Conceptual Metaphor in COVID-19 Speeches of the American President Joe Biden

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Abstract—**This qualitative and quantitative study aims at shedding the light on the use of metaphor in COVID-19 speeches of the American President Joe Biden. Metaphor is considered to be one of the common linguistic strategies that are pervasively used in different types of discourse including speech. This study focuses on analyzing metaphor according to their source domains and to investigate their functions using Conceptual Metaphor Theory (CMT) as a semantic cognitive approach. As opposed to the decorative approach, CMT states that metaphor "plays a central role in thought, and is indispensable to both thought and language" (Degani, 2005). This approach was first elaborated by Lakoff and Johnson and is the most accepted theory that relates metaphor to cognition. The study aims at answering the following questions: (1) What are the most frequent source-domain categories of conceptual metaphors used in COVID-19 speeches of Joe Biden?; (2) What is the density of metaphor in various speeches delivered by Joe Biden? and finally (3) What are the main functions of metaphors found in Biden's speeches? The findings revealed that the most common used source domains are Unity, Object, person, spatial and War metaphors, respectively. Moreover, the study has found that Urges America to Wear Masks is denser in metaphor than COVID-19 Response& Vaccine and Biden's Speech on Corona Virus. Finally, metaphor is used for several functions such as simplifying, convincing people and for emotive functions.**

Index Terms—**conceptual metaphors, source domain & target domain, Conceptual Metaphor Theory CMT, President Joe Biden of America**

I. INTRODUCTION

Persuasive speaking is needed in a wide range of situations, including giving a speech, arguing with another person, and haggling down a price. According to Perloff (2003), it is "the symbolic process in which communicators try to convince other people to change their attitudes or behaviors regarding an issue through the transmission of a message, in an atmosphere of free choice" (p. 8). People typically use a variety of strategies to make their words more powerful and effective. Many of these rhetorical strategies are employed by writers and speakers in order to elicit a response from their audience. One of the most influential and functional techniques in political speeches is the use of metaphor which has proved its effectiveness to twist and manipulate the minds of the audience (Charteris-Black, 2005, p.21).

Charteris-Black (2004) defines a metaphor as a "linguistic representation that results from the shift in the use of a word or phrase from the context or domain in which it is expected to occur to another context or domain where it is not expected to occur, thereby causing semantic tension"(p. 21). It simply draws a comparison between two concepts, without using the words 'as' or 'like', as is done in simile.

The cognitive approach regards metaphor as a creative linguistic device through which people unconsciously express their ideas and thoughts that could possibly be expressed using literal language:

Our conceptual system is not something we are normally aware of. In most of the little things we do every day, we simply think and act more or less automatically along certain lines. Just what these lines are is by no means obvious. One way to find out is by looking at language. Since communication is based on the same conceptual system that we use in thinking and acting, language is an important source of evidence for what that system is like (Lakoff & Johnson, 2003, p. 4).

A metaphor is a powerful rhetorical device that is used in a variety of contexts, including sports commentary, advertisements, TV news, and political settings. It is deeply ingrained in how we construct the world around us, as well as how others construct that world for us. According to Lakoff and Johnson (2003), "our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical" (p. 4). As a result, linguists have conducted a large number of studies on various types of discourse trying to arrive at a point in 'metaphor understanding'.

Political discourse plays an important role in mobilizing the public and motivating them and its "purpose is to offer an idealized 'Vision' of the social world. Therefore, metaphor choice is likely to be overt and conscious as the chosen metaphors are intended to communicate this vision" (Charteris- Black, 2004, p. 1). Moreover, Charteris- Black (2005) defines metaphor as "A figure of speech that is typically used in persuasive political arguments". The metaphor which is mainly based on human cognition as well as culture is widely spread in this type of discourse. He also assumes that

because of this cognitive and culturally rooted role, metaphor is important in influencing emotional responses. In other words, culture plays a main role in how we structure the concepts and how people from different cultures can have different structures and forms of concepts. For example, ARGUMENT is partially structured, understood, performed, and talked about in terms of battle in our culture when it could be structured and talked about in terms of dance (Lakoff & Johnson, 2003, p. 5).

However, metaphor has proved its effectiveness on the public in formal communications as it can stir the emotions and thoughts of the audience. As a result, it can convey the speaker's intended messages and thereby achieve their goals. Leaders are usually aware of the importance of language in delivering their messages. Therefore, they rely on metaphor as a rhetorical strategy to convey their ideas and ideologies.

The Conceptual Metaphor Theory (CMT) was born in Lakoff and Johnson's book (1980). They claim that language is drenched with metaphors and language is metaphorical because our conceptual system is simply metaphorical too. This theory is based on the fact that metaphor is central to ordinary natural language semantics and that conceptual metaphors are important because they underlie our conceptual system and therefore have a great influence on thought and are considered an intrinsic part of the human cognitive system. Metaphor representation theory contends that conceptual metaphors are not mere figures of speech, but important tools used to communicate and interpret concepts with no physical referents (Fetterman, 2013, p. 43).

This study sheds the light on the use of conceptual metaphors as a persuasive strategy in COVID-19 speeches delivered by the latest American president Joe Biden. So, the researcher refers to different speeches to identify and classify the conceptual metaphors according to their main source domains elaborated in Lakoff and Johnson's book (2003) and Charteris-Black's book (2005). The analysis will be based on the Cognitive Semantic Approach which was first proposed by Lakoff and Johnson (1980). Moreover, this study attempts to pinpoint the density of metaphor in this type of speech and to figure out the functions of these metaphors.

A. Theoretical Framework

The analysis is based on the Conceptual Metaphor Theory CMT (Cognitive Semantic Approach) which was founded by Lakoff and Johnson's classic work *Metaphors We Live By* (1980). This cognitive science regards metaphor as a mental phenomenon rather than a linguistic one that creates a link between language and the mind. It is based on the fact that new notions can be understood in terms of already existing notions. The interaction between new and previous experience can create three types of metaphors: **ontological metaphors** which view abstract notions as concrete objects with clear outlines, **structural metaphors** which imply the structuring of the target domain in terms of the source domain and **orientational metaphors** which represent the ways to fix the experience of spatial orientation (Kartashova, 2010, p. 1).

The researcher will refer to the Metaphor Identification procedure MIP, a model which was proposed by a group of seven metaphor analysts (Pragglejaz Group, 2007), to identify the metaphors found in the speeches of the latest American President Joe Biden. MIP is created to provide metaphor analysts with a reliable tool for the identification of metaphorically used words in context. Pragglejaz Group (2007) states that metaphor identification occurs when the analyst follows certain steps:

1. Read the entire text–discourse to establish a general understanding of the meaning. 2. Determine the lexical units in the text–discourse 3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit. (b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be —More concrete; what they evoke is easier to imagine, see, hear, feel, smell, and taste. —Related to bodily action. —More precise (as opposed to vague) —Historically older. Basic meanings are not necessarily the most frequent meanings of the lexical unit. (c) If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it. 4. If yes, mark the lexical unit as metaphorical (p. 3).

B. Aims and Questions of the Study

The conceptual metaphors are known for their use in different discourse topics and particularly in the speeches of political figures as they are considered one of the persuasive strategies used by politicians (Charteris- Black, 2005). This study provides a comprehensive understanding of the COVID-19 speeches of Joe Biden. Thus, the current study aims at exploring the conceptual metaphors used by Biden and categorizing the most common ones according to the source domains proposed by Lakoff and Johnson (1980, 2003). The researcher also investigates the density of the conceptual metaphors in various speeches which were delivered on different occasions. Moreover, the researcher examines the effect of the topic and context on the type of metaphors used. The current research is based on the following questions:

1. What are the most frequent source-domain categories of conceptual metaphors used in COVID-19 speeches of Joe Biden?

2. What is the density of metaphor in various speeches delivered by Joe Biden?

3. What are the main functions of metaphors found in Biden's speeches?

C. Significance of the Study

The relevance of this study lies in its attempt to offer a comprehensive analysis of conceptual metaphors as a persuasive strategy in COVID-19 speeches of Biden, which can be taken as a stepping stone for researchers working on persuasive strategies. In addition, it analyzes Biden's discourse from a Cognitive Semantic Approach.

This study is an attempt to investigate how American president Joe Biden accomplishes his goals in persuading and influencing the audience and how he promotes his political ideology through the use of conceptual metaphors. Moreover, the significance of this study lies in the fact that it highlights the effect of the topic on the type of metaphors found in Biden's speeches. Moreover, the researcher relates the results of the current study to previously conducted studies mentioned in the literature review to improve people's awareness and understanding of the importance of conceptual metaphors as a rhetorical strategy, especially since most of the previous studies focused on the use of metaphor as a rhetorical device in political speeches rather than other types of speeches.

II. REVIEW OF LITERATURE

Gibbs et al. (2002) state that a metaphor can create a "sense of intimacy between speaker and listener that literal language is less able to do" (p. 128). Previous research has shown that people can express deeply felt emotions about traumatic events such as war and natural disasters when they are provided with metaphorical framing (Neimeyer, 1999). One of these traumatic events that people have faced recently throughout the world is the COVID-19 pandemic. This pandemic has focused attention on political leadership all over the world. As a result, political leaders and governments put their all to influence the public standpoint and to gain immediate and prevalent acceptance for their policies. As a result, they place a greater emphasis in their public speeches on conclusive strategies in order to gain public compliance with what's critical to the success of their sweats in the running of the COVID-19 epidemic.

Many political leaders from around the world have described the coronavirus pandemic as a war or a fight. For instance, "President Emmanuel Macron in France declared his nation was 'at war' with an invisible enemy" adding that this enemy "requires our general mobilization" (The New York Times, 2020). Furthermore, Prime Minister Johnson in the UK referred to COVID-19 as an 'enemy' stating that "we must act like any wartime government to support the UK economy in the face of the coronavirus outbreak" (BBC News, 2020). As the COVID-19 crisis spreads around the world, many politicians and journalists stoked the pandemic rhetoric, which resurrected that of previous diseases and epidemics. Stanley et al. (2021) recently published a study on metaphor and the COVID-19 pandemic that provides insight into people's lived experiences with the COVID-19 pandemic. This study provides insight into the COVID-19 pandemic's lived experiences in the United States. They conducted semi-structured interviews to examine the metaphors used by different participants to describe the pandemic. They asked the participants to make a comparison between the pandemic and an animal and a color. However, the analysis revealed "four convergent mental models of participants' pandemic experiences (i.e., uncertainty, danger, grotesque, and misery) as well as four primary emotions associated with those mental models (i.e., grief, disgust, anger, and fear). Thus, the participants were able to express and articulate deeply felt emotions about their pandemic experiences through the use of metaphor. The findings suggest that these mental models and emotions influence participants' health beliefs and behavior" (p. 1900).

Semino (2021) discusses "different metaphors for the pandemic and explains why they are used and why they matter in another study. "War metaphors are considered first, as they were particularly frequent and controversial at the beginning of the pandemic" (p. 50). Later on, "these metaphors have been criticized by many critics and they were reframed by fire metaphors as the latter is more versatile and appropriate in communicating about different aspects of the pandemic," According to the author (p. 51). However, according to the researcher "some metaphors are more apt than others, depending on the topic and context. She has shown that Fire metaphors can be particularly appropriate and versatile in communication about the COVID-19 pandemic, especially as compared with war metaphors" (p. 56). She adds that "no metaphor can cater to all aspects of something as complex and long-term as a global pandemic" (p.56). The researcher explains why fire metaphors, for example, might not be appropriate to highlight the virus's danger simply as they can be less effective for people who have no fear of fires. The researcher concludes that "a well-informed and context-sensitive approach to metaphor selection can be an important part of public health messaging" (p. 56).

Dada et al. (2021) conducted a study to demonstrate how political leaders have differences in their approach to addressing the pandemic through public messages. They "analyzed 20 speeches given by different heads of governments around the world (from Bangladesh, Belgium, Bolivia, Brazil, Dominican Republic, Finland, France, Germany, India, Indonesia, New Zealand, Niger, Norway, Russia, South Africa, Scotland, Saint Maarten, United Kingdom, United States, and Taiwan) to highlight the differences between men and women leaders in discussing COVID-19" (p.1). The findings revealed that five primary themes that emerged from the 122 speeches delivered at COVID-19 were economics and financial relief, social welfare and vulnerable populations, nationalism, responsibility and paternalism, and emotional appeals. Furthermore, all male leaders concentrated on the economic impact of the pandemic, whereas female counterparts spoke more frequently about the impact on the human scale and described a broader range of social welfare services, such as mental health, substance addiction, and domestic violence. To depict COVID-19, Males used war metaphors more frequently and in greater volume than female leaders.

Based on a huge corpus of messages sent on Twitter between March and April 2020, Wicke and Bolognesi (2020) investigated the discourse related to COVID-19. They started by analyzing the speech topics in order to classify them. Then, they demonstrated how the WAR frame is employed to discuss specific topics, such as virus treatment, but not others, such as the population's impacts of social distancing. The popularity of the WAR frame was then measured and compared to three other frames (MONSTER, STORM, and TSUNAMI), as well as a literal frame employed as a control (FAMILY). They discovered that the WAR frame can only be used to discuss specific aspects of the current pandemic, such as the treatment of the virus and the operations made by doctors. However, the same frame cannot be used "to talk about the need to feel our family close to us while respecting the social distancing measures" (p. 1). According to the researchers "a collection of different frames and metaphors that tackle different aspects of the current situation" (p. 22) adding that "future studies could focus on the systematic identification of alternative figurative framings used in the Covid-19 discourse to tackle different aspects of the epidemic" (p. 22).

Last but not least, Prokhorova et al. (2021) published an article on COVID-19 coverage in political discourse. Because metaphorical concepts appear to be important mechanisms for molding reality in modern times, the authors wanted to investigate the significance of language and metaphor in how we communicate and interpret things. According to the findings, the most common types of metaphors used in this issue are military or war metaphors, animal metaphors, and catastrophe metaphors.

III. METHODS

Sample and Data Collection

The speeches selected for this study were delivered by the American president Joe Biden during the COVID-19 pandemic. The researcher has chosen three speeches that were delivered on different occasions and follows the Metaphor Identification Procedure (MIP) to identify the metaphors. The data is quantitatively and qualitatively analyzed. The sample of the study consists of three COVID-19 speeches: (1) Urges Americans to Wear Masks (UAWM) delivered on November 9, 2020 (2) Joe Biden COVID-19 Response & Vaccine Update Speech (R&V) delivered on July 6, 2021, and (3) Joe Biden Speech on Coronavirus (C.V.) which was delivered on March 12, 2020. As a result, the researcher will investigate the impact of the topic on the use of conceptual metaphors. The researcher, on the other hand, gathered all transcripts of speeches from the following websites: www.whitehouse.gov., www.facebook.com, and www.rev.com . The speeches under investigation were collected from the internet in two forms: the video and the script. At the end of the study, the links to the speeches will be included in appendix A.

IV. ANALYSIS AND DISCUSSION

A. Results Related to Question 1: What Are the Most Frequent Source-domain Categories of Conceptual Metaphors Used in COVID-19 Speeches of Joe Biden?

TABLE 1
FREQUENCIES AND PERCENTAGES OF THE USE OF METAPHORS ACCORDING TO THEIR SOURCE DOMAINS IN THE COVID-19 SPEECHES

No.	Source domain	Frequency (UAWM) S.	Frequency (R&V) S.	Frequency (C. V.) S.	Total Frequency	Percentage
1.	Unity metaphors	36	19	21	**76**	16.70
2.	Object metaphors	17	7	29	53	11.65
3.	Personification metaphors	16	5	29	50	11.00
4.	Spatial metaphors	18	21	9	48	10.55
5.	War metaphors	15	22	9	46	10.11

Table 1 above reveals that the most frequently used metaphor is *unity metaphor* followed by *object metaphor* (76 and 53 instances, respectively). Moreover, the table also shows that *unity metaphor* and *object metaphor* are followed by *personification metaphor* (50 instances)*,* and *spatial metaphor* (48 instances). Another significant finding is that the COVID-19 speeches recorded higher mean scores of *war metaphor* (46 instances) implying that American President Biden used this metaphor more often in COVID-19 speeches to achieve a certain function.

The use of *unity metaphor* implies that Biden stresses the importance of unity and how it is essential for a nation to have the strength to face their real enemy, which is 'COVID-19' in these speeches. In fact, being together makes them superior and enables them to overcome all the obstacles they face including COVID-19.

Personification metaphor is one of the most well-known ontological metaphors. Lakoff and Johnson (2003) state that "the physical object is further specified as being a person" (p.33) and this type of metaphor "allows us to comprehend objects and many nonhuman experiences in terms of characteristics and activities" (p.33). *Personification* is a wide category that cannot be summed up with one metaphor SOMETHING IS PERSON as the described target domain can be an object or even an abstract concept which is presented in terms of a variety of source domains that include different aspects of a person or ways of looking at a person. However, all these types of *person metaphors* "are extensions of ontological metaphors and that allows us to make sense of phenomena in the world in human terms—terms that we can understand on the basis of our own motivations, goals, actions, and characteristics" (Lakoff & Johnson, 2003, p.34). In

the examined data, Biden sometimes describes himself as an artist in "Go to Joe Biden.com where I lay out the immediate steps we have to take to deliver one decisive public health response to curb the spread of the disease" (Biden Speech on Coronavirus, 2020). He also describes himself as a protector when he said "Protecting the health and safety of the American people is the most important job of any president" (Biden's Speech on coronavirus, 2020). Moreover, Biden describes the virus and the crisis as a person in "This virus is hitting the Black, Latino, Asian American, Pacific Islanders, Native American communities, harder than white communities" (Biden, 2020, Urges Americans to Wear Masks) and "This crisis claimed nearly a thousand American lives a day" (Biden, 2020, Urges Americans to Wear Masks). These two metaphors in the previously mentioned quotes indicate that the virus and the crisis have the power to harm people.

This type of metaphor is also known as an ontological metaphor, in which experiences are understood in terms of objects. Understanding our experiences, according to Lakoff and Johnson (2003), "allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we can identify our experiences as entities or substances, we can refer to them, categorize them, group them, and quantify them—and, by this means, reason about them" (p. 25). Biden metaphorized some abstract concepts as objects in order for his audience to easily process these concepts, especially since he is addressing people from various backgrounds and with varying levels of education. As a result, he resorted to metaphors to describe some abstract concepts that not all people are aware of their dangerous consequences such as 'crisis', 'economy' in a very practical way. He described them in terms of other tangible objects in order to create a metaphor that helps people in processing such concepts in terms of real- world objects. Take a look at these examples:

(1) *"Results are fully transparent"* - RESULTS IS A TRANSPARENT OBJECT **(Urges America to Wear Masks)**

(2) *"We have to get to work immediately to dig ourselves out of this hole"*- A CRISIS IS A HOLE **(Biden's Speech on Coronavirus)**

(3) *"This is an even bigger concern because of the Delta variant"*- A CONCERN IS AN OBJECT **(COVID-19 Response & Vaccine Speech)**

Furthermore, Biden referred to object metaphors in his speeches mainly to describe abstract concepts more than to talk about people. However, he did not focus mainly on PEOPLE AS OBJECTS metaphor as heavily as Trump did in his political speeches. The latter described how he can control and move people back into employment (Pilyarchuk & Onysko, 2018, p. 104). This implies that the 'Nurturant Parent' family model that Biden belongs to is correlated with morals such as understanding and respect rather than dominance.

In addition, spatial metaphors have generally a high frequency in COVID-19 speeches. Lakoff and Johnson (2003) assume that "spatial orientations arise from the fact that we have bodies of the sort we have and that they function as they do in our physical environment" (p.15). For instance, conceptual metaphors such as HAPPY IS UP and SAD IS DOWN are derived from the human body posture when people are happy or sad. Such physical orientations are commonly found in conventional idiomatic expressions such as "Last week we topped 120,000 new cases" and "They're stepping up" (TOP IS UP & PROGRESS IS UP respectively). The prevalence of such metaphors in COVID-19 speeches implies that President Biden discusses a variety of topics, including wages, deaths, cases, infection rates, and so on. He also uses motion metaphors to describe the change he is looking for using the main metaphor CHANGE IS MOTION and TIME IS MOTION.

In COVID-19 speeches, Biden refers to words like attack, fight, confront, defeat, victory, battle, and many others. Such war terms are being mapped into various aspects (target domains), and the majority of war metaphors found in all of Biden's speeches are based on one main metaphor. A PANDEMIC IS A WAR, from which many other metaphors can be derived, such as COVID-19 IS AN ENEMY and AMERICANS ARE FIGHTERS. Moreover, MASKS, VACCINES, and TESTS ARE WEAPONS, LEADERS ARE FIGHTERS and DOCTORS ARE SOLDIERS. Examples of conceptual metaphors found in COVID-19 speeches are provided in the following quotes:

(4) *"This virus is hitting the Black, Latino, Asian American, Pacific Islanders, Native American communities, harder than white communities"* (Biden, 2020, in Urges America to Wear Masks speech) – COVID-19 IS AN ENEMY &VIRUS IS AN OPPOSING FORCE

(5) *"It's a patriotic thing to do"* (Biden, 2020, Biden's speech on coronavirus) - THOSE WHO TAKE THE VACCINE ARE PATRIOTS/ A PANDEMIC IS A WAR

(6) *"Local leaders who are battling the Coronavirus on the ground as I speak, have the resources"* (Biden, 2021, in COVID-19 Response & Vaccine speech) - COVID-19 IS AN ENEMY & LEADERS ARE SOLDIERS

Table 1 shows that Response & Vaccine Speech (R&V) contains the highest war metaphors (22 instances), implying that Biden considers and describes COVID-19 as a type of war. He compares the pandemic to a war, the virus to an enemy, unvaccinated people to victims, doctors to soldiers, and vaccine recipients to patriots. The findings are in line with other recent conducted studies that show war metaphors are widely used in COVID-19 discourse. In France, for example, President Emmanuel Macron declared his nation was 'at war' with an invisible enemy (Erlanger, 2020). Furthermore, the findings are consistent with another study conducted by Semino (2020), who discusses different pandemic metaphors and explains why they are used and why they matter. He discovered that "war metaphors are considered first, as they were particularly frequent and controversial at the beginning of the pandemic" (p. 50).

Biden intentionally refers to the war source domain in order to create a metaphoric implication in people's minds and to make them aware of the harm that would befall them. In other words, he wants to show Americans the negative effects of this virus in order to convince them and encourage them to work harder to save their lives and their country as well.

B. Results Related to Question 2: What Is the Density of Metaphor in Various Speeches Delivered by Joe Biden?

TABLE 2
TOTAL NO. OF WORDS AND METAPHORS FOUND IN COVID-19 SPEECHES

Speech	Number of metaphors	Number of words	Metaphor frequency in speech
Urges America to Wear Masks (UAWM)	175	1479 words	(11.8%) = 1 metaphor per 8.5 words
COVID-19 Response& Vaccine (C-19 R&V)	105	1316 words	(8%) = 1 metaphor per 12.5 words
Biden's Speech on Corona Virus (BSCV)	178	2597 words	(6.9%) = 1 metaphor per 14.5 words
Total	**458**	**5392**	(8.5%) = 1 metaphor per 12 words

As shown in Table 2, the Urges America to Wear Masks Speech contains 175 metaphors and 1,479 words, the COVID-19 Response & Vaccine Speech has 105 metaphors 1,316 words, and Biden's Speech on Coronavirus has 178 metaphors 2597 words. According to Musolff and Zinken (2009), "Metaphor frequency MF can be calculated relative to the total amount of language or speech of the sample" (p. 65). So, to calculate the MF in Urges America to Wear Masks, "we divide the total number of metaphors in this speech (e.g., 175) by the total number of words in the discourse sample (1479 words). As f-values are then very small and difficult to understand, the result is multiplied by 100" (p. 65). Accordingly, the MF in this speech is one metaphor per 8.5 words, compared to one metaphor per 12.5 words in COVID-19 Response & Vaccine Speech, and one metaphor per 14.5 words in Biden's Coronavirus Speech. The average MF of the three speeches, however, is one metaphor per 12 words. Thus, a discourse that includes more metaphors within a given number of words is said to have a higher density than one with fewer metaphors.

As a result, Urges America to Wear Masks contains more metaphor than COVID-19 Response& Vaccine and Biden's Coronavirus Speech. This shows that Urges America to Wear Masks is more rhetorical than the others. This emphasizes the significance of the speech because it was delivered prior to winning the elections, and Biden believed that America had never been worse than it is now in the United States because the virus was spreading so quickly even in rural areas. Furthermore, many people have died in the United States, and the democratic president-elect wants to do something about it. Therefore, he increased the emphasis on wearing masks to reduce COVID-19 cases, and his speech is intentionally full of metaphors to persuade his country to wear masks.

C. Results Related to Question 3: What Are the Main Functions of Metaphors Found in Biden's COVID-19 Speeches?

One of the traumatic events that people have faced recently throughout the world is the COVID-19 pandemic. This pandemic has put more emphasis on political leadership worldwide. Thus, it can be noticed that political leaders and governments put their all to influence the public standpoint and to gain immediate acceptance for their policies. Accordingly, in their public speeches, they refer to 'persuasive strategies' "to gain public confidence and influence behavioral change" (Di-Miceli, 2021), which is critical to the success of their efforts in the handling of the COVID-19 pandemic.

The American President Joe Biden arrived after the Republican President Donald Trump. Unlike other American presidents, he reveled in the political fight and chastised a long list of perceived adversaries. So, instead of unifying the nation, he used to separate them, which is why Biden's mission was difficult. The second reason for Biden's drastic mission was that he took office during a very critical phase in American history known as the COVID-19 pandemic. That is why he put more emphasis on unity metaphors in his speeches. He made use of metaphor as a 'persuasion tool' to persuade his audience of what he said, especially since he uses pronouns such as 'we', 'us', and 'our'. He also relies on some vocabulary items like 'together' and 'unite' to convince the nation that unity is the way for success and victory. Consider the examples below.

(7) *"Today **our** work begins"*
(8) "*We're still facing a very dark winter*"
(9) "***We** have to do this **together**"*
(10) "*And where **we're united** in our shared goal*"

Biden also employs the personification metaphor to describe the CRISIS as A MURDERER or CRISIS as A DANGEROUS PERSON, implying that the virus is responsible for ending the lives of thousands of people. So, he uses the metaphor VIRUS IS A KILLER to make his people realize how dangerous this virus is, in order to persuade them to keep their masks on and to encourage them to take the vaccine. Take a look at these examples:

(11) "*This virus is hitting the Black, Latino, Asian American, Pacific Islanders, native American communities, harder than white communities*"
(12) "*Delta variant is already responsible for half of all cases in many parts of this country*"

(13) **"This virus laid bare the severe shortcomings of the current administration"**
Moreover, he described the CRISIS AS A PERSON in the following quotes:
(14) "This crisis claimed nearly a thousand American lives a day"
(15) "To meet this moment"
Furthermore, Biden described the PANDEMIC as A WAR from which other metaphors such as MASKS & TESTS ARE WEAPONS, LEADERS ARE FIGHTERS and DOCTORS ARE SOLDIERS are derived. PANDEMIC IS A WAR is a phrase used by many presidents around the world, including president Macron of France, who declared his nation was 'at war' with an invisible enemy. In the United Kingdom, Prime Minister Johnson referred to the virus as an 'enemy', stating that "we must act like any wartime government" to support the UK economy in the face of the coronavirus outbreak" (Erlanger, 2020, p. 1). They all referred to this metaphor as a persuasive strategy for gaining their audience's compliance.

Metaphors are also employed in COVID-19 speeches to elicit emotional responses from their audience. For example, when Biden described the VIRUS as A WILD ANIMAL or the VIRUS IS as A NATURAL DISASTER in quotes (16) and (17) below, he was attempting to manipulate people's emotions in order to make them hate the virus and take action to protect themselves. He also used the metaphor AMERICA IS A PERSON in "to heal the soul of this country", implying that America is a sick person manipulating people's emotions. In another study conducted by Prokhorova, et al. (2021) about COVID-19 coverage in political discourse, the results show that the most common types of metaphors used in this topic are military or war metaphors, animal metaphors, and catastrophe metaphors when all these types are studied in political discourses on the gross scale. Political figures rely on these domains because they can manipulate their audience's feelings and such domains can easily affect people and stir their emotions, causing them to act.

(16) *"That are the hardest hit by the virus"* (Biden, 2021, in COVID-19 Response & Vaccine speech)- A VIRUS IS A NATURAL DISASTER

(17) *"Who will track and curb this disease?"* (Biden, 2020, in Urges America to Wear Masks speech) - COVID-19 IS AN ANIMAL

Meanwhile, metaphor is used in Biden's speeches to simplify some abstract concepts so that their audience can easily understand them. The metaphors EXPECTATIONS ARE ENGINES in quote (18) and ECONOMY IS A VEHICLE in quote (19) are good examples of how metaphors can be used to simplify abstract concepts and describe them in terms of other concrete concepts experienced and used in everyday life. However, these two metaphors do not belong to the main five frequent source domains. They belong to MACHINE/ VEHICLE source domains.

(18) "Schools will operate safely and effectively" (Biden, 2020, in Urges America to Wear Masks speech) - A SCHOOL IS A MACHINE

(19) "And it will not stop, banning all travel from Europe or any other part of the world may slow it" (Biden, 2020, Biden's speech on coronavirus)- CORONAVIRUS IS A VEHICLE

Some metaphors are also used to capture people's attention and get them involved in what the president says. In COVID-19 speeches, American President Biden makes use of metaphor to draw people's attention to the topic he is discussing. Thus, the use of unity metaphors can be effective in attracting and retaining people's attention. For example, using pronouns like 'we', 'our', and 'us' makes the audience feel that they are involved in Biden's speech. Furthermore, the use of other *unity metaphors* such as the adjective 'united' and the adverb 'together' in the above examples aims at making the audience alert as they feel they are part of the topic being discussed by the speaker. Consider the following examples.

(20) "And where we're united in our shared goal"
(21) We have to do this together"
(22) "We have to come together to heal the soul of this country"
Overall, the metaphor functions used in various speeches correspond to the functions of metaphors mentioned in Charteris-Black Book (Black's 2005). In his book, He employs the notion of 'purposeful' metaphor, claiming that metaphors serve the following functions in political discourse: The first one is "the general rhetoric purpose to gain audience's attention and to establish trust; the second is to simplify or reify abstract and complex concepts into intelligible ones in a way favorable to the speaker's intention; the third is to evaluate the prospective political action and actor, and the fourth is to arouse the audience's emotions and feelings favoring the speaker" (p. 567). Moreover, Pennick (2004) claims that metaphors are used in political discourse for three main purposes: emotive, oversimplifying, and political persuasion. This study demonstrates that metaphor serves the same functions as described by Charteris-Black (2005). This proves that metaphor can be found not only found in political speeches but also in other types of speeches, such as COVID-19 speeches.

V. GENERAL DISCUSSION AND CONCLUSION

This study investigates COVID-19 discourse in the speeches of the democratic president, Joe Biden. It focuses on two different types of analysis: quantitative analysis and qualitative analysis. Three specific research questions were addressed: (1) What are the most frequent source-domain categories of conceptual metaphors used in COVID-19 speeches of Joe Biden?; (2) What is the density of metaphor in various speeches delivered by Joe Biden?; (3) What are the main functions of metaphors found in Biden's speeches?

The findings reveal that metaphor is commonly used in different COVID-19 speeches and that Biden refers to the following main five source domains: unity metaphors, object metaphors, person metaphors, spatial metaphors, and war metaphors. The aforementioned domains are typically encountered in different speeches, but the WAR domain is unique.

Furthermore, the results suggest that the average metaphor frequency (MF) of the three speeches is one metaphor every 12 words, with **Urges America to Wear Masks** having a greater metaphor density than **COVID-19 Response& Vaccine Speech** and **Biden's Coronavirus Speech**. This emphasizes the significance of this speech, given that the disease was rapidly spreading and many people had already died. As a result, Biden wants to demonstrate his supporters that he is the savior who will save the country from this deadly epidemic. Indeed, this is why his discourse is replete with metaphors.

In addition to that, the present study reveals that Biden employs metaphor in this discourse to achieve certain functions, such as gaining the audience's trust as a rhetoric purpose, simplifying the abstract or hard concepts, evaluating the prospective political action or actor, and arousing the audience's emotions, all of which are in line with the functions mentioned by Charteris-Black (2005). As a result, metaphor is used deliberately throughout Biden's speech as a rhetorical tool to convince his country to do certain things and avoid others. On the other hand, the audience picks up on the metaphor naturally without even recognizing it, and this is how it creates its effect.

Moreover, the current study reveals that the COVID-19 speeches recorded high mean scores of war metaphors. This proves that the topic of speech influences the types of metaphors used in that speech. Biden used this type of metaphor consciously in his discourse to achieve certain functions and to convince them naturally without noticing the use of metaphor. Based on the collection of data from various speeches delivered by Biden and related to COVID-19, it appears that the context affects the use of specific source domains. For example, in COVID-19 discourse, the WAR FRAME is frequently used to discuss COVID-19, which is according to previous literature, the most conventional one. The most commonly used words related to this frame are 'fight', 'fighting', 'combat', and 'defeat' where Biden describes the pandemic as a war and the virus as an enemy in different speeches. The WAR Domain is used to discuss some aspects of the pandemic such as the treatment of the virus and how people must react to it, but not to discuss other aspects such as the importance of family or the cooperation required to normalize the curve. Moreover, findings of the current study show that Biden refers to this type of metaphor to achieve positive effects such as helping people to be more cautious, encouraging them to unite to confront a common enemy, raising the value of sacrifice and heroism, and clarifying the interest of USA in the lives and dignity of its citizens. In other words, the use of war metaphors in COVID-19 speeches is becoming more common, and it transforms war from the scope of fighting the pandemic to a broader scope of public and daily life.

Finally, future research studies analyzing COVID-19 could focus on other source domains to outline different aspects of the epidemic. That would raise the awareness of people and help communities to understand and express aspects of COVID-19 that cannot be expressed by the WAR frame.

APPENDIX. COVID-19 SPEECHES

1. Urges America to Wear Masks http://www.rev.com/blog/transcripts/joe-biden-covid-19-briefing-transcript-november-9-urges-americans-to-wear-masks/
2. COVID-19 Response & Vaccine Update Speech http://www.whitehouse.gov.briefing-room/speeches-remarks/2021.07/06/remarks-by-president-biden-on-the-covid-19-response-and-the-vaccination-program-6/
3. Biden's Speech on Coronavirus Joe Biden - I'm about to address the nation on how we should confront the corona virus pandemic. Tune in to watch live: | Facebook

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