Blends and Mental Models in the Time of the Covid-19 Pandemic: The Case of English Multimodal Op-Eds

Shaimaa Mostafa Mohamed Owis Osman

Abstract

The Covid-19 pandemic has affected not only the health of people but also their daily social practices and interactions, especially on electronic media platforms and news agencies. This paper aims to investigate British and American multimodal Op-Ed articles (opposite-editorials) on the Covid-19 pandemic from a sociocognitive perspective, find out where multimodal blends come from, find out to what extent the writer and the illustrator complement each other in order to co-shape the message of Op-Ed discourse, investigate the role of knowledge in Op-Ed articles, illustrate to what extent multimodal Op-Ed articles manage the relationship between presupposed and new knowledge, and investigate the similarities and the differences between British and American Op-Eds. A corpus of 24 multimodal Op-Ed articles is collected from British and American digital newspaper archives *The Guardian* and *The New York Times*, respectively. The selected data are analysed qualitatively and quantitatively. Abdel Raheem's integrative model (2021a) is adopted to analyse the selected multimodal Op-Ed articles. It combines Conceptual Bending Theory (Fauconnier and Turner, 2002) and Mental Model Theory (van Dijk, 2014, 2023). The paper discusses cross-cultural similarities and differences in blending use and presents the crucial role of knowledge in Covid-19 Op-Ed articles production and understanding.
Keywords: Covid-19, multimodal Op-Eds, blending, mental models, knowledge

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1. Introduction

The sudden outbreak of the Covid-19 pandemic has plunged the world into an unusual crisis with its rapid spread causing great changes in politics, the economy, education, etc. It first appeared in Wuhan, China in December 2019. Since then, discussion of this infectious respiratory illness has dominated the social media and the news agencies. The media have a crucial role in spreading information and constructing public opinion. Social media platforms and electronic newspapers have a great responsibility to show regular updates on the status of this pandemic and discuss the appropriate precautions people need to follow. Moreover, they show local and global interventions to curb its outbreak (Schwitzer et al., 2005). It is necessary to know how news discourse, like multimodal Op-Ed articles, is structured to affect readers' thoughts and mindsets. To reach this goal, the present paper makes use of two cognitive theories; Fauconnier and Turner's (2002) Conceptual Blending Theory is used to examine and unpack blends, and van Dijk's (2014, 2023) Mental Model Theory is deployed to determine discursive strategies.

1.1 Objectives of the Study

The main objectives of this study are:

- To analyse multimodal Op-Ed articles in selected British and American newspapers from a sociocognitive perspective.
- To identify the conceptual blends used by *The Guardian* and *The NYT* to represent the pandemic and to find out where multimodal Op-Ed blends come from.

- To find out, to what extent, the illustrator and the writer complement each other to co-shape the message of Op-Ed discourse.
- To investigate the role and kind of knowledge in Op-Ed articles.
- To investigate the similarities and differences between British and American Op-Eds.

1.2 Research Hypotheses

This study sets out to test the following hypotheses:

H1. Since the Covid-19 pandemic is a global event and humans similarly conceptualise events, the Covid -19 Op-Ed discourse in British and American newspapers should have similarities; On the other hand, as British and American communities of different social and cultural experiences, their conceptualisation of this epidemic should have some differences.

H2. If blending is a cognitive phenomenon, it must have manifestations in multimodal Op-Ed articles.

H3. British and American journalists will use a variety of blends in their Op-Ed articles to make their discourse more influential.

H4. If a multimodal Op-Ed article involves two communicators (a writer and an illustrator), there should be some relationship between the text and the illustration.

1.3 Research Questions

The current study endeavours to answer the following questions:

1. What type of blending network is employed in each multimodal Op-Ed? How are these networks constructed?
2. Where do multimodal blends come from?
3. To what extent could an Op-Ed illustrator conform to or deviate from the writer?
4. How do images and texts relate to each other in terms of conceptual blending and knowledge? And how far does the illustration represent the knowledge in the Op-Ed article?

5. What are the similarities and differences between British and American multimodal Op-Ed articles?

1.4 Op-Ed Articles

An Op-Ed article is "a piece of writing that expresses a personal opinion and is usually printed in a newspaper opposite the page on which the editorial is printed (Cambridge Dictionary, n.d.). Consequently, it is known as Opinion-Editorial or Opposite-Editorial. According to Stovall (2005), Op-Ed articles are the heart of the newspaper and the soul of journalism. It is a genre that targets the public as its discourse community. Furthermore, it plays an influential role, as it shows the official position of the newspaper on a certain topic. Reah (2002) claims that they are direct ways by which the newspaper addresses its readers who expect to find crystal clear comments on everyday issues and events. The language of the editorial is usually formal. However, the formality of the language may vary from a large international newspaper to a small provincial newspaper. Furthermore, the language of the editorial is persuasive. Unlike news stories that present facts, editorials attempt to convince readers and encourage them to subscribe to a specific ideology (Shams, 2016). "Unlike anything ever seen in a newspaper, Op-Ed art became a fertile, globally influential idiom that reached beyond narrative for metaphor and changed the very purpose and potential of illustration" (Kraus, 2009, p. 1).

The illustrations "summarise or reflect the opinions expressed in the op-ed texts they accompany…. illustrations are always subservient to the copy, and they are not captioned …. This type of imagery is not used in Arabic newspapers" (Abdel-Raheem, 2019a, p. 32). Kraus (2009) adds that the mission of the illustration in this genre is to form an environment that deepens the influence of the word. In general, the Op-Ed page section of most newspapers aims at holding the attention of readers and advertisers, promoting the quality of elite debate, and acquainting the audience on prominent issues (Rosenfeld, 2000). According to van Dijk (1995, 2000),

opinion discourses in the newspapers play an essential role in shaping public opinion, influencing social and political debates, and applying the political agenda.

As already noted, the Op-Ed genre consists of two components: text (the verbal mode) and illustration (the visual mode). Because of this twofold nature of an Op-Ed article, the question arises about how the linguistic and the pictorial components actually relate to each other. The issue of how the text and the image in this genre work together to construct meaning needs to be investigated.

Little research attention has been directed toward multimodal Op-Ed articles. Therefore, the current research aims to investigate multimodal Covid-19 Op-Ed articles published in *The Guardian* (a British newspaper) and *The New York Times* (an American newspaper). English Op-Ed articles often have a multimodal character (Abdel-Raheem, 2013, 2018, 2019), and they are rich in blending, where structure from two or more arrays is projected to a blended mental space (Fauconnier & Turner, 2002). Interestingly, this genre is uncommon or rare in the Arabic press (Abdel-Raheem, 2020b).

2. Review of the Literature

The main aim of this review is to discuss some relevant previous studies that have been conducted over the last three years that handle the Covid-19 pandemic from various linguistic perspectives. Moreover, it attempts to illustrate the similarities and differences between the current study and the previous studies in an attempt to bridge a research gap. This section is divided into two parts: Relevant studies drawing on cognitive linguistic theories, and studies drawing on non-cognitive linguistic theories.

2.1 Studies on Covid-19 Drawing on Cognitive Linguistic Theories

El-Shazly (2020) examines the discursive structures used by the US and UK governments to legitimise the lockdown during the pandemic partially and fully in March 2020. Her study aims to reveal the conceptual and spatial representations of national lockdown declarations in the US and UK from a cognitive

perspective. The data include public speeches of the former president of the US *Donald Trump* on 11 March 2020 and of the former prime minister of the UK *Boris Johnson* on 23 March 2020. Cap's (2013) Proximization Theory is adopted and deployed as a cognitive-pragmatic model of threat construction to analyse the speeches. The findings show that Trump deemphasises the seriousness of the pandemic and blames China for it, whereas Johnson appeals to the British nation's fear by widening the distance between the threat and the nation. Both affirm that the conceptualisation of the change of "Us" moving towards "Them" to neutralise the crisis.

Abdel-Raheem's (2021b) study aims to show how recent diseases and viruses may influence human social-political perception and explore how the Covid-19 pandemic itself becomes a metaphor. A corpus of 620 Coronavirus-related political cartoons are selected from the digital archive of the Arab satirical *Cartoon Tomato*. Lakoff and Johnson's (1980) Conceptual Metaphor Theory is adopted to analyse the data. The results show that recent diseases and viruses, such as Covid-19, have a negative effect on cognition. Moreover, they shape societies' mindsets and worldviews. Another study on Covid-19 conceptual metaphors has been carried out by Amaireh (2022). She sheds light on metaphorical language in coverage of Coronavirus news in a local Jordanian newspaper *The Jordan Times*. The data consists of 135 editorials about the pandemic published between April to July 2020. Lakoff and Johnson's (1980) Conceptual Metaphor Theory and Charteris-Black's (2004) Critical Metaphor Analysis are adopted to analyse the selected data. It is concluded that the conceptual metaphors COVID AS A PERSON, COVID AS WATER, and COVID AS A WAR are highly used in the corpus to frame the pandemic. Moreover, COVID AS A WAR is not only deployed to conceptualise a war against the pandemic but also a conflict among countries. The findings show that the three conceptual metaphors are deployed to persuade the readers of the danger of the pandemic.

2.2 Studies on Covid-19 Drawing on Non-Cognitive Linguistic Theories

Pavlina (2021) examines British and American Covid-19 cartoons. Her study aims to uncover the similarities and differences between British and American cartoons. The data include 200 cartoons, divided evenly between British and American. The British Covid-19 cartoons are gathered from *The Guardian* and The American cartoons from *US Today* were published in 2020-2021. O'Halloran's (2011) systemic functional critical discourse analysis is deployed to analyse the selected data. The findings show that British cartoonists criticise the authorities responsible for vaccination, while American cartoonists reflect a positive image of these authorities in their country. Kandel (2022) investigates selected posters from a semiotic perspective. The aim of this study is to raise people's awareness concerning the preventive measures that reduce the chances of pandemic infection and to encourage children this deadly pandemic. The data consist of posters that are launched by the United Nations Children's Fund, UNICEF. Kress and van Leeuwen's (2006) theoretical framework is used to analyse the selected posters. The findings show that visual texts have a great influence on the audience, particularly children.

Anapol (2023) investigates a sample of Covid-19 memes that were designed in response to "Stay Alert" health campaign of the UK government. Her study aims to explore how multimodal semiotic resources are employed in the "Stay Alert" memes to construct meaning and to determine what discursive strategies emerge multimodally in the design of memes. A corpus of 50 multimodal memes is examined and selected because of their relevance to the theoretical approach. Kress and van Leeuwen's (2006) Visual Social Semiotic Model is adopted to analyse the selected memes. The results show that memes, during the Covid-19 pandemic, have been both a source of entertainment for quarantined people and tools for expressing confusion and frustration about the pandemic and the government plans for fighting it.

To the best of my knowledge, little has been known about the multimodal genre, i.e. Op-Ed. This genre is especially interesting because we have two communicators: The writer and illustrator. The issue of how the text and the illustration work together needs to be investigated. Moreover, there has been some work on the role of knowledge in political cartoons (for more details, see Abdel-Raheem, 2020a), but there has not been yet any discussion about the role of knowledge in Op-Eds.

3. Theoretical Framework

Cognitive linguistics is "the scientific study of the nature of thought and its expressions in language" (Lakoff, 2004, p. 122). Furthermore, it is concerned with studying the relationship between language, mind, and socio-physical experience (Evans, 2007; Evans & Green, 2006; Steen, 1994). According to Wen and Taylor (2021), it is not a single linguistic theory. Instead, it is an approach, a perspective, or a school that has adopted achievements from cognitive psychology, cognitive science, cognitive neuroscience, and cultural studies. Two cognitive linguistic theories are adopted in the present study: Fauconnier and Turner's Conceptual Blending Theory (2002) and van Dijk's (2014, 2023) Mental Model Theory. The tenets of both theories are illustrated in the following two sections. The third section presents an integrative model, i.e. an extended view of Conceptual Blending Theory drawing on Mental Model Theory.

3.1 Conceptual Blending Theory

Conceptual Blending Theory has been founded and developed by Gilles Fauconnier and Mark Turner. It is derived from two cognitive theories: Lakoff and Johnson's (1980) Conceptual Metaphor Theory and Fauconnier's (1994) Mental Spaces Theory. Conceptual blending is defined as a basic mental operation that "operates uniformly at different levels of abstraction and under superficially divergent contextual circumstances" (Fauconnier & Turner, 2006, p. 304), and

"a common everyday process indispensable to the most routine workings of the modern human mind" (Turner, 2014, p. 18). It constructs meaning unconsciously and dynamically. Moreover, conceptual blending is embedded in human experience (Coulson & Oakley, 2000; Evans & Green, 2006; Turner, 2006). Importantly, it can be "detected in everyday language, idioms, creative thought in mathematics, the evolution of socio-cultural models, jokes, advertising, and other aspects of linguistic and nonlinguistic behavior" (Turner & Fauconnier, 1995, p. 5). This theory is applied "in nearly every field that studies human affairs" (Turner, 2020, p. 2).

Fauconnier and Turner (2002) state that "blends arise in networks of mental spaces" (p. 47). Kövecses (2006) metaphorically describes them as "small lightbulbs lighting up in the brain/mind. The area 'lit up' corresponds to an activated mental space" (250). This conceptual network is called a "four-space model" (p. 103). Figure 1 is the basic diagram that presents the main structure of the conceptual blending network:

> The circles represent mental spaces, the solid lines indicate the matching and cross-space mapping between the input mental spaces, and the dotted lines indicates indicate connections between input spaces and either generic or blended spaces. The solid square in the blended space stands for an emergent structure (Fauconnier & Turner, 2002, p. 45).
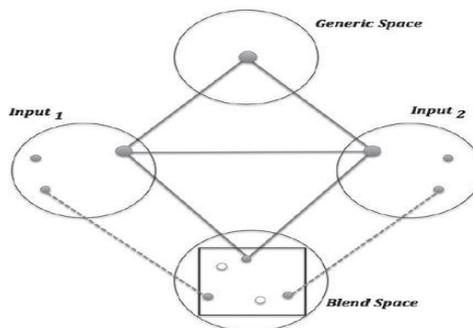

Figure 1 Conceptual blending network (Fauconnier and Turner, 2002, p. 46)

3.1.1 Types of Blending

Fauconnier and Turner (2002) and Turner (2006) identify four distinct types of integration or blending networks: Simplex, Mirror, Single-Scope, and Double-Scope. In Simplexes, one input consists of a general frame and the other consists of specific elements, as they are the simplest type of integration network. In Mirrors, a common organising frame is shared by all mental spaces in the network. In Single-Scopes, each of the inputs contains a distinct frame but only one of them organises the blend. In Double-Scopes, the two inputs involve distinct organising frames that construct the blend. Evans and Green (2006) claim that the Double-Scope networks can develop metaphorical blends. Fauconnier and Turner (2002) mention that "metaphoric integrations are typically single-scope or double-scope" (p. 154). Sometimes, the conceptual integration fuses various inputs. Hence, it converts to a multiple blend or megablend where one blend functions as the input for another.

3.1.2 Frame Blending

According to Fillmore (1985) and Goffman (1986), frames are cognitive structures that are necessary for understanding and reasoning. They include participants or FEs "semantic roles" and sequences of actions "scenarios" (Lakoff, 2008). Feldman (2006) gives an example of the Commercial Event frame. In this frame, the semantic roles consist of the Seller, the Buyer, the Goods, and the Money. The Seller and the Buyer are People. The scenario consists of the following three states:

> **The Initial State**
> The Buyer owns the Money and needs the Goods.
> The Seller owns the Goods and needs the Money.
> **The Middle State (an exchange)**
> The Buyer gives the Money to the Seller.
> The Seller gives the Goods to the Buyer.

The Final State
The Buyer has the Goods.
The Seller has the Money.

Coulson (2008) states that Conceptual Blending or frame-blending is particularly appropriate for the analysis of political cartoons which directly depict the contents of a "frame-blend" and urge the viewer to unpack it into "input frames" (p. 38). With this in mind, frame-blending is also well-suited for analysis of multimodal Op-Eds. Frames, according to Abdel-Raheem (2019), are the most commonplace mental structures, and most mental structures are metaphorical, mapping from one frame to another. All forms of communication (e.g. language, illustrations, images, cartoons, gestures, etc.) work through activating such frames.

3.2 Mental Model Theory

The leading name behind a sociocognitive approach is Teun A. van Dijk (2008, 2009, 2014, 2023), who draws on Social Representation Theory (Moscovici, 2000). Van Dijk estimates the importance of the study of cognition in the critical analysis of discourse, interaction, and communication. He affirms that there is no direct correspondence between discourse structure and social structure, but discourses operate through a cognitive interface (van Dijk, 2009). Simply put, he looks at discourse as having two inseparable facets: social and cognitive, and joins the two concepts together in one term, i.e. social cognition.

The sociocognitive approach depends on the discourse-cognition-society triangle (van Dijk, 2009). Here, the notion of mental models is necessary for this triangle. Van Dijk (2014) defines mental models as "subjective event representations involved in the production and comprehension of discourse such as news reports or stories, and more generally to engage in everyday social interaction" (p. 7). They play a basic role in the understanding and production of discourse because they represent the events as we experience them. Twhhey are the basis of all discourse genres such

as conversations, stories, news, or Op-Eds (the data of the present study). The basic two types of mental models that sociocognitive approach presents are situation models and context models (van Dijk, 2008, 2012b, 2014, 2023):

A) Situation Models

The crucial premise of this theory is that language users create mental models of the events texts are about, i.e. the situation they refer to, hence the name *situation models* is coined by van Dijk and Kintsch (1983). According to Abdel-Raheem (2021a), semantic situation modes "are construed from discourse and observation or experience" (p. 247). Van Dijk (2008, 2012b, 2014) asserts that language users not only create semantic situation models of the events referred to in discourse but also decipher dynamic context models of the communicative situation in which they participate. These models are called context models.

B) Context Models

The idea of context is that some event or discourse needs to be investigated in relation to its surrounding conditions (van Dijk, 2008, 2012b, 2014). Generally, the idea of context is deployed to explain things. According to Abdel-Raheem (2021a), pragmatic context models are defined as "representing the communicative situation itself and featuring schematic categories spatiotemporal Settings, Participants (and their identities, roles, and relations), Intentions and Goals, Knowledge, and so on" (p. 247). Van Dijk (2006) mentions that "context models are the basis of our pragmatic understanding of discourse" (p. 170).

3.2.1 Discourse and Knowledge

Discourse plays a crucial role in the social reproduction of knowledge. Most of what people know about the world is taken from the talk and text of family, friends, teachers, colleagues, the mass media and the media, and many other forms of communication

and genres, e.g. Op-Ed articles. Both discourse and knowledge are not only intentional as representations of situations but also contextual. It is assumed that knowledge is relative to epistemic communities and specific communicative situations, all discourse is produced and understood in specific communicative situations. The same discourse could be right in one situation and false in another. Pragmatically, discourses are more or less appropriate in each communicative situation according to the parameters of the situations, such as the Setting (time and place), Participants (their roles and identities), Actions, Goals, and the shared knowledge of the participants (van Dijk, 2014).

Importantly, context models have a K-device (Knowledge device) which at each moment calculates what recipients of knowledge have, i.e. *Common Ground* which is defined by Kecskes and Zhang (2009) as "a dynamic construct that is mutually constructed by interlocutors throughout the communicative process" (p. 331). The K-device constrains the complex knowledge management of discourse and interaction. For example, what recipients likely know already, might need to know, may forget, have not known yet, and so on. To wit, this basic device is the control mechanism of the common ground of the participants of talk and text underlying structures of discourse (van Dijk, 2014).

3.2.2 Epistemic Discourse Strategies

Epistemic discourse analysis can be defined as "the systemic and explicit study of the ways knowledge is interactively 'managed' …..in the structures and strategies of text and talk (van Dijk, 2013, p. 497). van Dijk (2012a, 2014) has paid specific attention to the epistemic structures and strategies in discourse that are constrained by the K-device and otherwise associated with participants' knowledge. These epistemic strategies include speech acts, semantic macrostructures, sequencing and ordering, cohesion, descriptions, evidentiality, modality, implication, implicature, presupposition,

elaboration, definition, and metaphor. In the present study, the blend is replaced with metaphor.

3.3 Blending and Mental Models: An Integrative Model

This section introduces an extended view of Fauconnier and Turner's (2002) Conceptual Blending Theory, drawing on insights from cognitive psychology and discourse studies (in particular, Mental Model Theory). Blending theory, though illuminating and useful, lacks a pragmatic component (Forceville, 2014, 2020). To fill this gap, van Dijk's theory (2014, 2023) is employed to promote the usefulness of the Blending Theory. Significantly, a theoretical approach to Blending Theory has been suggested to take its cognitive and contextual function into account. Abdel Raheem's (2021a) model (see figure 2) is adopted in the present study to integrate the context of blend production into Mental Model Theory.

Importantly, the Op-Ed article consists of two components: illustration (the visual mode) and text (verbal mode). Figure 2 shows the elements of both theories combined in an integrated approach to blends in context and discourse. The elements of a conceptual integration network are two inputs, the generic space, and the blend. The arrows refer to the cross-space mapping between the two inputs, and the dotted lines indicate connections between input spaces and either generic or blended spaces. Moreover, as shown in the figure 2 below, context models that represent the parameters of the communicative situation: Participants (writer, illustrator, publisher, and readers), Setting (the newspaper and date of publication), Roles, Knowledge, Goal, and Acts.
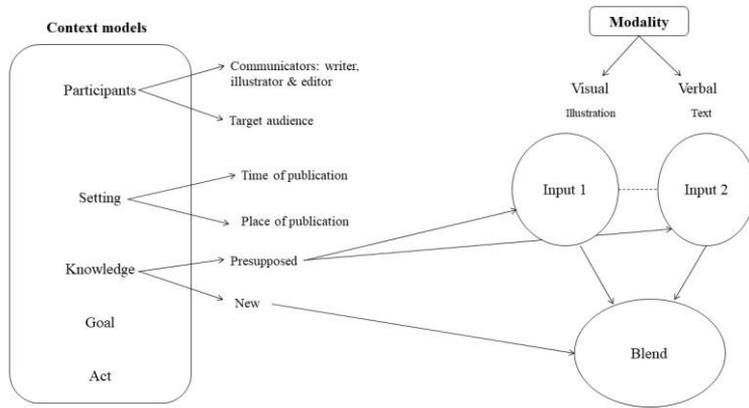
Figure 2 An integrative model (Abdel-Raheem, 2021a)

4. Data Collection and Sources

The data for this research consist of 24 multimodal Op-Eds published in *the Guardian* (n=12) and *The New York Times* (n=12) between March 2020 and August 2021. This period has been selected because it includes the great impacts of the Covid-19 pandemic on personal and social life, politics, economy, education, etc. The data are collected from digital archives of the newspapers selected for the study. The average daily circulation of *The Guardian* newspaper is 10,800,000 news subscribers (as of May 2024), while that of *The New York Times* newspaper is 1,100,1000 news subscribers (as of Sept 2024).

5. Methodology
To achieve the objectives of the present study, a set of procedures is used for the analysis of the selected data as follows:
1. Extracting Covid-19 Op-Ed articles published from March 2020 to August 2021 in the electronic newspapers under investigation.
2. Selecting 24 Covid-19 Op-Ed articles, divided evenly between British (taken from *The Guardian*) and American (taken from *The New York Times*).

3. Examining the illustrations carefully and finding out what they present. This means the semantic and context models for each visual are identified.
4. Reading the Op-Ed articles carefully and understanding accurately what they say.
5. Applying Abdel-Raheem's (2021a) integrative model (see figure 2).
6. Performing an analysis of identified blends and mental models.
7. Carrying out a comprehensive analysis of discourse strategies.
8. Finding out the similarities and differences between British and American multimodal Covid-19 Op-Ed articles.

6. Analysis and Discussion

This section presents a sociocognitive analysis of 24 British and American multimodal Op-Ed articles taken from *The Guardian* and *The New York Times*, respectively by adopting Abdel-Raheem's integrative model (2021a) that combines Conceptual Blending Theory (Fauconnier & Turner, 2002) and Mental Model Theory (van Dijk, 2014, 2023). There are two phases to the analysis: a qualitative phase to identify blends, mental models, knowledge, and other epistemic discourse strategies, and a quantitative phase to identify the most frequent source domains. Both are done manually. All the British and American multimodal Op-Eds are analysed in depth, but two can present 24 examples in this paper; they are particularly remarkable and illustrative in terms of their use of (non)metaphorical blends and context models.

6.1 Qualitative Analysis of the British Data
ENTERTAINMENT Frame

The illustration depicts a circus performance. In the foreground, there is a huge, gray elephant standing on a large, spiky colourful sphere representing the Coronavirus. The circus performer is

greeting the audience and wearing a circus costume with a top hat on his head. In the background, there is a red curtain behind which there is a huge number of virus-like spheres.

Figure 3 From Op-Ed "The Dominic Cummings circus is an indictment of the entire governing class" Aditya Chakrabortty; image by Bill Bragg

(The Guardian, 26 May 2021)

Blending Network and Mental Models

Figure 4 shows the integrative model of the ENTERTAINMENT frame for Chakrabortty's Op-Ed article. The multimodal Op-Ed evokes a double-scope integration network with two inputs, each structured by a distinct frame: ENTERTAINMENT/ CIRCUS and THE COVID-19 PANDEMIC. Cibulskiene (2024) mentions that the source domain of ENTERTAINMENT gives rise to different scenarios such as performance, story-telling, games, leisure activities, etc. The PERFORMANCE scenario includes verbal-visual activities performed on stage of theatre, circus, etc. Conceptual elements projected from each frame organise the blend. The circles show three mental spaces: The source input THE CIRCUS PERFORMANCE and the target input CUMMINGS'

STRATEGY DURING THE PANDEMIC. The input 1 is used to comprehend the input 2. The former input has elements: CUMMINGS' POLITICAL STRATEGY, DOMINIC, LIES, SCENARIO, BRITISH PEOPLE, CORONAVIRUS, and VARIANTS. The latter input has elements: THE CIRCUS, PERFORMER, ELEPHANT, SHOW, AUDIENCE, BALL, and BALLS BEHIND THE CURTAIN. Each element in input 1 has a direct counterpart in input 2. Dotted lines show the mapping between the two inputs, and solid lines show the projections made between the mental spaces. Most importantly, the third mental space is a new structure known as *a blend* created from the projected contents of the two inputs. The conceptual blend in the current Op-Ed article is DOMINIC CUMMING'S STRATEGY DURING THE COVID-19 PANDEMIC AS A CIRCUS PERFORMANCE.
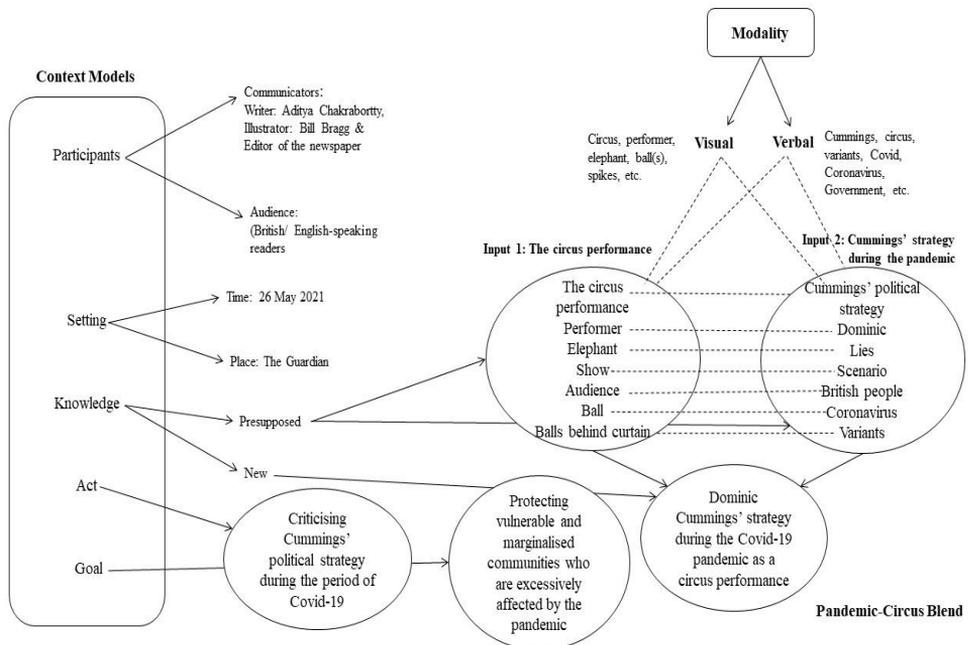

Figure 4: Integrative analysis of ENTERTAINMENT frame

The Op-Ed discusses how Dominic Cummings's testimony has distracted from the UK government's lies and failures in handling the Covid-19 crisis, which has led to the death of thousands of British citizens (= The semantic models). The context models (see Figure 4) include five contextual parameters: Participants are classified into two groups. The first group involves Participants: John Harris (the writer), Matt Kenyon (the illustrator), and the newspaper editor. The second group is the audience (British or English-speaking readers). Another parameter is Setting which includes the time of publication (15 Nov, 2020) and place of publication (The Guardian), Act or illocutionary speech act (criticising Cummings' political strategy during the period of Covid-19), Goal (Protecting vulnerable and marginalised communities who are excessively affected by the pandemic), Knowledge.

In the current multimodal Op-Ed, the writer and the illustrator work together to help readers understand the article efficiently. Chakrabortty presupposes that most British readers know what an epidemic is, what it does, what a circus is, and a huge amount of world information. Here, a crucial question comes to mind: how does he expect that the British readers know such things? If he had no hypotheses of what they know at any time, he might repeat the same things he wants to communicate because he presupposed knowledge the readers do not have. Communication would be impossible if the writer had no idea about what the readers already knew. Van Dijk (2003, 2008a) believes that context models feature a basic device "*K-device*" that manages the (non) expression knowledge in discourse and calculates how much of the information is already shared by the recipients.

In his article, Chakrabortty mentions many presupposed information that he expects the British readers to have already known. For example, he does not say who is *Dominic Cummings* although it is written in the headline. Then he mentions lexical items

such as *grave-faced*, *shaven-headed man*, *chief adviser*, and *distractor-in-chief*. Within the text, if the precedently mentioned item is dependent upon another element, it is a semantic tie. Without semantic ties, sentences would lack any kind of relationship to each other.

Another example in the first paragraph that is loaded with presuppositions, is located in the items *chief*, *his former confidant*, *the prime minister*. These items are identical in reference, or coreferential. They refer to the same thing, i.e. *Boris Johnson*. This form of presupposition is known as anaphora, i.e. referring back to some previous item (Halliday & Hasan, 1976). An example of old information mentioned in the second paragraph is *Domageddon*. This term first appeared in the electronic article, "One cabinet minister has even dubbed the event 'Domageddon'-playfully alluding to the biblical story of the last battle good and evil". The reader should have the religious, historical, political, and scientific background to know the etymology of the word 'Armageddon' whose origin dates back to the New Testament.

Another example of presupposed knowledge is the American idiom *knows where all the bodies are buried* which means "to know the closely guarded secrets of someone or an organization. These secrets may be criminal, immoral, or simply embarrassing" (Grammarist, n.d.). Chakrabortty presupposed that readers already knew this idiom that was used earlier in the American movie *Citizen Kane*, released in 1941. In the fourth paragraph, the writer talked about the September 11 attacks when comparing the number of deaths with that of Covid, mentioning "*the equivalent in deaths of a twin towers terrorist attack*". It is presupposed that the reader keeps in his memory even a little about this event.

The last two paragraphs summarise Chakrabortty's opinion that is considered new knowledge, i.e. The British government must make sure that the country is well-protected against Covid and other coming variants. In addition, it has to save money and possible

precautions to reduce the risk of the virus transmission in schools and among low-income families. From his perspective, these are the lessons that people should learn from Covid. In the end, he extols the role of healthcare workers during the pandemic.

To wrap it up, the writer consciously or unconsciously makes pragmatic presuppositions based on the assumed shared knowledge between him and his readers. Furthermore, he adds his opinion at the end of the Op-Ed article which considered new information.

Modelling Text-Image Relations on Blending and Cohesion

Bill Bragg depends on Aditya Chakrabortty's words and expressions to design his illustration. In other words, the text has an anchorage function. Bragg relies on the word *circus* that is mentioned in the headline and para. 8 to design his image. The illustration (see Figure 3) is about a show in a circus whose name is the Dominic Cummings Circus as presented in the headline. In Cummings' circus, DOMINIC CUMMINGS HIMSELF AS A PERFORMER, THE UK GOVERNMENT LIES AS AN ELEPHANT, SCENARIO OF UK GOVERNMENT DURING THE PANDEMIC AS A CIRCUS SHOW, THE CORONAVIRUS AS A BALL and VARIANTS AS UNSEEN BALLS BEHIND THE RED CURTAIN. Significantly, Dominic's lies and failures during the pandemic are metaphorically conceptualised as ENTERTAINMENT as mentioned in the text:

> Westminster demands a **diversion** and, over the months leading up to this hearing, Cummings has made himself its **distractor-in-chief**. **Ever happy to fatten the beast** he only pretends despise.
>
> (The Guardian, May 26, 2021; emphasis added)

Bragg attempts to complement Chakrabortty's message to help readers understand the Op-Ed but the text still has an anchorage function. To elaborate, when looking at the illustration at first glance without reading the text, the reader cannot understand many

details except that it is about Covid-19 but who the performer is, what the elephant refers to, why there are many Covid-19 balls behind the curtain, what they present, and what the cracked ball presents. Their answers cannot be known without reading the whole text. Nevertheless, there are some cohesive ties between the text and the image. For example, the figure of the performer in the circus or THE ENGLISH MAN (metonymically represented by THE TOP HAT) refers to THE BRITISH POLITICIAN Dominic Cummings or even forms of personal reference such as HE, HIS, HIM, HIMSELF. Furthermore, THE SPIKES are used metonymically to refer to THE VIRUS (PART FOR WHOLE metonymy).

6.2 Quantitative Analysis of the British Data

After listing all the conceptual blends in the selected British data, seven source inputs are found, namely WAR, ENTERTAINMENT, CORONAVIRUS, FIREFIGHTING, JOURNEY, SOLAR ECLIPSE, and CLOGGED WATER PIPE (see Table 1). Given our sample data, the most frequent source inputs are WAR and CIRCUS. To elaborate, 6 out of the 12 multimodal British Op-Eds depend evenly on both these domains as source inputs. The conceptual blend A CORONAVIRUS PANDEMIC AS A WAR is found in three Op-Ed articles, where elements of war are visualised such as soldiers (Roman soldiers with their military traditional costumes. The soldiers are the UK prime minister Boris Johnson, doctors, frontline workers, and even Britain itself is personified as a female soldier. Moreover, the vaccination, lockdown, social distancing, and health measures are conceptualised as the weapons (spears, shields, swords, etc.) and the Coronavirus as the enemy. Similarly, THE ENTERTAINMENT frame is found in 3 multimodal British Op-Eds. It takes different entertainment shows, i.e. the elephant show, the rolling ball, and the magician and rabbit circus show. It is to be noted that the target input in most Op-Eds is THE COVID-19 PANDEMIC except in two articles, where the

pandemic is the source input. Other source inputs are found once in the selected data.

Table 1: Source inputs in the British data

No.	Source Input	Occurrence	Percentage
1	ENTERTAINMENT	3	(25 %)
2	WAR	3	(25 %)
3	CORONAVIRUS	2	(16.7 %)
4	FIREFIGHTING	1	(8.3 %)
5	JOURNEY	1	(8.3 %)
6	SOLAR ECLIPSE	1	(8.3 %)
7	CLOGGED WATER PIPE	1	(8.3 %)

6.3 Qualitative Analysis of the American Data
WAR Frame

The Op-Ed, entitled "What fans of 'herd immunity' don't tell you" was published on 19 Oct, 2020. The text is written by John M. Barry and the illustration is purchased from Getty Images (a visual media company). The illustration (see Figure 5) depicts a huge Coronavirus-like sphere surrounded by soldiers carrying spears and shields labeled R.I.P. The soldiers are wearing a Roman warrior's uniform with plumes on their helmets.

Figure 5 from Op-Ed "What fans of 'herd immunity' don't tell you" John M. Barry; image by Getty Images

(The NYT, Oct 19, 2020)

Blending Network and Mental Models

Figure 6 displays the integrative model of the Op-Ed under investigation. The multimodal Op-Ed evokes a double-scope integration network with two inputs, each having a different frame: WAR and THE COVID-19 PANDEMIC. Conceptual elements projected from each frame organise the blend. The source input is the domain of WAR, whereas the target input is structured by the domain of PANDEMIC. The WAR domain has the conceptual elements, i.e. WAR DECLARATION, ROMAN SOLDIERS, ENEMY, WAR STRATEGY, WEAPONS, and VICTIMS OF WAR. On the other hand, THE COVID-19 PANDEMIC domain has the elements, GREAT BARRINGTON DECLARATION, FANS OF HERD IMMUNITY, CORONAVIRUS, HERD IMMUNITY POLICY, VACCINATION/ LOCDOWN, and DEATHS. Both inputs are structured by their resemblances featured in the generic space. They are THEME, AGENT, PATIENT, METHOD, INSTRUMENT, and RESULT. Dotted lines show the mapping between the two inputs, and solid lines represent the projections made between the mental spaces. Importantly, a new structure known as the blend is constructed from the projected contents of inputs 1 and 2. To elaborate, A GREAT BARRINGTON DECLARATION AS A WAR DECLARATION, FANS OF HERD IMMUNITY AS ROMAN SOLDIERS, THE CORONAVIRUS AS AN ENEMY, HERD IMMUNITY POLICY AS WAR STRATEGY, VACCINATION/ LOCKDOWN AS WEAPONS, and DEATHS AS VICTIMS OF WAR.
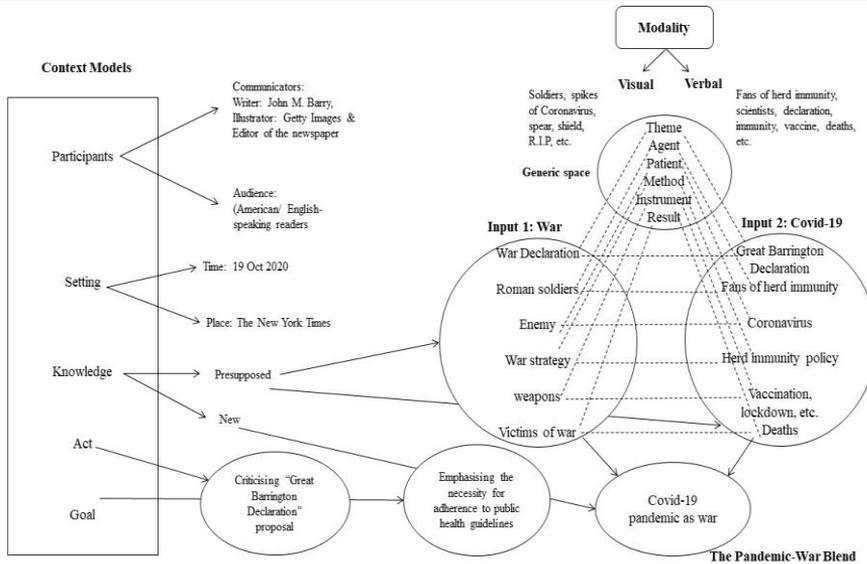
Figure 6: Integrative model of WAR frame

The Op-Ed is about the "Great Barrington Declaration," a proposal by a group of well-credentialed scientists and academics to shift Covid-19 policy to accomplishing herd immunity by letting low-risk individuals live normally while protecting vulnerable individuals. Moreover, the Op-Ed handles the pros and cons of the "herd immunity" approach to the pandemic (= semantic models). The context models (see Figure 6) include the Participants: three communicators, i.e. John M. Barry (the writer), Getty Images Company (the illustrator) which is a visual media company and supplier of supplier of stock images, and the editor of the electronic newspaper. Moreover, the audience should be American or English-speaking readers. Setting is another parameter including time of publication (19 Oct 2020) and place of publication (The NYT), Act (criticising "Great Barrington Declaration" proposal, Goal (Emphasising the necessity for adherence to public health guidelines), and knowledge.

For readers to interpret this illustration (see Figure 5), they need to have and activate general and historical knowledge. For example, the shape of the Coronavirus, the physical appearance of Roman soldiers and their war costumes, what the acronym R.I.P stands for, etc. The same is the case of the text, to comprehend even the first paragraph of this Op-Ed article, the reader needs to know and conceive many things: Among many other things, they need to know what the Great Barrington Declaration is, what the "Herd Immunity" proposal is, who fans of this proposal are, there are two groups for this declaration: supporters and opponents, The White House (the workplace of the USA president), University of Washington (an American university), etc. Moreover, a part of their generic knowledge of the world American or English-speaking readers are also assumed by the writer to know about more historical medical situations, such as the 1918 influenza pandemic and its health effects.

Besides all this presupposed old knowledge, the Op-Ed is about new information, that is, information John M. Barry (the writer) assumes the reader did not yet know: Who are right: the supporters or the opponents, three enormously important omissions in the declaration, the possibility of achieving herd immunity, refuting the American administration's handling of the pandemic (= pragmatically a critique of Trump government), emphasising the need for adherence to public health guidelines (= pragmatically assertion), etc.

Modelling Text-Image Relations on Blending and Cohesion

It is observed that Figure 5 is credited to Getty Images (a visual media company), which means that it is general and thus likely would need to be anchored because it was not designed particularly for the text. Importantly, the illustration expresses the conceptual frame of WAR that has core elements that are not inferred in the

text. Without reading the headline or subheadline that reflects the notion of the "herd immunity" proposal, readers cannot get this notion. Nevertheless, there are some cohesive ties between the two modes. For example, THE SPIKES in the illustration are used metonymically to refer to THE VIRUS (PART FOR WHOLE metonymy), which is mentioned three times as a lexical word in the text (lead of the Op-Ed and paras. 1 & 5). Furthermore, the acronym R.I.P written on the warriors' shields relates contiguously with the lexical word DEATHS which is repeated twelve times in the text. Moreover, its simple and complex lexical repetitions such as DEATH (three times), DIES OUT (once in para. 4), DIE (para. 5), DIED (conclusion).

6.4 Quantitative Analysis of the American Data

Table 2: Source inputs in the American Data

No.	Source Input	Occurrences	Percentage
1	JOURNEY	3	(25 %)
2	WAR	2	(16.66 %)
3	PRISON	2	(16.66 %)
4	CLASS	2	(16.66 %)
5	HOURGLASS	1	(8.33 %)
6	GRIM REAPER	1	(8.33 %)
7	EVANGELIST CROSS	1	(8.33 %)

The analysis shows that the identified conceptual blends found in the American multimodal Op-Eds are categorised under the following seven source inputs: JOURNEY, PRISON, WAR, HOURGLASS, GRIM REAPER, EVANGELIST CROSS (see

Table 2). The most frequent source input is JOURNEY (25 %). It is noticed that the illustrators depend on traffic signs to conceptualise the target input COVID-19 PANDEMIC. For example, *the attention traffic sign* is used to warn citizens of the danger of the Coronavirus and advise readers to take the vaccination (pragmatically warning). Nicholas Konrad (the illustrator) places a figure of a syringe instead of an exclamation mark. *The one-way traffic sign* is used to direct readers that the only way out of this crisis is vaccination. Adam McCauley (the illustrator) puts a vaccine glass bottle in front of the arrow in the sign. *No entry road sign* is also deployed to prohibit citizens from practising their normal daily activities and stopping this risk (pragmatically prohibition). Erik Carter (the illustrator) puts a Coronavirus shape on a traffic sign to alert citizens that it is a danger zone. The following source inputs: WAR, PRISON, and CLASS source inputs are found twice in the American data, whereas HOURGLASS, GRIM REAPER, and EVANGELIST CROSS occurred once.

6.5 Discussion

The multimodal Op-Eds activate cognitive, social, and cultural models entrenched in British and American societies. Although the WAR frame has been widely criticised, particularly: for being "inherently masculine, power-based, paternalistic and violent" (Reisfield & Wilson, 2004, p. 4025), it has been used in *The Guardian* and *The New York Times* since the emergence of the Covid-19 pandemic. In the American Op-Eds, the NYT illustrators resort to the WAR frame to design their images though the writers do not use any militaristic (non)metaphorical blends of war or battle. Unlike The British Op-Eds, the Guardian writers conceptualise the Covid-19 pandemic as a war in their texts. They deploy expressions of war. For example, "this is war", "frontline staff", "Britain is charging into battle…", "Britain's freedom", "Europe must fight as a whole", "Britain's vaccine rollout is a

triumph", "to give the current crisis its wartime", "to give the current crisis its wartime", "their (people) fights are limited", etc.

The use of such expressions of war has historical connotations. England is known for its long history of warfare, which has a great impact on the language. Nunn (2014) gives examples of the neologisms with which the Second World War enriched the English language. These examples were borrowed from the enemies such as kamikaze (from the Japanese), ersatz (from the German), etc. It has been observed that the Guardian journalists conceptualise the WAR frame verbally and visually to comprehend the Covid-19 pandemic. Consequently, the relationship between the text and the illustration is quite strong. Unlike the NYT, the text does not strongly anchor the image and does not depict this frame. The illustrations have been used in a satirical way. Although the warriors in the NYT illustrations are portrayed as a group, they fail to confront the huge enemy (the Coronavirus). In one of the illustrations, for example, the warriors holding shields with the acronym R.I.P. written on them and this confirms their inevitable defeat. Consequently, American society resists and refutes this frame. Porto (2024) discusses the negative effects that the use of war metaphorical expressions can have on patients. Semino (2015) mentions some of these negative entailments: "They have associations of violence and threat; they cast the patient in the aggressive role of a fighter; they suggest the presence of an enemy-the disease itself- inside the patient's body; and they associate not recovering with defeat" (p. 61). As mentioned before, the WAR frame has been criticised for being masculine. In both newspapers, the warriors are male figures but Britain in one of the NYT is conceptualised and personified as a female warrior. This means a change in the stereotype of the soldier gender in wars. It probably has a political connotation, i.e. the monarch of the British kingdom at that time was Queen Elizabeth II.

Another frame repeated frequently in the Guardian Op-Eds is ENTERTAINMENT/ CIRCUS. Three different circus

performances are used to comprehend and conceptualise the target input THE COVID-19 PANDEMIC. These circus chows are adopted by illustrators to design their images: TRAINED ELEPHANT SHOW, ROLLING BALL SHOW, and RABBIT SHOW. Importantly, the circus is a generic form of popular entertainment (Bouissac, 2012), and the first modern circus dates back to the 18th century when it was established by Philip Astley in England (Jando, n.d.), so this frame plays a role in British culture and has a historical connotation. In the *Elephant Show* Op-Ed, Bill Bragg (the illustrator) depends on the word *circus* mentioned in the headline and some words and phrases mentioned in Aditya Chakrabortty's text such as "diversion", "distractor-in-chief", "Ever happy to fatten the beast", "What the Cummings circus has obscured…", etc. Similarly, the notion of the illustration in the *Rabbit Show* Op-Ed is based on the idiom of "pull a rabbit out of the hat" which means "to find or obtain a sudden solution to a problem". Sébastien Thibault (the illustrator) depends on Martin Kettle's (the writer) headline to design her image because it contains the phrases "sleight of hand" and "up to their old tricks". Although this Op-Ed also includes a FIREFIGHTING frame, Thibault does not take it into consideration when designing it. Ironically, he criticises Johnson-Cummings' strategy in solving political and social problems such as BREXIT and COVID-19. Unlike the two previous circus shows, the *Rolling Ball Show* Op-Ed does not contain linguistic components of ENTERTAINMENT. Visually, the source domain ENTERTAINMENT/ROLLING BALL is provided by the religious belief system in the culture of the illustrator (Nathalie Lees) by virtue of analogy between Jesus's cross (a metonym of Christian graveyards) and the Covid-19 crisis (especially, the pandemic victims). Kövecses (2020) affirms that the discourse of Christianity often generates metaphorical source domains in the Christian world. In the three images of the circus, the *Guardian* illustrators depend on this frame to criticise the British government led by Boris Johnson in confronting the Covid-19 crisis

(visual speech act). Put another way, they mock the political situations at the time of the pandemic.

In the current study, multiple concrete source inputs are used to conceptualise and understand the target input THE COVID-19 PANDEMIC but there is an exception in two multimodal Op-Eds. That is, the source input is THE CORONAVIRUS. Abdel-Raheem confirms (2021b), "the virus (and its engineered vaccines) has become a very salient source domain at the moment transferred to a myriad of target domains" (p. 525). For example, in John Harris' Op-Ed, THE CORONAVIRUS (source input) and THE GLOBE (target input) are visually fused to construct the metaphorical blend of THE GLOBE AS A CORONAVISUS. In this case, the social connotations mapped from THE CORONAVIRUS to THE GLOBE can be formulated as "fast-spreading", "threatening the lives of millions of people", etc.

In the American multimodal Op-Ed articles, the JOURNEY frame is the most frequent, where the NYT illustrators resort to *the traffic signs* to design their images. The metaphorical JOURNEY plays a significant role in raising citizens' awareness about the dangers of the pandemic, cautioning against it, and taking necessary precautions. This is in tune with Abdel-Raheem's (2019) observation that "the JOURNEY metaphor can play a crucial role in political cognition" (p. 83). Furthermore, the PRISON frame is common in the NYT Op-Ed articles. Using such a frame asserts applying social norms that citizens must adhere such as staying at home or lockdown, isolation, and social distancing.

For *the Guardian/ NYT* readers to interpret these multimodal Op-Ed articles, they need to have and activate myriad amounts of generic and particular political, social, and even historical knowledge. Moreover, readers are assumed by the writers and illustrators to know about more concrete situations. Besides all this presupposed knowledge, the Op-Ed article is about new

information, for example, the writer's opinion at the end of the article or the (non)metaphorical blends that the illustrators create in their images.

Conclusion

This study has investigated blends and mental models in selected English multimodal Op-Ed articles on the Covid-19 pandemic from a socio-cognitive perspective. It also discusses the importance of semantic and context mental models in interpreting the Covid-19 discourse.

Answering the research questions proposed at the beginning of this paper, first; the analysis reveals that the type of integration network used in the 24 multimodal Op-Ed articles is double-scope. *The Guardian* and *the NYT* writers and illustrators make double-scope blends by corresponding between two inputs with different elements that are partially fused in the blended space. It is noteworthy that THE COVID-19 PANDEMIC input is the dominant input in most Op-Eds. Second, it is noticed that British and American journalists employ new conceptual matters to form creative blends not just from embodied experience but also from various contexts such as language, news, social/ political/ cultural/ historical situations, etc. Third, it is worth noting that the writers and the illustrators interact together to co-shape the message of the Op-Ed. In most of the data, the illustrator draws on (non)metaphorical blends created by the writer to design his/ her illustration. Fourth, the text-illustration relationship in most data is complementarity. Put another way, the text has crucial (presupposed and new) knowledge that is not in the illustration. In some cases, the text does not guide the interpretation of knowledge in the illustration. Fifth, the analysis yields that *The Guardian* and *The NYT* share cognitive blends COVID-19 PANDEMIC AS WAR and COVID-19 PANDEMIC AS JOURNEY in conceptualising this pandemic. On the other hand, there are many differences between the digital newspapers. *The Guardian* journalists employ source inputs such as ENTERTAINMENT, FIREFIGHTING, SOLAR

ECLIPSE, and CLOGGED WATER PIPE to understand THE COVID-19 PANDEMIC. However, there is an exceptional case where the latter input becomes the source input in one of the British Op-Eds. The NYT journalists deploy source inputs such as PRISON, CLASS, HOURGLASS, GRIM REAPER, and EVANGELIST CROSS. From the multimodal Op-Eds of *The NYT*, it has been concluded that the American newspaper focuses on the lives of citizens and cares about their health, social, and educational matters, whereas *The Guardian* concentrates on criticising British officials and politicians and their inability to deal with this crisis.

This research paper is hoped to be a modest contribution to further studies analysing Covid-19. These studies could concentrate on other source inputs to outline diverse aspects of the pandemic. On a different note, future research can examine a diversity of multimodal Op-Ed articles from tabloids co-shaped by writers and illustrators of diverse academic and professional backgrounds. The current study is not without limitations, though. The first limitation is the sample size (=100 multimodal Op-Ed articles) based on a specific period. Future research may include more data. Drawing on one genre is the second limitation. It is hoped that future research will investigate a variety of multimodal genres.

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Appendices

Appendix A

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