of harvesting in relation to Covid-19 depicted a pandemic that was claiming lives. It was observed that the most vulnerable were people above 60 years. The role of a person harvesting had no relations with the same person being a strange visitor since the conceptualization of (*COVID no omucheni wamakana*) COVID is a STRANGE VISITOR did not necessarily include such a visitor claiming lives instead one who would cause disruption in the ordinary way of people's lives.

The Disanalogy Vital Relation
Fauconnier and Turner (2002) argue that the Disanalogy vital relation is closely related to Analogy. However, whereas Analogy shows a relationship of resemblance between two people, situations or objects when used as a basis of explanation, Disanalogy is basically based on the differences in the input spaces. Analogy and Disanalogy work together because when explaining the presence of analogous elements

like it is observed in the present study, the elements of comparison in the mental spaces are based on negativity. In this view, Analogy vital relation applied on the parallels between the mental spaces while Disanalogy was used to bring out the fact that the sources and the target were completely two different things which manifested instances of incompatibility. Nevertheless, through compression in the input spaces the negative interrelations formed the basis of explaining the conceptualization of the novel pandemic (Covid-19). It was inferred that there were instances in which the conceptualization of Covid-19 in Lukabaras was manifested through metaphors that projected the Disanalogy vital relation. The findings established that this happened because Covid-19 as an abstract and new phenomenon was quite different from what it was compared to in Lukabaras. Such incongruous comparison was disanalogous. The study presented the following metaphors in Table 4 as instances of Disanalogy.

Table 4: Metaphors of Covid-19 in Lukabaras Based on Disanalogy

No	Lukabaras	Gloss
1.	*COVID ne shilikisa*	COVID is a hiccup
2.	*COVID ne liminikha lie tsinganakani*	COVID is stress
3.	*COVID no busafi*	COVID is hygiene
4.	*COVID no butakha*	COVID is poverty
5.	*COVID ne yinzala*	COVID is hunger
6.	*COVID na mangayimwe*	COVID is a difficult situation
7.	*COVID ne lifumbetsa*	COVID is mist
8.	*COVID ne shibela*	COVID is grief
9.	*COVID no muyeka*	COVID is a cold
10.	*COVID ne siasa*	COVID is politics
11.	*COVID ne shinyasio*	COVID is banishment
12.	*COVID ne wonyo*	COVID is a warning
13.	*COVID ne sheli*	COVID is doomsday
14.	*COVID ne shiboye*	COVID is imprisonment

Source: Fieldwork (2021)

It can be inferred from the linguistic data in Table 4 that there was a noticeable discrepancy between the aspects of the source on to which the target, Covid-19 was projected. For instance, in example 1 in Table 4, (*COVID ne shilikisa*) COVID is a HICCUP that the surface matches in the mapping of the input spaces were not coherent. It was revealed that the metaphorical correspondences in this instantiation invoked lean mapping in which the most available aspects of comparison are restricted and as such the explanation of the relational comparison applied disanalogy. The source element, hiccup, construes an involuntary action that is discomforting and thus negative. However, unlike Analogy in which there are parallel structures of equivalence in the input spaces, there was no one on one correspondence between hiccup and Covid-19.

Similarly, in example 10, Covid-19 was conceptualized as POLITICS (*COVID ne siasa*) which elucidates a difference in the perceptual relations between Covid-19 and politics., There were no parallel aspects of comparison in the two input spaces due to limited metaphorical correspondences in the mapping. However, through the principles of CIT, the findings deduced that since blends arise in the networks of the input spaces to develop an emergent structure that is not in the input spaces, there was a connection between the target domain and the source domain through the Disanalogy vital relation that utilized the available generic concrete experiences about politics and projected them onto the specific abstract idea of Covid-19. The manifestation of metaphors of Covid-19 in Lukabaras through Disanalogy as a vital relation largely depended on the nature of the source domains. In this perspective, it is observed that the instantiations of Disanalogy in the metaphors of Covid-19 involved negative non-tangible source elements such as hiccup, stress, hygiene, poverty, hunger, mist, grief, cold, politics, warning, imprisonment and banishment which were derived from generic categories including states/conditions, natural occurrences and events.

During the pandemic there were Covid-19 related deaths which caused a lot of grief (Kajliwa, 2020a & Kajliwa, 2020b). However, the study observed that the concrete experiences of grief were as varied as the cultures in which the Covid-19 deaths occurred. The metaphorical conceptualization of Covid-19 as GRIEF (*COVID ne shibela*) in Lukabaras revealed that the available source knowledge projected onto

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Covid-19 was based on the aspects of mourning the dead such as keeping vigil and having an elaborate funeral arrangement. However, during the pandemic the findings established that there was a restricted number of people that attended funerals, the burial was allocated 15 minutes and people were to observe unusual containment measures such as handwashing, wearing masks and keeping social distance (MOH,2020). The findings inferred that since funerals in the cultural context of Lukabaras are an elaborate social event, the bereaved feel much comforted when the departed is mourned by many people. Due to the emergence of Covid-19 pandemic bereaved families found it more grievous to bury a loved one without mourners.

Anudo (2018) and Gathigia (2014) established that there is a relationship between metaphors that are perceived as negatively analogous and the Disanalogy vital relation. This argument is corroborated by Fauconnier & Turner (2002) who posit that Analogy is the most pervasive vital relation and Disanalogy is grounded on Analogy. Furthermore, Fauconnier & Turner (ibid) established that Disanalogy works at the same level of hierarchy with Analogy. The findings of the present study were similar to Gathigia (2014) and Anudo (2018), however, it was revealed that the Disanalogy vital relation was more prevalent than the Analogous associations in the metaphors of Covid-19 in Lukabaras. The findings established that out of 25 metaphors based on Analogy/Disanalogy, there were 11 metaphors with analogous associations representing 44% and 14 metaphors based on Disanalogy representing 56%. The most available knowledge in the concrete experiences of Covid-19 was thus exhibited through Disanalogy. While the Analogous elements were based on bodily experiences, Disanalogy was conceptualized in basic correlations and culture-specific understanding of common sources such as states/conditions, natural occurrences and events.

The Analogy vital relation involved rich mapping in which specific concrete sources (person, animal, object) were projected onto an abstract target (Covid-19). On the other hand, Disanalogy was manifested through lean mapping in which generic concepts such as states and natural occurrences were mapped onto the abstract concept (Covid-19). However, due to the invariance principle, not all the metaphorical entailments of the Disanalogous associations in the metaphors of Covid-19 in Lukabaras were utilized. The findings inferred

that, for instance, the metaphor *COVID no busafi* (COVID is HYGIENE) was based on the disanalogy that only utilized the aspects of the source which when flouted there would be dire consequences. This implies that there were other potential entailments of the same metaphor such as CLEAN is GOOD, CLEAN is SAFE, DIRT is DANGEROUS or DIRT is BAD. The findings deduced that from these examples, it is the experiential focus of a given source that determines the metaphorical scope and entailments in comprehending any conceptual product.

The Cause-Effect Vital Relation
The Cause-Effect vital relation is about the relationship that connects between two mental spaces and concerns what exists in one input space and what causes it in another input space (Fauconnier & Turner ,2002). The Cause exists in input space 1 whereas the Effect is in input space2 and relationship is thus one of causality. Conceptual integration usually identifies input space1 with the source domain while input space2 with the target domain. The findings established several elements in the source domain which were projected onto a single element in the target domain (Covid-19) as illustrated in Table 5.

Table 5: Metaphors of Covid-19 in Lukabaras Based on Cause-Effect

No.	Lukabaras	Gloss
1.	*COVID no lweni*	COVID is lightning
2.	*COVID ne shimbulubusi*	COVID is a whirlwind
3.	*COVID no lunyilili*	COVID is a drizzle
4.	COVID **ni kwamachenga**	COVID is coal fire
5.	*COVID ne shilikisa*	COVID is a hiccup
6.	*COVID ne liminikha lie tsinganakani*	COVID is stress
7.	*COVID ni yamachina*	COVID is hailstorm
8.	*COVID ne lifumbetsa*	COVID is mist
9.	*COVID no lubala*	COVID is a sting
10.	*COVID ne shiboye*	COVID is imprisonment

Source: Fieldwork (2021)

The metaphor in example 1 in Table 5, (*COVID no lweni*) COVID is LIGHTNING, had the source element as lightning. In this conceptual metaphor, lightning is known to strike and, in some cases, cause death. The flash is also usually scary and can cause panic whenever the lightning strikes. The connection of this element to Covid-19 construed the effects that the pandemic caused. Such effects in relation to lightning included death, anxiety, worry and panic. As is universally common in many cultural settings, rains that are accompanied by flashes of lightning are always deemed scary. Therefore, it was observed that the Cause-Effect vital relation was central in explaining the conceptualization of Covid-19 through the metaphor (*COVID no lweni*). For this reason, it was inferred that the explanation of the effects that were associated with the source domain, lightning, in the Cause-Effect vital relation was culture specific. However, experiences of things such as lightning are not perceived in the same way in areas that do not have frequent rains accompanied with thunder and lightning.

The Similarity Vital Relation
The similarity vital relation is exhibited through the use of Mflags such as the word (like) or the word (resembles) which explicitly signals the presence of a metaphorical use. Additionally, the copula (is) is also used to link the target domain and the source elements and in discerning a metaphor, one is encouraged to draw comparisons between the properties of the elements in the input spaces (Gathigia,2014). The study presented instantiations of Similarity vital relation in Table 6.

Table 6: Metaphors of Covid-19 in Lukabaras Based on Similarity

No.	Lukabaras	Gloss
1.	*COVID ni khuli olweni*	COVID is like lightening
2.	*COVID ni khuli shimbulubusi*	COVID is like a whirlwind
3.	*COVID ni khuli omucheni wamakana*	COVID is like a strange visitor
4.	*COVID ni khuli omusuku*	COVID is like an enemy
5.	*COVID ni khuli omwononi*	COVID is like a spoiler
6.	*COVID ni khuli olubala*	COVID is like a sting
7.	*COVID ni khuli eshiniamuliro*	COVID is like a troublemaker

8. *COVID **ni khuli omuchesi***   COVID is like a harvester
9. *COVID **ni khuli shiboye***   COVID is like imprisonment
10. *COVID **ni khuli obusafi***   COVID is like hygiene

Source: Fieldwork (2021)

From Table 6, the most explicit properties of comparison were generated from sources in natural occurrences like lightening and whirlwind, from organisms such as person and animal and from states and conditions. It is deduced that from these sources, the most available properties of similarity were exhibited from the metaphor COVID is like a person (*COVID ni khuli omundu*). The Mflag 'ni khuli' which means 'is like' was used to connect the aspects of similarity in the source domain and the target Covid-19. For instance, in the metaphor (*COVID ni khuli omusuku*) COVID is like an ENEMY, the source implies that an enemy is a person who is a danger or threat to others. This is directly connected to the pandemic whose coming threatened lives and posed a danger to the social economic endeavors of people. In this view, Covid-19 was conceptualized as a PERSON but in particular one who was likened to an enemy. The findings inferred that through integration networks as explained in CIT, the aspects of comparison in input space 1 were projected onto the target (Covid-19) in input space2 which was characteristically associated with things like handwashing, sanitization, masking hence the metaphor (*COVID ni khuli obusafi*) COVID is like HYGIENE and social distancing, curfews, quarantine hence the metaphor, (*COVID ni khuli eshiboye*) COVID is like IMPRISONMENT.

Conclusion
The findings in the metaphorical conceptualization of Covid-19 pandemic in Lukabaras are in line with Fauconnier & Turner's (2002) argument that the network structure of the human brain will allow any kind of information to occupy spaces which are interconnected with other spaces through vital relations. In light of this, vital relations as one of the components of Conceptual Integration Theory (CIT) played a role in the conceptual mappings of Covid-19 pandemic in Lukabaras. The most common vital relations included Analogy, Disanalogy, Cause-Effect and Similarity. It is revealed that the metaphorical use of

indigenous, local and understandable concepts created from the immediate social, physical and cultural environment of Lukabaras speakers enabled the people to unpack their experiences with Covid-19 pandemic**.** However, the varied conceptualizations of the pandemic show that the language used in pandemic times can have consequences on the preventive and intervention strategies to reduce the spread and fight against a disease outbreak. As such metaphors play a crucial role in community-based health communication since dissemination of messages would otherwise trivialize, magnify or make a situation routine. For instance, the metaphor, COVID IS MIST in the discourse among Lukabaras speakers, trivializes the pandemic and the perception about the disease. The study suggests that risk communication in community- based health interventions should emphasize language behaviour that minimize long-term consequences of pandemics such as Covid-19.

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