

# APOCALYPTIC REPRESENTATION OF COVID-19: A CORPUS-ASSISTED DISCOURSE ANALYSIS OF THE WORLD HEALTH ORGANIZATION'S DISCOURSE PRACTICES

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## Abstract

This study examines the interdiscursive representation of the coronavirus disease by the World Health Organization from the outbreak of the virus in January 2020 to the announcement of a successful vaccine in November 2020. The aim is to find out whether the agency has delivered apocalyptic language that increased anxiety and stress among the public leading to a weak human immune system, or contributed to creating global cooperation and placing emergency measures to fight the virus. I have adopted a discourse analysis approach, with the aid of NVivo qualitative software and corpus linguistic tools, for the analysis of a purpose-built corpus of the WHO Director-General's speeches, focusing on referential, predication, perspectivation, intensifying, mitigation and argumentation strategies. The result of the analysis revealed that the WHO discourse referred to COVID-19 as an eccentric virus, qualified and intensified by the agency as a threat to humanity. The WHO adopted a subjective point of view, showing active involvement in the discursive representation of the virus and argumentatively asking people to unite until a vaccine is invented.

## Keywords

COVID-19, World Health Organization, corpus-assisted discourse analysis, discourse-historical approach, NVivo

## 1 Introduction

The outbreak of COrona VIRus Disease in late 2019 (COVID-19) has shifted the world into a big prison, where those outside their homes are either medical staff or patients suffering deadly symptoms in hospitals. The virus rapidly developed into a pandemic creating globalised hysteria where conspiracy theories suggest that the virus is a human-made pandemic. The virus was described as a new generation of coronavirus family that infected humans in 2003, causing severe acute respiratory syndrome (SARS) (<https://who.int>). However, the newly discovered COVID-19 caused lethal symptoms and led to more than 2.4M deaths and 109M confirmed cases, at the time of writing this research (<https://covid19.who.int>). For months, the causing agent of the virus stayed

unknown, and laboratories around the world were in a race to find antiviral drugs or vaccines to stop the virus.

The COVID-19-inspired discourse by institutional and non-governmental organisations has contributed to the scientific ambiguity of the origin and impact of the virus and has left the world terrified of what could come next. The current study focuses on the discourse practices of the World Health Organization (WHO) in times of the virus, because this organization is the United Nations' specialized agency for international public health. Since the outbreak of the virus in January 2020, the agency has made recurrent speeches by its Director-General Tedros Adhanom Ghebreyesus who briefs the public about the virus and updates information on the laboratory findings, symptoms, prevention guidelines and vaccine production. The aim is to uncover the discourse representation of the virus by the WHO and to find out whether the agency has contributed to taking serious measures to stop the virus or has left the world baffled with fear and anxiety. To achieve this aim, I have adopted Wodak's (2001), and Reisigl and Wodak's (2017) Discourse-Historical Approach (DHA), using NVivo qualitative analysis software and Corpus Linguistic (CL) tools.

As for the qualitative aspect, the analysis concerns itself with issues of language, power and ideology, whereby ideology derives from the taken-for-granted assumptions, beliefs and value systems which are shared collectively by social groups (van Dijk 2006). This part of analysis employs referential/predicational, perspectivation, intensification/mitigation, and argumentation strategies to discover aspects of coherence, authoritarian reference, group identities, proximal distance and point of view in the representation of the virus within the WHO's speeches. This includes the analysis of the cohesive lexical items within clauses and larger-scale units of paragraphs in the corpus. NVivo software is used to code the qualitative features of the data, classifying the linguistic features according to their discourse function within the corpus. For the quantitative analysis, I have used the Wordsmith CL tool (Scott 2020) to process a relatively large corpus of 241 speeches on the virus, since obtaining reliable evidence regarding the use of language requires the analysis of a large sample of data (Stubbs 1991, Baker & McEnery 2015).

The Discourse Analysis (DA) theories and methods employed in this study can complement sociological studies and contribute to this area of study by providing a systematic analysis of power and ideology present in the discourse of those with power to change/impact the status quo of the society in the time of the pandemic. Also, this paper, to the knowledge of the researcher, is the first to provide a diachronic analysis of the lexical choices and lexico-grammatical structures of COVID-19 in speeches made by the Director-General of the WHO,

and to shape the specific attitudes and ideologies of the agency. Furthermore, the corpus examined is unique in its scope, covering the period of the pandemic from the outbreak in January to the announcement of a successful vaccine in November 2020. Therefore, this study contributes to filling the gap in knowledge of the representations and impact of COVID-19 within the fields of linguistics, politics and sociology.

## **2 COVID-19 discourse and social reality**

For COVID-19 discourse and social reality, this subject has received considerable academic attention to date. Previous language analyses, especially within sociology, report that COVID-19 is a social disease and suffering requiring equity-focused treatment of a more fair and just society (Trout & Kleinman 2020). The virus was also found to teach humans how to develop a social system that works for sustainable, ethical and equitable existence (see e.g. Matthewman & Huppatz 2020, Ward 2020). While sociological studies have contributed to a better understanding of the impact of the virus on society, it is through discourse that we can understand how people feel, think and react to social issues (in this context COVID-19) they are suffering (van Dijk 2000, Harper 2003). The analysis of COVID-19 discourse as communicative units embedded in social and cultural practices helps uncover how the whole world started a struggle for survival in late 2019, when a new virus hit Wuhan city in China's Hubei province and spread very rapidly outside China to other countries. The discourse representation of COVID-19 as a social reality varies across medical institutions, media and governments. The virus has been represented, from a socio-political and medical perspective, as a monster (Davis 2020), a silent killer (Birhman et al. 2020) and a social stigma (Ramaci et al. 2020). Politicians, in particular, construe discourse to persuade the public of their politically oriented view of COVID-19, since "the aim of politicians is not only to be understood but also to make the audience accept their representation of reality" (Dontcheva-Navratilova 2012: 79). Such discursive representation contributes to uncertainty and spreads fear and anxiety across the public, which can weaken the human immune system, causing cardiovascular and gastrointestinal damage and leading to death (Iddir et al. 2020, Seiler et al. 2020). The importance of the study of the discursive representation of COVID-19 by the WHO can help measure/point out the damage, if any, such representation causes to the public and the role of the agency in (in)directly increasing stress and affecting the immune system and, then, the lives of people.

The WHO is the United Nations agency responsible for public health and whose objective is the "highest possible level of health" (World Health Organization

2020: 10). The agency has an essential role in the governance of disease because of its international function of enforcing medical standards and coordinating common goal actors (Ruger & Yach 2009). More importantly, the WHO presents evidence-based medical standards on core areas, such as COVID-19, for key institutions and governments to coordinate for a drug or vaccine. At the time of the COVID-19 outbreak, the WHO started press releases updating the public on the laboratory findings, research development, medical protocol and technical guidance to avoid the infection. The speeches delivered by the WHO's Director-General are important briefings for medical institutions and the whole world. The speeches (language) show the ways the WHO conceptualizes COVID-19 and the agency's implications and guiding protocols (see e.g. Chen et al. 2020, Adal 2022). Since the outbreak, the agency started suggesting safety guidelines, such as "protect yourself and others from COVID-19, keep yourself and others safe, don't forget the basics of good hygiene, take some simple precautions, such as physical distancing and mask wearing" (<https://who.int>). The agency, also, asked member states to come together to protect those who cannot afford protection, and to maintain health services. On the other hand, the agency showed how fragile many health systems are when they are unable to mitigate the deadly risk and avoid the system collapse, by taking immediate actions, such as robust planning, (non)governmental coordination, and facility management (Thomson et al. 2019). This means that the role the agency plays in saving the lives of affected people and the discourse they delivered can shape the research agenda and global response to COVID-19, which justifies the selection of WHO speeches as the data of the current study.

### **3 Methodology**

#### **3.1 Data**

The data of the current study are 241 speeches (212K words) delivered by the WHO's Director-General from 5 January 2020 (when WHO published the first outbreak statement) to 25 November 2020 (when the leading vaccine production companies Pfizer, Moderna and AstraZeneca/Oxford developed effective vaccines for COVID-19). Following the download of the speeches which are freely available on the agency's website (<https://who.int>), they were saved as txt files for CL processing. They were then cleaned from corpus noise (Gabrielatos 2007) and classified via the date of publication.

### 3.2 Framework and procedures

To understand the WHO's institutional and political stance and function in the representation of COVID-19, there is the need to examine the relationships between language, ideology and power – principal DA trends in Critical Discourse Analysis (CDA) (see e.g. Fairclough & Wodak 1997). DA methodology helps uncover why certain procedures are to be followed in the discursive representation of social issues (such as COVID-19) (Wodak 1996, 2015). It also allows understanding the way discourse is constructed and delivered to the public, and the political power in framing the social reality of the virus (or what Finlayson et al. 2016 call political rhetoric). Within power theory, Fairclough (2001) recognizes two aspects of power, power in discourse and power behind discourse. Power in discourse refers to the actual use of language where power relations are enacted, such as face-to-face communication, language disorders, and cross-cultural communication. The power behind discourse, on the other hand, focuses on the order of discourse (total discursive practices of an institution) shaped by the relations of power, such as standard language (standardization). This study focuses on the two aspects of power in the analysis of WHO discourse, because the agency has the two sources of power. The methodology that works on this overlap between language, power and ideology within DA is Wodak's (2001, 2015), and Reisigl and Wodak's (2017) DHA. The DHA "integrates different approaches, and proceeds multi-methodically based on a variety of empirical data as well as background information" (Reisigl & Wodak 2001: 2). It is marked by the principle of triangulation (Wodak 2001: 2015) which aids in drawing on various interdisciplinary approaches. This triangulation presupposes the possibility of combining CL and DA for the purpose of "identifying specific contents [...], investigating discursive strategies [...] and examining context-dependent linguistic realization" (ibid.: 44). More importantly, the DHA is marked by contextual triangulation of four contextual factors, namely co-text, intertextual relationship, extra-linguistic social variables, and sociopolitical and historical context. This potential of triangulation is methodologically applied through the analytical tools of referential/predication, perspectivation, intensifying/mitigation and argumentation strategies (Wodak 2001, Wodak 2015, Reisigl & Wodak 2017). These strategies are attributed to five questions that explain what each strategy is meant to do, and those I will answer throughout the analysis of the WHO's discourse:

- How is COVID-19 referred to and described in the WHO's corpus? (referential and predication strategies)

- From what point of view are these references expressed? (perspectivisation strategies)
- Are these references intensified or mitigated? (intensifying and mitigation strategies)
- By what means (arguments) are references justified? (argumentation strategies)

What I have found extra potential in the DHA strategies of representation is that there is a hierarchical or inclusive relationship between these strategies starting with a reference and ending with an argument. In other words, an entity (linguistic feature) within discourse is negatively/positively referred to by a noun (reference) and might be followed by a predication that negatively/positively labels the entity (predication). The entity can be described and qualified by various linguistic categories (intensification/mitigation), and may occur in a specific discoursal context (perspectivation). Finally, the whole positive/negative utterance can be justified (argumentation). The DHA, drawn upon in this study, has been applied for the analysis of socio-political issues and achieved the aims to which it was applied, such as the analysis of the collective identity of social actors and how it is formulated by discourse practices (Koller 2010), and the socio-political representation of terrorism in media and political discourses (Bhatia 2009).

For the quantitative analysis of the corpus, the Wordsmith corpus tool was used (Scott 2020). Wordsmith software shows patterns in text from different languages in different fields of knowledge, such as linguistics and politics (lexically.net). This software has built-in tools for frequency, concordance, collocation and keyword analyses. The frequency of occurrence tool was used to set a list of COVID-19 terms (search words), including coronavirus, covid\*, virus\* (\* stands for more characters/additions), pandemic and epidemic. The concordance lines and collocates of the terms/search words were then extracted to form the WHO corpus of this study.

Each concordance line was then read by eye and coded through NVivo for referential/predication strategies. The basic function of NVivo is to code the linguistic features of the discourse into categories or nodes which can be divided into sub-nodes and a hierarchical structure of coded information (see also Mozzato et al. 2016). NVivo is qualitative and mixed-methods research software that can be used for the analysis of audio, video, and, more importantly for this study, texts. The software is produced by QSR International – the developer of software products for qualitative data analysis (QDA) based in Australia (see <https://qsrinternational.com>). This software enables the researcher to import large texts from web content, online surveys, social media, and others in an

intuitive interface to do an in-depth qualitative analysis. I use NVivo to code the DHA strategies in the WHO corpus, followed by a statistical analysis of these strategies. The goal is to bring together qualitative and quantitative analyses in the examination of how COVID-19 is linguistically represented to the public by the WHO. This method extends the use of an innovative synergy of qualitative data analysis software like NVivo (2018) and corpus linguistic software like Wordsmith (Scott 2020). It helped uncover topic representations via salient lexical selections which were grouped on the bases of semantic fields.

The corpus was then searched for the parts of speech (POS) collocating with the search words in Wordsmith. Lexical selections were shown in word trees marked by associations of each lexeme to others in the texts. The resulting list was then extracted and coded in NVivo for the intensification and mitigation strategies. The concordance lists of the search words and their collocates were then analysed for functional elements (subject/objects) and coded for the perspectivisation strategy in NVivo. Finally, I have used the keyword tool in Wordsmith software to compare the WHO corpus against the COVID-19 corpus (<https://sketchengine.eu>) to find out the lexically salient keywords/topoi in the WHO corpus (see e.g. Baker 2006). Each Keyword-concordance was read by eye for further qualitative analysis to identify the warrants-argument used to justify the representation of the virus in the corpus, which was, then, coded in NVivo under the argument strategies.

## **4 Corpus analysis**

### **4.1 Statistical measures and qualitative coding**

Following the clearing of the corpus noise (see Gabrielatos 2007), such as dates, applause and cheers, the corpus was uploaded to NVivo. I ran the word frequency tool and searched for the words 'covid\*', 'coronavirus\*', 'pandemic' and 'epidemic'. The frequency of occurrences was n=2,622, n=1,768, n=1,736 and n=912, respectively (see Figure 1).

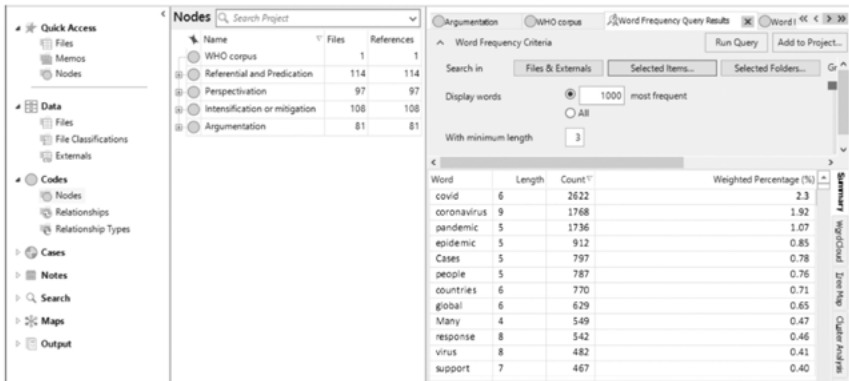


Figure 1: NVivo results for search word frequencies

The concordance lines of the search words were then read by eye and qualitatively analysed for discourse strategies. The manual reading of all the concordances allowed grouping the search words in the internal sources of NVivo into discourse strategies or nodes, with each referring to a specific strategy, namely referential and predicational, intensification or mitigation, perspectivation and argumentation. When selecting any of the nodes, NVivo showed a list of all the occurrences of the search words with a scrollable list of all examples in the corpus (see Figure 2).

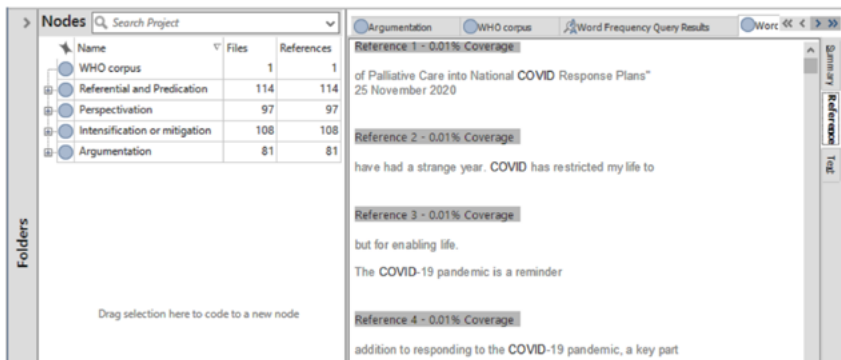


Figure 2: NVivo platform for discourse strategies

By selecting any of the nodes from the left panel in Figure 2, NVivo shows the list of all examples coded under this node (category) in the right panel of the

platform. For example, the referential and predicational node has been coded 114 times. Following this statistical measure and qualitative coding, quantitative and qualitative analyses were further employed throughout the analysis of the discourse strategies as illustrated in the analysis section below.

## 4.2 Discourse representation of COVID-19

### 4.2.1 Eccentricity discourse

The qualitative analysis of the concordance lines and paragraph views of the referential strategies showed that the WHO discourse referred to COVID-19 as an eccentric virus linguistically realised through cases of being *complex* (33), *uncontrolled* (27), *unknown* (19), *straining* (13), *varied* (8), *transferable* (8) and *winding* (6). COVID-19 was represented as an unbeatable disease toward which the WHO acted powerless. The common characteristic of the presented referential and predicational identification of the virus is that the virus is an eccentric entity that has no stable condition to be examined and assessed, for example (all examples are extracts from speeches delivered by the WHO's Director-General Tedros Adhanom Ghebreyesus):

- (1) *The epidemic of COVID-19 is becoming increasingly complex.*
- (2) *We are dealing with a global pandemic, uncontrolled outbreak.*
- (3) *The COVID-19 pandemic is straining health systems in many countries.*

There was no frequent use of terms that showed control of the virus, such as *treated*, *cured*, *healing*, or *controlled* (cf. Weldon analysis of Ebola discourse 2001). Contrarily, the WHO's discourse continuously updated the rise in the number of death and the shortage of beds and medical supplies, portraying as if the world has come to an end. It added that a 25-per-cent increase had been reported in the prevalence of anxiety and depression worldwide. This was evident when COVID-19 took the majority of health scientists by surprise, although they had long predicted a disease would strike and it was only a matter of time (Seiler et al. 2020). By the start of the virus, scientists insist that they are facing an invisible monster for which they have no treatment yet. Soon, according to Iddir et al. (2020), the system got overwhelmed and a medical crisis happened.

Dealing with this eccentric virus has led the WHO into revising the medical treatment protocol eight times since May 2020 (<https://who.int>, Centre for disease control and prevention 2020). The clinical guidelines and protocols to survive the infection with COVID-19 have been continuously modified following



### 4.2.2 Discourse of threat

The analysis of intensification and mitigation strategies revealed that the WHO qualified the condition of the virus as a threat to humanity. The illocutionary force of the representation of the virus toned and sharpened the utterances on the virus (Renkema 2009), describing it as being *dangerous* (43), *new* (29), and *deadly* (23) (see Figure 4).

><> Humility to believe that we need one another to fight this dangerous	virus	.	</s><s> And Josep, as you rightly said during the World Health Ass
><> It is when the world comes together that it can defeat this dangerous	virus	.	</s><s> I will be honest with you. </s><s> I am really, really worried
I bring the rest of the world together and to be able to fight this dangerous	virus	in unison. </s><s> Without that, the virus will get advantage and will	
ities and governments to continue suppressing and controlling this deadly	virus	.	</s><s> So-called lockdowns can help to take the heat out of a cou
ecentered global health crisis. </s><s> Not only are we confronting a new	virus	,	we are also confronting the first pandemic in history caused by a co
safe operation of markets. </s><s> Because an estimated 70% of all new	viruses	come from animals, we also work together closely to understand and	
focus for WHO. </s><s> As we have said many times before, this is a new	virus	,	and the first pandemic caused by a coronavirus. </s><s> We're all I
he Turkic speaking states. </s><s> We have learned much about this new	virus	since we first encountered it at the start of the year. </s><s> While e	
isease in the coming days. </s><s> We have learned much about this new	virus	since we first encountered it at the start of the year. </s><s> These h	
VID-19, health workers in DRC faced the double threat of fighting a deadly	virus	in one of the world's most dangerous and unstable regions – exposin	
lsewhere. </s><s> As I said at yesterday's press conference, this is a new	virus	,	and the first pandemic caused by a coronavirus – two firsts. </s><s>
ugh football. </s><s> We didn't know then what we know now – that a new	virus	would emerge that would bring many parts of society to a standstill –	
save lives. </s><s> And fourth, innovate and learn. </s><s> This is a new	virus	and a new situation. </s><s> We're all learning, and we must all find	
save lives. </s><s> And fourth, innovate and learn. </s><s> This is a new	virus	and a new situation. </s><s> We're all learning, and we must all find	
d cases. </s><s> And fourth, innovate and improve. </s><s> This is a new	virus	and a new situation. </s><s> We're all learning and we must all find r	
ve blended strategy for controlling their epidemics and pushing this deadly	virus	back. </s><s> Countries that continue finding and testing cases and	
ve blended strategy for controlling their epidemics and pushing this deadly	virus	back. </s><s> Countries that continue finding and testing cases and	

**Figure 4: Screenshot of COVID-19 modifiers**

This intensification of the virus as dangerous constructs the feeling of insecurity. This insecurity stance entails a shift in people's cultural and national heritage (see e.g. Dalarud 2013). Notably, the semantic nature of this representation instigates the communicative effectiveness of threat among the public and displays the functional orientation of the WHO to not only alarm, but to scare people, as illustrated below:

- (7) *It is when the world comes together that it can defeat this dangerous virus.*
- (8) *Not only are we confronting a new virus, we are also confronting the first pandemic in history caused by a coronavirus.*
- (9) *COVID-19 continues its deadly path across the planet, as we all know.*

The intensification strategy revealed the coherent formation and the controlling theme of the discourse on COVID-19, especially in terms of macrostructure theory (van Dijk 1980), where the virus was represented in frame-like

conventional knowledge of threat. Reinforcing the virus as new, dangerous and deadly is a rhetorical strategy of stylistic gradient with the focus on “making plans and employing strategies” to accomplish the frame of a threatening entity (Caffi 2007: 16). Consequently, intensifying the threat of the virus can (and it did) increase the tension and stress to the peak. This intensification strategy is an author’s viewpoint trying an effective communication, rather than the actual status of the object/event being intensified (see e.g. Dalarud 2013). This means that the WHO might not represent the actual situation of the virus at the time of representation, but the speeches it delivered were still threatening.

Another intensification strategy was the use of quantification terms that pointed out the growth and amount of the virus, e.g. *very* (56), *many* (34), and *wide* (18):

- (10) *COVID-19 spreads very efficiently among clusters of people.*
- (11) *Everyone is fighting hard against the virus but so many lives have been lost.*
- (12) *Countries are in the dark as to how far and wide the virus has spread – and who has coronavirus or another disease with similar symptoms.*

The intensification and quantification of the virus as being ‘unbounded’ foreshadows the social reality that the virus cannot be brought down, which again brings fear and imposes threat among people.

#### **4.2.3 Hegemony discourse**

While the WHO represented COVID-19 as eccentric (see 4.2.1) and intensified it as threatening (see 4.2.2), the agency adopted a subjective point of view in this discursive representation of the virus. The WHO showed active involvement in the discourse on the virus, seen evident in the frequent use of proximal first-person pronouns *we* (n=511) and *I* (n=172), as in Examples 13 and 14, in comparison with objective representation through distal pronouns, such as *you* (n=123) and *they* (n=73), as in Examples 15, 16:

- (13) *We also established the COVID-19 Technology Access Pool, a voluntary mechanism through which we are inviting companies or governments to develop an effective vaccine.*
- (14) *I said that the global COVID-19 outbreak can now be described as a pandemic.*
- (15) *This will not only help you in the long term, it will also help you fight COVID-19 if you get it.*

- (16) *Some countries have had large outbreaks but were able to bring them under control and they continue to suppress the virus*

The perspective of using first-person pronouns in the representation of COVID-19 reveals the ideology of WHO being actively included in the representation of the virus, rather than using bird-eye narration. The use of first-person pronouns, however, marks an element of subjectivity and constructs the speaker's active consciousness in the discourse, which, in fact, provides additional power to the WHO's commitment to what it proposes and communicates to the public (see e.g. Langacker 1991, Marín-Arrese 2007, Almagred 2021b). First-person pronouns, also, foreground the authority of the WHO, as they do in academic writings when authors act as 'architect' of the theses (Dontcheva-Navratilova 2013: 21). Nuyts (2001), for instance, goes further and states that the speakers' subjective references imply their responsibility for the subject matter under consideration, which puts the WHO under serious responsibility in dealing with the virus.

This subjective involvement is referred to by Simpson (1993) as internal points of view or homodiegetic narrations, where speakers can be either negatively or positively committed to taking action. Notably, most of the internal narrations in which the WHO used first-person pronouns were negative, using epistemic and perception modality markers in which the WHO was not obliged to the achievement of actions it proposes to deal with COVID-19. Consider Example 17:

- (17) *We will break chains of transmission, suppress the virus, and protect health systems.*

Epistemic '*will*' in Example 17 does not oblige the WHO (*we*) to *break*, *suppress* and *protect* the health systems, because the future commitment might (not) occur. This modality use is intuitively negative, highlighting uncertainty over actions (see Jeffries 2014). In a few cases, the WHO employed a neutral point of view, marked by a 'complete absence of narratorial modality' (Simpson 1993: 55), presenting the fact that the WHO is learning lessons from the pandemic, as illustrated in Example 18:

- (18) *From Berlin to Bogota, Minneapolis to Mumbai, Seoul to St Petersburg, we are facing the same threat, confronting the same difficult new reality.*

In Example 18, the use of the verb *to be* (*are*) shows that WHO adopts a categorical assertion point of view (Jeffries 2014) which is a straightforward

description of what the world is facing – a threat. This point of view, unlike the negative epistemic *will*, portrays actions from the WHO’s spatial location, rather than its bird-eye position.

#### 4.2.4 Discourse of distress

The analysis of argumentation strategies employed in the representation of COVID-19 as eccentric and threatening, and the agency’s discourse as hegemonic showed that the WHO implied public antagonism and asked people to unite until a vaccine is invented. This was evident in the identification of the recurrent keywords/topos manifested in the data. The keywords provide a set of main topics in a corpus (Scott 2020) and constitute an essential feature of corpus-based methodologies because it is inherently comparative (Partington 2009). They are “content-related warrants or ‘conclusion rules’ which connect the argument” (Reisigl & Wodak 2001: 69-80). This was necessary for the analysis of the WHO’s discourse in that keywords are indicators of the aboutness of the discourse and a reflector of the societal and cultural views of actors (WHO) (see e.g. Baker 2006). To analyse keywords, the CL software Wordsmith was used to compare the WHO corpus with the Covid-19 Open Research Dataset (CORD-19). CORD-19 is a 224M-word corpus released by Allen Institute for AI including 280K scientific articles about coronavirus. As illustrated in Table 1, the keyword analysis showed that the frequent keywords were ‘unity’, ‘solidarity’, ‘supply’, ‘vaccine’, ‘honour’, ‘cooperation’, ‘treatment’ and ‘lifesaving’.

Item	Score	Freq
unity	1,134.39	276
solidarity	580	313
supply	472.13	161
vaccine	318.66	76
honour	255.66	74
cooperation	100.21	45
treatment	54.82	31
lifesaving	51.97	23

**Table 1: Keywords of WHO against COVID-19 Corpus**

The keywords in Table 1 underlay manipulative arguments in representing the virus. They can be classified into two groups, namely ‘unity’ warrant and ‘vaccine’ argument. In ‘unity’ warrant, the topos of *unity*, *solidarity*, *honour* and *cooperation* were the main assumptions and justification to support the WHO’s

‘vaccine’ argument that the virus can be defeated when *supply*, *vaccine*, *treatment* and *lifesaving* are offered:

- (19) *I have said many times, the keys to defeating this pandemic are unity and solidarity.*
- (20) *We have called consistently for the two essential ingredients for conquering this virus: national unity and global solidarity.*

Following the increase in virus fatalities and shortage in medical supplies, such as masks and ventilators, many countries were in a race to buy them overseas. The US, for example, was accused of piracy when it confiscated 200K Germany-bounded masks for its own in April 2020. Italy, on the other hand, was crying for help to suppress the virus when the death tolls 1K a day, with the European Union acting helpless. This has driven the WHO to condemn this antagonistic behaviour and to call for unity to defeat the virus (see also Schemm & Taylor 2020).

## 5 Discussion

Referring to the virus as an eccentric entity being *complex* and *uncontrolled* reflects the inability of the WHO and member states to control the pandemic. The WHO’s discourse has worsened the situation and led to a global economic crisis since the 1930s when poverty and social exclusion grew rapidly (Lorenzo-Dus & Almaged 2020). This was evident in the discourse analysis limited to the WHO Director-General’s speeches from January to November 2020. Eccentric discourse could contribute to placing burden on people and increasing their anxiety and stress, hence affecting their immune system functionality. This representation of the virus has also been reported by Scott (2016) in his analysis of WHO’s health security reforms. He states that the agency has urged the affected countries to ask for help, rather than offering them aid and service, which has led to a baffled, then broken global health system. The WHO used eccentric discourse between January and April 2020, which might worsen the economic and medical situation in the developed countries and drive some developing governments to suffer health collapse. Italy, for instance, suffered more than 1K reported deaths in a single day in March 2020 (<https://who.int>).

Death toll shortly declined in May 2020, and Pfizer and AstraZeneca companies started the development and trials of vaccines for the virus. However, with another phase of the outbreak in September 2020, death tolls rose to 6K a day and the eccentricity discourse came to the surface again when the WHO frequently described the virus as *uncontrolled*. While deaths steadily declined in November and successful trials of the vaccines were announced, the number

of fatalities across the globe tolled 62.3M confirmed cases and 1.45M deaths (worldometers.info). This human catastrophe drove the WHO to call for emergency response and to employ warlike metaphors and military terms, e.g. *fight*, *defeat* and *conquer* the virus. The personification of the virus as an enemy motivates and encourages medical staff to endure long hours of work and, at the same time, invokes the call for renewed medical research to win over the enemy/virus. Similar findings have been reported in the analysis of the Ebola virus, such as Larson et al.'s (2005) analysis of infectious diseases and Weldon's (2001) analysis of Ebola discourse, where the virus was personified as an enemy and the tilt to political replaced medical representation.

Following the November 2020 death toll, the WHO delivered threatening discourse by intensifying the virus as being *deadly* and *dangerous*, in addition to qualifying the growth/amount of the virus as *wide*. This was a typical discourse practice of media representation of COVID-19 (see e.g. Parvin et al. 2020, Chen et al. 2020), fuelling apocalyptic representation of the pandemic. It was also the discourse of doctors, healthcare workers and medical staff (briefings) (see e.g. NHS.uk, healthaffairs.org). In one of the interviews, Bill Gates, Windows software developer and prominent vaccine funder, has also invoked an apocalyptic representation of the virus, predicting more outbreaks and wider infections "We're not ready for the next pandemic. And, sadly, not that much was done, it got more into do vaccines work at all?" (Didion 2020). This apocalyptic discourse echoes the destructive instability of the virus with the ideology that every human being today should be afraid of economic crisis and death. What has worsened the situation is the denial from what is now called anti-lockdown and anti-vaccine protesters who believe in the conspiracy theory that COVID-19 is a man-made virus. Conspiracy theorists aim to direct blame at the Trade competitors, mainly the US and China, and motivate disbelief and distrust in governments (Sardarizadeh & Robinson 2020). Ironically, conspiracy theorists might help people cope with a virus they do not believe existed, such as when urging people not to have masks or follow social distancing procedures (ibid.). This, on the other hand, has slowed virus containment and medical response, leading to the raise in the number of confirmed cases and hospital overstaffing.

The reference to COVID-19 as eccentric and the intensification of the virus as threatening was formulated by an internal perspective/point of view. The agency showed active involvement in the representation of COVID-19 through the use of proximal first-person pronouns (*we* and *I*) in the corpus. This conscious and/or physical involvement, together with the use of challenging actions, implies the WHO's appeal to hegemony. Similar findings have been reported in the analysis of the discourse practice of political elites, where hegemony and authoritarian

references are typical examples (cf. van Dijk 2006, Lacerda 2015). The viewpoint the WHO withholds in the representation of COVID-19 is a discursive tactic to persuade the public of the agency's stance, because the discourse communicating a point of view subjectively is by nature persuasive (see e.g. Verstraete 2001, Rett 2010). However, the agency has not made an active involvement in funding the vaccine production, nor managed the cooperation among vaccine production companies, namely Pfizer, Oxford-AstraZeneca and Moderna. Furthermore, the agency has not taken obligatory measures to ensure that rich countries help those suffering from the pandemic.

The keyword analysis between the WHO corpus and COVID-19 corpus showed that the agency implied a ground argument of antagonistic behaviour among the public. This argument was justified by resorting to topics of unity and vaccine invention to overcome public discord. While such justifications highlight the responsibility of every organization and individual, the focus on the production of a vaccine (via topos of *supply*, *vaccine*, *treatment*, and *lifesaving*) revealed the inability of the WHO to take emergency actions. The agency, instead, resorted to wishes of creating a vaccine, which is seen evident in the frequent use of topos of *unity*, *solidarity*, *honour* and *cooperation* in the corpus. This might contribute to spreading distress among the public and fuel antagonism among the member states to invent/book vaccine shots first. Meanwhile, member states were in an unfair race to reserve medical supplies, such as the US piracy of masks shipment imported for the German police (*The Guardian* 2020). Also, the US terminated more than 100M\$ of the WHO's funds, about 15 per cent of the total WHO budget in May 2020, arguing that the 'WHO had not made reforms' (<https://who.int>). This move has alarmed medical institutions of WHO's potential to cooperate with member states to fight the virus and has undermined the effort to produce vaccines.

While the WHO Director-General's speeches are representative of the agency's functional procedures in medical and health issues, they might not be fully reflective of the agency's political stance and military intervention toward other issues. The findings of the analysis validate the agency's inadvertent behaviour/procedure toward health issues, and are limited to a particular period between January-November 2020 when the WHO General Director delivered his speeches. Researching the Director-General's speeches on different occasions/timespan, for future research, may render different findings, i.e. different WHO's socio-political stance and measures.

## 6 Conclusion

The study aimed at uncovering the interdiscursive representation of COVID-19 by the WHO between January 2020 and November 2020, and the extent to which the agency was contributive to the world health systems. The analysis of the speeches delivered by the WHO's Director-General Tedros Adhanom Ghebreyesus revealed that the agency is apocalyptic in the representation of the virus, while strengthening its hegemony. The systematic application of the DHA's strategies of referential/predication, intensification/mitigation, perspectivation and argumentation, with the aid NVivo software and Wordsmith CL tool, has achieved its aims and assisted in finding out that the agency has manipulated four discourses in the representation of the virus, namely eccentricity, threatening, hegemony, and antagonism. Each of the discourses is rhetorically constructed through a specific DHA strategy to uncover the socio-political stance of the WHO.

COVID-19 is institutionally identified by the WHO as an eccentric entity with unbounded measures. This representation, frequently following the first rise of death tolls, in April 2020, implies global series of failure and inability of the WHO to deal with the virus, putting millions of lives at risk. In this regard, the WHO's corpus did not show the agency assigning the member states freedom in encountering the virus and cooperating to avoid the agency's and individual states' failures. This also laid with the member states not being ready to face medical challenges (Benvenisti 2020).

The virus was presented as an enemy that the WHO needs to fight, similar to the representation of terrorism in political discourse. This political waging of war against the virus has its impact on mental health, and the human immune system. Military discourse is not common in the WHO's scientific and medical support to the health system. The WHO could have better used encouraging rhetoric and promising measures to contaminate the virus. With the second outbreak of the virus in November 2020, the agency intensifies that the virus is deadly and dangerous, threatening the public and inciting a pessimistic view. This has also been evident in representing the virus as unbounded and growing in amount. Notably, the WHO shows consistent political dynamism, rather than medical support, by adopting a subjective point of view/perspective in the representation of COVID-19. This perspectivation is linked to power exposition and discourse of control, which is a rhetorical move to strengthen the political power and hegemony of the agency, rather than to strengthen ties and cooperation among working medical labs and teams. Hegemony discourse is often associated with antagonism, and this association was noticeable in setting the ground argument for

COVID-19. The antagonistic discourse by the WHO is a strategy of ideological closure adopted to constrain the interpretation of the agency's discourse by its audiences to defeat the virus.

The WHO's discourse fell short of its stated objective to keep the international health system secure, since member states showed no discursive intention to fit the WHO assignment to cooperate against the pandemic, or adopt shared sovereignty in front of the global crisis. This failure in management and administrative tasks might have motivated the economic and medical strain on developed countries and driven some developing governments to suffer health collapse. The WHO might unintentionally assist in creating a desperate social reality no one was willing to live.

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