Degree Project
Bachelor's Thesis
Conceptual Metaphors for Covid-19

An Analysis of Metaphors for Covid-19 in the Discourse of Political Leaders of the UK, the USA, Canada, and Australia

Author: Maria Andersson
Supervisor: Julie Skogs
Examiner: Joseph Lee
Subject/main field of study: English Linguistics
Course code: EN2043
Credits: 15hp
Date of examination: 2nd June 2022.

At Dalarna University it is possible to publish the student thesis in full text in DiVA. The publishing is open access, which means the work will be freely accessible to read and download on the internet. This will significantly increase the dissemination and visibility of the student thesis.

Open access is becoming the standard route for spreading scientific and academic information on the internet. Dalarna University recommends that both researchers as well as students publish their work open access.

I give my/we give our consent for full text publishing (freely accessible on the internet, open access):

Yes ☒ No ☐
Abstract

Since the emergence of Covid-19 in December 2019, metaphors to talk about the pandemic have been extensively used in political discourse. This study aims to compare metaphors for Covid-19 in the discourse of political leaders of the UK, the USA, Canada, and Australia by drawing upon three conceptual metaphors found by De la Rosa (2007). The following conceptual metaphors are investigated: DISEASE IS A WAR, DISEASE IS A NATURAL FORCE, and DISEASE IS A JOURNEY. To find metaphors for Covid-19, one corpus of transcribed political discourse was compiled for each country. The corpora were then searched using lemmas of words specific to each conceptual metaphor. By drawing upon conceptual metaphor theory (Lakoff & Johnson, 1980) instances of metaphor usage were then analyzed. The frequency results showed the natural force metaphor to be the more frequently used in the UK and Canada corpora. In contrast, no occurrences of natural force metaphors were found in the USA or Australia corpora. The war metaphor was most frequently used in the USA corpus, and in the Australia corpus, the war and journey metaphor were used at similar frequencies. The findings of this study indicate that there is a difference in both frequency and choice of conceptual metaphors between the four corpora. The analysis also suggests that different metaphors can be used for different purposes.

Keywords: Covid-19, Pandemic, Metaphors, Political Discourse, Conceptual Metaphor Theory.
Table of Contents

1. Introduction .................................................................................................................. 1
   1.1 Aim of the study ....................................................................................................... 1

2. Theoretical background .............................................................................................. 2
   2.1 Political discourse ................................................................................................... 2
   2.2 Conceptual metaphor theory .................................................................................. 4
   2.3 The partial nature of metaphorical mapping ......................................................... 5
   2.4 Metaphors in political discourse ............................................................................ 7

3. Material and methods .................................................................................................. 8
   3.1 Data ....................................................................................................................... 8
   3.2 Method of analysis ................................................................................................. 11

4. Results and discussion ............................................................................................... 12
   4.1 DISEASE IS A WAR metaphor ............................................................................ 14
   4.2 DISEASE IS A NATURAL FORCE metaphor ..................................................... 18
   4.3 DISEASE IS A JOURNEY metaphor .................................................................... 21

5. Conclusion .................................................................................................................... 24

References ....................................................................................................................... 28

Appendix A: Links to retrieved transcripts ................................................................. 31

Appendix B: Identified metaphors from the corpora .................................................. 33
1. Introduction

In December 2019, a cluster of viral pneumonia cases emerging from Wuhan, China was reported. In January 2020, they were confirmed to be caused by a novel Coronavirus later named Covid-19. Since then, the virus has turned into a pandemic spreading across the globe, thus becoming a current issue in political discourse worldwide. In political discourse, metaphors have a history of being used in relation to pandemics. Chiang and Duann (2007) found how the political orientations of Chinese and Taiwanese broadsheet papers were transmitted through their metaphor usage in discourse relating to SARS – the Severe Acute Respiratory Syndrome. De la Rosa (2007), who researched British news discourse relating to Avian influenza, claimed that “exposure to particular metaphors to describe a complex political reality can affect readers’ perceptions and value judgements (…)” (p.16). While both Chiang and Duann (2007), and De la Rosa (2007) found the war metaphor to be the more commonly used in reference to the illnesses, De la Rosa also found Avian influenza to often be characterized as a natural force and a journey. The use of war metaphors in discourse relating to illness has been extensively criticized for being, among other things, power-based and violent (Reisfield & Wilson, 2004). Reisfield and Wilson as well as Semino (2021) have argued that, compared to war metaphors, it is more appropriate to use journey or natural force metaphors in discourse relating to illness. Studies on metaphor usage in political discourse relating to Covid-19 have also been carried out. Semino (2021), for example, has analyzed metaphor usage on Covid-19 in English news articles, and Seixas (2021) have analyzed metaphor usage in speeches relating to Covid-19.

1.1 Aim of the study

Drawing on the three metaphor areas found by De la Rosa in political discourse relating to Avian influenza (war, journey, and natural force), this study aims to investigate the use of metaphors relating to Covid-19 in discourse led by the political leaders of the UK, the USA,
Canada, and Australia. In this study, the metaphor areas are formulated as, and limited to: DISEASE IS A WAR, DISEASE IS A NATURAL FORCE, and DISEASE IS A JOURNEY.

The following research questions are posed:

1. Which conceptual metaphors for COVID-19 are frequently used in the discourse of the political leaders of the UK, the USA, Canada, and Australia?

2. Are there differences in the choice of metaphors for COVID-19 in the discourse of the political leaders of the UK, the USA, Canada, and Australia?

2. Theoretical background

This section introduces some relevant concepts. First, section 2.1 concerns the definition of political discourse. Then, section 2.2 introduces the conceptual metaphor theory while section 2.3 provides information on the partial nature and the highlighting and hiding principle of conceptual metaphors. Lastly, section 2.4 introduces the topic of metaphors in political discourse.

2.1 Political discourse

Despite political discourse being a common object of linguistic studies for quite some time, it still does not have one clear-cut definition. Van Dijk (1997) states that the easiest way to identify what constitutes political discourse is to identify it by its “actors or authors, viz., politicians” (p.12). Using this basis of identification would mean that spoken or written data would only constitute as political discourse if it was uttered or written by politicians or political institutions. This definition might be adequate in many cases since most studies of political discourse are based on the speeches or texts of politicians. However, there are more aspects to consider before settling on this definition of political discourse because, as van Dijk puts it: “politicians are not the only participants in the domain of politics” (1997, p.13).
This points us to the question of whether or not discourse that is not carried out by politicians, but that takes place within the domain of politics, should be considered political discourse? Voters, demonstrators, and various organizations who partake in political activity could also be included as actors within political discourse (Verba, et al., 1993). Graber (1981) defines political discourse as something that occurs when “political actors, in and out of government, communicate about political matters, for political purposes” (p.196, as cited in Ädel, 2010). This definition considers the matter of topic and purpose when defining political discourse. This means that political discourse cannot simply be defined by its actors, the discourse must also be centered around political matters and carried out for political purposes. Since politicians can reasonably be assumed to sometimes have conversations that are not political, Grabers' definition might be more suitable. On the other hand, one might argue that everything a politician does is politics and could therefore be included in political discourse. Ädel (2010) brings up that a “broader definition of ‘political discourse’ [could include] discourse which happens to be on a political topic, such as an informal conversation between friends where the topic revolves around (...) a politicised issue” (p.591). This definition focuses on the content of the discourse rather than who is speaking or writing. It also leaves the question of how to define which topics are political and which are not, a question that is not attempted to be answered in this study.

In conclusion, political discourse might be defined based on its actors, its content, or both. Some, but not all, aspects of defining political discourse have been brought up in this section. More aspects and further discussions on the definition of political discourse are beyond the limit of this study. This study is based on transcripts of spoken data where political leaders (i.e prime ministers or presidents) are the main speakers. The topic of these transcripts is Covid-19, which reasonably can be seen as a political topic. Both the actors and the topic, then, place the data of this study within the category of political discourse.
2.2 Conceptual metaphor theory

The Conceptual Metaphor Theory is brought forth for the first time by Lakoff and Johnson in *Metaphors We Live By* (1980). The theory opposes what they observed to be, at the time, the common view of metaphors as being a mere characteristic of language. Rather than viewing metaphors as a “rhetorical flourish” (p.3) and a matter of words alone, Lakoff and Johnson proposed that it instead is a matter of thought and action. In other words, metaphors do not only influence how we talk, but also how we think and act. One of Lakoff and Johnson’s primary arguments was that our conceptual system which controls our perception of the world and how we relate to others is structurally metaphorical. This means that the way we experience, think about, and do things is a matter of metaphor (p.3). Kövecses (2010) explains this cognitive view of metaphors as “understanding one conceptual domain in terms of another conceptual domain” (p.4). The two domains Kövecses is referring to are the *source domain* and the *target domain*. Source domains are usually more concrete, physical, and tangible. Target domains, on the other hand, are usually more abstract, complex, and intangible. Examples of source domains are MONEY and FOOD. Examples of target domains are TIME and IDEAS. In these examples, we can see that the source domains are more concrete than the target domains. Using conceptual metaphors means that we use a source domain to understand a target domain. We do this by transferring meaning between the two domains by using words from the source domain to talk about and understand the target domain – this prompts a *mapping* between the two domains (Kövecses, 2010, p.7). To demonstrate this mapping between the two domains, we can look at the recently mentioned examples of source domains (MONEY and FOOD) and target domains (TIME and IDEAS). Together they create two conceptual metaphors, each with several linguistic realizations. First, we get the IDEAS ARE FOOD metaphor with linguistic realizations like *half-baked*.
ideas, food for thought, and ideas that are tough to swallow. Second, we get the TIME IS MONEY metaphor with linguistic realizations like wasting time, saving time, and spending time. These expressions, perhaps especially the ones deriving from the TIME IS MONEY metaphor, are so common to us in everyday speech that we most likely do not think of them as metaphorical. They are however metaphorical because we are using our understanding and experience of the concrete concept of money to understand the more abstract concept of time.

For a final example, the conceptual metaphor THEORIES ARE BUILDINGS can be used. It is manifested in metaphorical linguistic expressions like the foundation of a theory, and to construct a strong argument (Kövecses, 2010, p.6). Here the tangible source domain BUILDINGS is used to understand the intangible target domain THEORIES. This transfer of meaning by using words from one conceptual domain to understand another is illustrated in Figure 1 which demonstrates how words from the concrete domain BUILDINGS are used to talk about the more abstract domain THEORIES.

**Figure 1**
*Visualization of the Transfer of Meaning*

![Diagram](image)

2.3 The partial nature of metaphorical mapping

It is important to stress that the mapping between two concepts can only be partial, meaning that only a part of the source domain can be mapped onto the target domain. Kövecses explains that “(...) the mappings between a and b are, and can be, only partial. Only a part of concept b is mapped onto target a and only a part of target a is involved in the mappings from
b” (2010, p.91). In other words, some but not all aspects of the source domain are used to talk about some but not all aspects of the target domain. For example, if we again look at the
THEORIES ARE BUILDINGS metaphor with realizations like I have constructed a solid argument, your claims are without foundation, and the second half builds on the first half, we can see that it is the aspects of construction and strength from the domain building that are being mapped onto the domain theories. Other aspects of buildings, such as aesthetics, height, or rooms are not being mapped onto the domain theories. The reason mapping can never be total, according to Kövecses, is that the source domain would actually be the target domain if all aspects from the first were mapped onto the latter (2010, p.91). For example, TIME is not really MONEY, you can not actually get back the time you have invested, you can simply get back the same amount of time.

This partial nature of metaphorical mapping, which enables us to understand a particular aspect of a concept in terms of another, entails what Lakoff and Johnson refer to as the principle of highlighting and hiding. When a source domain is mapped onto the target domain, some aspects of the target domain will be brought to focus – they will be highlighted. The aspects of the target domain which are not consistent with the metaphor are then put out of focus – they are hidden. In other words, when we use a metaphor to talk about something, we are highlighting what the source domain and target domain have in common and thus hiding what they do not have in common. To exemplify the highlighting and hiding principle, Lakoff and Johnson use the ARGUMENT IS WAR metaphor with metaphorical expressions like:

Your claims are indefensible.

He attacked every weak point in my argument.

His criticisms were right on target.

He shot down all of my arguments. (1980, p.4)
When mapping aspects of WAR onto ARGUMENT, the battling aspects of arguing is highlighted. We focus on winning by attacking someone else’s position while defending our own. What this metaphor hides, then, is the potential collaborative aspects of arguing in order to gain a mutual understanding as well as the fact that the other person is giving you their time (p.10). This example demonstrates not only the highlighting and hiding principle but also how the ARGUMENT IS WAR metaphor does more than just influence how we talk about arguments. It also shapes how we perceive, think about, and carry out arguments. It shapes what we actually do when we argue (p.10)

2.4 Metaphors in political discourse

The use of metaphors is a commonly employed linguistic strategy in political discourse and much has been written on the subject (e.g., Beard, 2000; Charteris-Black, 2011; Ferrari 2007). Charteris-Black (2011) claims that metaphors “activate unconscious emotional associations” and are therefore often used by politicians for ideological purposes since it helps them to “tell the right story” (p.28). In addition, Charteris-Black claims that the primary function of metaphor usage in political discourse is to frame the public's view of a political issue by hiding alternative points of view. This connects to the highlighting and hiding principle of the conceptual metaphor theory - when hiding alternative points of view a politician inevitably highlights the point of view they choose to present.

Metaphors can also be employed to help politicians communicate about abstract or complex issues. Steuter and Wills (2008) state the following:

Our most common metaphors help us to understand problems and conflicts in certain ways, offering us certain available responses, and negating or obscuring others. Public discourse, which relies on metaphors both obvious and tacit, can harness its power to shape opinion, set or justify policy, and direct action. (p.3)
Here, a couple of relevant uses of metaphor are highlighted. First, how metaphors can help us to understand complex issues by transferring meaning from a more concrete domain onto an abstract domain, as explained in section 2.2. Second, how the highlighting and hiding principle will warrant responses consistent with the metaphor being viewed as more adequate than responses that are not consistent with the metaphor. Third, how anyone active within the public discourse can use the metaphor’s ability to influence others’ perceptions and actions, as explained in sections 2.2 and 2.3.

Musolff (2016) also makes several claims regarding metaphor usage in political discourse. He claims that it is used to denote specific concepts, evaluate a topic, make persuasive and emotional appeals, and “[...] reassure the public that a perceived threat or problem fits into familiar experience patterns and can be dealt with by familiar problem-solving strategies” (p.4). In conclusion, a metaphor is a possibly advantageous conceptual tool for politicians to use when communicating to the public. Not only can it help the public to comprehend a complex political issue but using metaphors might also help politicians to shape public opinion.

3. Material and methods

Section 3.1 describes how the data was collected and compiled to the corpora while section 3.2 outlines how the corpora were analyzed.

3.1 Data

Meyer (2000) describes a corpus as a body of text that is both suitable for linguistic analysis and obtainable in a computer-readable format (p. xii). The primary advantages of using a corpus are, according to Lindquist & Levin (2018), “speed and reliability” (p.5). It allows for more material to be searched and for more exact frequency calculations (p.5). As a way to answer the research questions, four corpora (one for each political leader/country) of political
discourse concerning the Covid-19 pandemic were compiled. The data included in the corpora consist of transcribed political press conferences, briefings, speeches, and remarks given by the political leaders from the UK, the USA, Canada, and Australia between January 2020 to October 2021. For the sake of simplicity, these four corpora will from now on be referred to as the UK corpus, the USA corpus, the Canada corpus, and the Australia corpus.

The transcriptions were gathered by accessing Rev’s online archive of transcriptions and doing individual searches on the names of the political leaders of each country. Since the USA had a change in leadership during the chosen period for the corpus collection, two different names had to be searched to gather transcriptions of political discourse for the USA corpus. Table 1 shows the names of the political leaders searched for in Rev’s online archive. It also shows the included genres of political discourse as well as each corpus’ total word count.

Table 1
Overview of Texts Compiling the Corpora From the Four Different Countries.

<table>
<thead>
<tr>
<th>Name(s) of leaders for the political discourse</th>
<th>UK</th>
<th>USA</th>
<th>Canada</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boris Johnson</td>
<td>41 987</td>
<td>39 935</td>
<td>31 944</td>
<td>41 291</td>
</tr>
<tr>
<td>Donald Trump &amp; Joe Biden</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justin Trudeau</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scott Morrison</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total corpus word count</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of press conferences</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Number of briefings</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Number of speeches</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of remarks</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

1 https://www.rev.com/blog/transcripts/all-transcripts
The difference in genres of political discourse came as a result of the limitations of Rev’s online archive. There was not one type of political discourse in Rev’s archive that alone met my criteria. The included genres of political discourse were selected based on two criteria: (1) It had to be transcribed political discourse concerning Covid-19. (2) The political leader of either the UK, the USA, Canada, or Australia had to be the main speaker. For this reason, different genres of political discourse were gathered. The press conferences and briefings were similar in length and both included speakers other than the main political leaders. These were often authorities in areas relating to the pandemic but could also be reporters asking questions. While the speeches were somewhat longer than the remarks, they have in common that it is only the country’s political leader who is speaking. Despite the differences in the types of data collected, and the potential risk of it affecting the results of this study, all collected data falls under the category of political discourse and is therefore deemed adequate for this study. The four countries were chosen to enable a comparison of metaphor usage in political discourse led by the political leaders (i.e. prime ministers and presidents) of different English-speaking countries. In every transcription included in the corpus, the political leader of each country is the main speaker.

The material collected for the corpora was dated from January 2020, when the first cases of Covid in the UK, the USA, Australia, and Canada were confirmed, to October 2021 when this study began. This time period was then divided into seven shorter periods. These were, January-March 2020, April-June 2020, July-September 2020, October-December 2020, January-March 2021, April-June 2021, and July-October 2021. Except for the last, the time periods spanned over three months. This division of time periods allowed for one transcription meeting my criteria within each period to be found. Narrower or more specific time periods would have made it harder to find suitable transcriptions. The reason for dividing the corpus into periods was to find samples of metaphor usage throughout
the pandemic since the choice of metaphor area might change depending on what stage of the pandemic the chosen countries were in. For each time period, one transcription with words relevant to the Covid-19 pandemic in their headline was collected per country. Such relevant words could be Covid-19, Coronavirus, or vaccine. For the instances where no suitable transcription within a temporal demarcation was found on Rev, the official websites of the Prime Minister of Canada\(^2\), the Prime Minister of Australia\(^3\), and the Conservative Party in the UK\(^4\) were accessed instead. One transcription was gathered from the Conservative party’s website, two from the Canadian Prime Minister’s official website, and two from the Australian Prime Minister’s website.

### 3.2 Method of analysis

As mentioned in section 1.1, the metaphor areas investigated were limited to three: DISEASE IS A WAR, DISEASE IS A NATURAL FORCE, and DISEASE IS A JOURNEY. In order to locate metaphors in the corpora, a list of words relevant to the chosen metaphor areas was compiled and later searched as lemmas in the corpora. The relevant words were chosen by looking at words previously identified for these metaphor areas in earlier studies (Chiang&Dunn, 2007; De la Rosa, 2007; Semino, 2021; Reisfield & Wilson, 2004) as well as Professor Nerlich’s online text “Metaphors in the time of Coronavirus”\(^5\) The search lemmas are shown in Table 2.

---

\(^2\) [https://pm.gc.ca/en](https://pm.gc.ca/en)

\(^3\) [https://www.pm.gov.au/](https://www.pm.gov.au/)

\(^4\) [https://www.conservatives.com](https://www.conservatives.com)

Table 2
Search Lemmas for Metaphor Areas

<table>
<thead>
<tr>
<th>Metaphor</th>
<th>Search lemmas</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISEASE IS A WAR</td>
<td>fight, war, win, defense, enemy, attack, battle</td>
</tr>
<tr>
<td>DISEASE IS A NATURAL FORCE</td>
<td>fire, wildfire, wave, tsunami, storm, flare</td>
</tr>
<tr>
<td>DISEASE IS A JOURNEY</td>
<td>road, crossroad, route, journey, destination, path</td>
</tr>
</tbody>
</table>

The freeware concordance program AntConc (2022) was used to search the corpora for the chosen lemmas and to show them in a concordance, which is a “list of all the contexts in which a word occurs in a particular text.” (Lindquist & Levin, 2018, p.5). All lemmas were searched with a wildcard asterisk at the end. This allowed for different realizations of the lemmas to be found when searching the corpus in AntConc, thus generating a more extensive result. For example, searching for fight* will yield search hits such as fight, fights, and fighting. This enabled more relevant tokens of metaphors to be found. For each search, the occurrences were examined manually to remove those that were not metaphors relating to Covid-19. An example of a token that was manually removed is:

(1) So why does it seem like the Liberals at the National Defense Committee are trying to prevent her from testifying, and would you be okay with her testifying? (Canada,116)

Here, the word defense does not refer to Covid-19 in any way, nor is it metaphorical. Instead, it refers to the National Defense Committee in Canada. In fact, defense is part of its name. This token, then, was not relevant for this study and therefore it was removed.

4. Results and discussion

In this section, the results of metaphor usage in the four corpora are presented. The number of relevant tokens found in the corpora will be presented both in raw frequency numbers (r) and in numbers normalized to occurrences per 10 000 words (n). The normalization was made to allow for a comparison between the four countries despite the four corpora being of different...
word lengths. The resulting metaphor frequencies per 10 000 words have then been rounded off to two decimals. All numbers are based on occurrences of the lemmas used to search the corpus for relevant metaphors.

First, the overall frequency results for the three metaphor areas in each corpus are presented. Then, section 4.1 presents the occurrences of metaphors containing DISEASE IS A WAR search lemmas. This is followed by a discussion of different uses of the lemmas together with analyzed examples from the corpora. Section 4.2 presents the occurrences of metaphors containing DISEASE IS A NATURAL FORCE search lemmas along with a discussion and examples from the corpora. Finally, section 4.3 presents the occurrences of metaphors containing DISEASE IS A JOURNEY search lemmas along with a discussion and examples from the corpora.

Table 3 shows the overall frequency results for each metaphor area in the four different corpora. The results are shown in raw numbers (r), and in numbers normalized to occurrences per 10 000 words (n).

Table 3
Overall Results for the Three Metaphor Areas and the Four Corpora.

<table>
<thead>
<tr>
<th>Metaphor Area</th>
<th>UK</th>
<th>USA</th>
<th>CANADA</th>
<th>AUSTRALIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISEASE IS A WAR</td>
<td>(r) 16</td>
<td>(r) 33</td>
<td>(r) 11</td>
<td>(r) 12</td>
</tr>
<tr>
<td></td>
<td>(n) 3.81</td>
<td>(n) 8.26</td>
<td>(n) 3.44</td>
<td>(n) 2.91</td>
</tr>
<tr>
<td>DISEASE IS A NATURAL FORCE</td>
<td>(r) 37</td>
<td>(r) 0</td>
<td>(r) 22</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 8.81</td>
<td>(n) 0.00</td>
<td>(n) 6.89</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>DISEASE IS A JOURNEY</td>
<td>(r) 16</td>
<td>(r) 4</td>
<td>(r) 4</td>
<td>(r) 11</td>
</tr>
<tr>
<td></td>
<td>(n) 3.81</td>
<td>(n) 1.00</td>
<td>(n) 1.25</td>
<td>(n) 2.66</td>
</tr>
<tr>
<td>Total amount of metaphors</td>
<td>69</td>
<td>37</td>
<td>37</td>
<td>23</td>
</tr>
<tr>
<td>Total metaphor frequency per 10 000 words</td>
<td>16.43</td>
<td>9.26</td>
<td>11.58</td>
<td>5.57</td>
</tr>
</tbody>
</table>
The results in Table 3 show that the USA corpus has the overall highest metaphor usage while the Australia corpus has the lowest. While all corpora included the usage of war metaphors to a varying degree, most occurrences were found in the USA corpus which had the highest frequency both in raw and normalized numbers. In both the UK and Canada corpora, Covid-19 was most frequently described in terms of a natural force. In contrast, the lemmas used to search for natural force metaphors were not found at all in the USA or Australia corpora. Despite the limited sizes of the corpora, and the limited amount of search lemmas, these results indicate a difference in choice of metaphors between the different political leaders.

4.1 Disease is a war metaphor

Table 4 shows that all four corpora contained usage of the war metaphor to some extent, but that the USA corpora have more than double the frequency of war metaphors compared to the other three corpora. It also shows that metaphors with the lemma *fight* were the more frequently used in connection to *Coronavirus, disease, virus, and Covid-19* in the UK, USA, and Canada corpora. In the Australian corpora, *battle* was the more frequently occurring lemma.
Apart from *battling* the virus itself, *battling* was also used to denote measures taken to counteract the economic crisis that came as a result of the pandemic. *Coronavirus*, *disease*, *virus*, and *Covid-19* were referred to as an *enemy* in the UK and USA corpora, but never in the Canada or Australia corpora. *War* and *win* were used most frequently in the USA corpus, but not used in the Canada or UK corpora. The pandemic was talked about as a *war* that one could *win* by taking measures to slow down the spread of the virus. These measures included vaccinations, hotel quarantines, and canceling flights and were referred to as a *defense*. In the USA, on two occasions, measures taken by the country were referred to as *war-time* efforts.

<table>
<thead>
<tr>
<th>Search lemmas</th>
<th>UK</th>
<th>USA</th>
<th>CANADA</th>
<th>AUSTRALIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>fight</td>
<td>(r) 13</td>
<td>(r) 12</td>
<td>(r) 8</td>
<td>(r) 2</td>
</tr>
<tr>
<td></td>
<td>(n) 3.10</td>
<td>(n) 3.00</td>
<td>(n) 2.50</td>
<td>(n) 0.48</td>
</tr>
<tr>
<td>war</td>
<td>(r) 0</td>
<td>(r) 7</td>
<td>(r) 0</td>
<td>(r) 1</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 1.75</td>
<td>(n) 0.00</td>
<td>(n) 0.24</td>
</tr>
<tr>
<td>win</td>
<td>(r) 0</td>
<td>(r) 6</td>
<td>(r) 0</td>
<td>(r) 3</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 1.50</td>
<td>(n) 0.00</td>
<td>(n) 0.73</td>
</tr>
<tr>
<td>defend</td>
<td>(r) 1</td>
<td>(r) 1</td>
<td>(r) 1</td>
<td>(r) 2</td>
</tr>
<tr>
<td></td>
<td>(n) 0.24</td>
<td>(n) 0.25</td>
<td>(n) 0.31</td>
<td>(n) 0.48</td>
</tr>
<tr>
<td>enemy</td>
<td>(r) 1</td>
<td>(r) 3</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.24</td>
<td>(n) 0.75</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>attack</td>
<td>(r) 1</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.24</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>battle</td>
<td>(r) 0</td>
<td>(r) 4</td>
<td>(r) 2</td>
<td>(r) 4</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 1.00</td>
<td>(n) 0.63</td>
<td>(n) 0.97</td>
</tr>
<tr>
<td>Total amount of war metaphors (r)</td>
<td>16</td>
<td>33</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td><strong>Metaphor frequency per 10 000 words (n)</strong></td>
<td><strong>3.81</strong></td>
<td><strong>8.26</strong></td>
<td><strong>3.44</strong></td>
<td><strong>2.91</strong></td>
</tr>
</tbody>
</table>
The virus was at times personified, as in the following briefing held by

President Trump:

(2) I spoke to great people today that have done a great job, and one day they’re at the top of their business, they’re celebrity chefs, they’ve got the most successful restaurants, and in one day they have nothing, they’ve gotten wiped out, one day, from our enemy, this invisible, horrible scourge. (USA,81)

Covid-19 is personified by referring to it as an enemy. This personification highlights the possibility of triumph by defeating it and thus hides the difficulty of defeating a complex and abstract social problem (Steuter and Wills, 2008, p.8). It is, quite literally, hard to be at war with something. Being at war with someone, though, is both possible and understandable. This connects to how metaphors can help us to understand complex issues by transferring meaning from a more concrete domain onto an abstract domain, as explained in section 2.2. By using the war metaphor to personify that something, it can be turned into a someone, thus making it seem possible to beat.

In order to mobilize a population to assist in managing a crisis, the resilience and the unity of the people are important. The war metaphor is useful because it can help mobilize people to fight an “invisible enemy” (Seixas, 2000, p.66). By referring to Covid-19 as an enemy that can be defeated together, President Trump also appeals for unity amongst the population:

(3) In our present crisis, the strength of our people is our single most important asset, and together we will defeat this invisible curse, this invisible enemy, and rise to incredible new heights. (USA,79)

Just like a war, the battle against Covid-19 has two clear sides, and therefore the war metaphor “enticingly promises a clear narrative of aggressors and victims [and] winners and losers” (Steuter and Wills, 2008, p.10). While example (2) positions Covid-19 as an aggressor and the American people as victims, example (3) highlights that the strength and unity of the American people will make them winners and Covid-19 the loser.

As mentioned in section 2.4, Charteris-Black (2011) states that framing the
public’s view of a political issue by hiding alternative points of view is the main function of using metaphors in political discourse. Moreover, Semino (2021) states that “[w]ar metaphors for illness highlight the need to eliminate it completely through swift action [while at the same time背景下] the possibility of adapting to and living with it” (p.51). In example (4), Australian Prime Minister Morrison highlights the need to eliminate Covid-19 and backgrounds the possibility of their community living with it when claiming that it is an enemy to Australia’s way of life:

(4) I want to assure you that we’re in two fights. We are battling this thing on two fronts, and they’re both important. We’re battling this virus with all the measures that we’re putting in place, and we’re battling the economic crisis that has been caused as a result of the Coronavirus. Both will take lives, both will take livelihoods, and it’s incredibly important that we continue to focus on battling both of these enemies to Australia’s way of life. (Australia, 124)

The repeated use of battling in example (4) highlights how the Australian people are active, not passive. The Australian people are acting, not being acted upon by Covid-19. As Steuter and Wills (2008) point out: war-related verbs “allow for glorious activity” (p.11). When PM Morrison states that it is “incredibly important that we continue to focus on battling”, he hides the option of looking at different ways of adapting to Covid-19 in an effort to co-exist with it.

The war metaphor is useful when managing a health crisis because, in addition to encouraging unity and mobilization, it can help prepare the public for tougher times and persuade them to adapt their behavior accordingly (Seixas, 2020, p.4). As stated earlier, Steuter and Wills (2008) point out that the highlighting and hiding principle of metaphors will warrant some responses being viewed as more adequate than others (p.3). One response to the ongoing pandemic that political leaders have highlighted as the more adequate is the development and administration of a vaccine:

(5) “Vaccinations remain our top defense against the virus” (Canada, 89)
While highlighting vaccinations as the more adequate response to the pandemic, all other responses are inevitably backgrounded, or hidden. Furthermore, using the war metaphor when encouraging people to get vaccinated might be useful because among some groups there is a reluctance to get vaccinated. Scherer et al. (2015) found that, compared to literal descriptions of influenza, metaphorical descriptions caused people to express an increased willingness to get vaccinated.

In conclusion, the war metaphor seems to be potentially efficient for politicians to use in times of crisis. Firstly, the personification of the virus as an enemy can not only help people to understand it but also persuade them that it is possible to defeat it. The war metaphor can help in mobilizing the people in a collective effort, and it can be used to present some responses to the crisis as more adequate than others, thus persuading people to adapt their behaviors accordingly.

4.2 Disease is a natural force metaphor

Based on the lemmas used to search the corpora, the results in Table 5 show that both the UK and Canada corpora use the natural force metaphor relatively frequently. It also shows that wave is by far the most frequent of the search lemmas from this metaphor area. What stands out is that both the USA and Australia have zero occurrences of metaphors containing the chosen search lemmas relating to natural force metaphors.
Table 5

*Frequency of DISEASE IS A NATURAL FORCE Search Lemmas*

<table>
<thead>
<tr>
<th>Search lemmas</th>
<th>UK</th>
<th>USA</th>
<th>CANADA</th>
<th>AUSTRALIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>fire</td>
<td>(r) 3</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.71</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>wildfire</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>wave</td>
<td>(r) 32</td>
<td>(r) 0</td>
<td>(r) 20</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 7.62</td>
<td>(n) 0.00</td>
<td>(n) 6.26</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>tsunami</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>storm</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 2</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.63</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>flare</td>
<td>(r) 2</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.48</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>Total amount</td>
<td>37</td>
<td>0</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>of natural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>force</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>metaphors</td>
<td>(r)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metaphor</td>
<td>8.81</td>
<td>0.00</td>
<td>6.89</td>
<td>0.00</td>
</tr>
<tr>
<td>frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>per 10 000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>words (n)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In both the UK and Canada corpora, *wave* was used to denote the rising and declining cases of Covid-19 infections over a period of time.

(6) Regarding the second wave, we’ve been warned from the very beginning that it would happen. It’s happening. You can see the numbers in Quebec that are much higher than we had anticipated after the first wave. (…) Regardless of all the measures that were taken, we’re here in the second wave. (Canada, 109)

By drawing on the literal uncontrollability of waves, possible preventive measures are backgrounded and Covid-19 is conceptualized as beyond human control, as if nothing can be done to prevent an increase in cases (De La Rosa, 2007, p.25). Despite being “warned from the very beginning” and “regardless of all the measures that were taken”, the wave still came crashing. The wave metaphor, then, highlights the inevitableness and uncontrollability of
Covid-19 and downplays the responsibility of both the government and the individual to control the virus. This is further exemplified in example (7)

(7) There is another wave building on the European continent, amongst our friends. (UK, 39)

Despite being aware of the coming wave, it seems as if it is not possible to stop it from “building”. The wave metaphor seems to imply that the number of Covid-19 cases increases not because of human behavior, but because of the virus itself. Therefore, the wave metaphor also has the potential of hiding the fact that the measures taken by the government to slow the spread of the virus have failed to stop an increase in cases.

Fire metaphors were only used in the UK corpus, where **flare-ups** indicated sudden increases of Covid-19 infections in particular geographic areas and **firefighting** referred to the actions taken to thwart these flare-ups. Vaccines and school holidays were talked about as **firebreaks** because of their ability to slow down the spread of Covid-19, thus indicating that Covid-19 spreads like a fire. Fire is an appropriate source domain when talking metaphorically about diseases because just like fire, disease can spread rapidly, increase in size and intensity, and is hard to control, meaning it can cause great damage to any community. (Charteris-Black, 2016; Semino, 2021). By metaphorically referring to an increase of Covid-19 cases in a particular geographical area as a **flare-up**, the suddenness and uncontrollability of Covid-19 are highlighted:

(8) So, if there’s a flare-up in a particular part of the country (...) then we will be firefighting, (...) to deal with that issue. (UK,17)

Just like the wave metaphor, the fire metaphor seems to hide the potential of human behavior to control how the virus spreads. Unlike a wave, however, a **flare-up** seems impossible to predict.

In the Canada corpus, Prime Minister Justin Trudeau spoke about the pandemic as a **storm** to be withstood:
I’ve been speaking to many leaders about these issues and about the importance of global cooperation. This includes chancellor Merkel of Germany and president Macron of France. And key international financial experts. To address this pandemic, to keep people safe, to help our economies weather the storm, we need to collaborate. And with this forum, Canada will be there to help lead the way forward.

Similar to both the wave and fire metaphor, the storm metaphor draws upon the uncontrollability of a storm to highlight the inevitableness of the pandemic. The difference in example (9) is the simultaneous highlighting of the governments' responsibility to manage the pandemic by collaborating with and even leading the way for, governments of other countries.

Natural force metaphors seem to draw mainly on the inevitableness and uncontrollability of literal natural forces. The examples of wave and fire metaphors in this section showed how natural force metaphors can be used to hide the responsibility of both the government and the individual to control the virus. In contrast, the example of a storm metaphor showed how a natural force metaphor also can highlight the responsibility of the government.

4.3 Disease is a journey metaphor

Table 6 shows occurrences of journey metaphors across all four corpora. The UK corpus has the highest frequency of journey metaphors – more than three times higher than the USA and Canada corpora which had very few occurrences. Nearly all of the journey metaphors found in the UK corpus were occurrences of the lemma road, and the only other lemmas found for this metaphor in the UK corpus was path. Roadmap stood for 13 out of 14 realizations of the search lemma road in the UK corpus. The metaphorical roadmap is divided into steps consisting of restrictions and guidelines and denotes the planned course of actions relating to the pandemic.
Table 6
Frequency of DISEASE IS A JOURNEY Search Lemmas

<table>
<thead>
<tr>
<th>Search lemmas</th>
<th>UK</th>
<th>USA</th>
<th>CANADA</th>
<th>AUSTRALIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>road</td>
<td>(r) 14</td>
<td>(r) 1</td>
<td>(r) 0</td>
<td>(r) 1</td>
</tr>
<tr>
<td></td>
<td>(n) 3,33</td>
<td>(n) 0.25</td>
<td>(n) 0.00</td>
<td>(n) 0.24</td>
</tr>
<tr>
<td>crossroad</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 2</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.63</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>route</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 1</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.24</td>
</tr>
<tr>
<td>journey</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 1</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.24</td>
</tr>
<tr>
<td>destination</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
<td>(r) 0</td>
</tr>
<tr>
<td></td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
<td>(n) 0.00</td>
</tr>
<tr>
<td>path</td>
<td>(r) 2</td>
<td>(r) 3</td>
<td>(r) 2</td>
<td>(r) 8</td>
</tr>
<tr>
<td></td>
<td>(n) 0.48</td>
<td>(n) 0.75</td>
<td>(n) 0.63</td>
<td>(n) 1.94</td>
</tr>
<tr>
<td>Total amount of journey metaphors (r)</td>
<td>16</td>
<td>4</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td><strong>Metaphor frequency per 10 000 words (n)</strong></td>
<td><strong>3.81</strong></td>
<td><strong>1.00</strong></td>
<td><strong>1.25</strong></td>
<td><strong>2.66</strong></td>
</tr>
</tbody>
</table>

The journey metaphor encompasses discussions of different goals, directions, and progress (Reisfield, 2004, p. 4026). Example (10) suggests that being in the pandemic is like being on a slow journey to freedom, where each step, and each vaccination dose will lead the population to the freedom it had before the pandemic.

(10) And it’s thanks to all of you therefore that we can continue on our roadmap to freedom (…)
And cautiously but irreversibly, step-by-step, jab by jab, this country is on the path to reclaiming our freedoms (UK, 54)

The implication seems to be that if you follow the roadmap, e.g., get vaccinated, the community will get through the Covid-19 pandemic and return to a life without restrictions.

The journey metaphor does not inherently include concepts such as winning or losing, instead it involves various choices in forms of roads to travel (Reisfield, 2004, p. 4026). In example (10) getting vaccinated is highlighted as the only choice that allows the country to continue
forward on the metaphorical roadmap. The option of not getting vaccinated is thereby hidden.

In the Canada corpus, references to being at a *crossroads* suggest that there is a choice of which road to take. Just as in example (10), this means that the choices people make affect which road they collectively go down and, by extension, how fast they get to the other side of a wave or the pandemic:

(11) We are at a crossroads, and the future is in our hands. There are many days to go before we get to the other side of this. But there are also many of us to get us there, so long as we each remember to do our part. (Canada, 113)

Example (11) shows that while journey metaphors can imply a long and difficult journey, they can also highlight the importance of individual choices. When at a crossroads, one must choose which road to go down. While highlighting each individual’s responsibility, there is a potential of backgrounding the responsibility of the government to make decisions.

The lemma *path* was used in slightly different ways in the four corpora. In the USA corpus, it was used to denote a set of guidelines that would allow for faith communities to reopen:

(12) The President wants to see these communities open. Dr. Birx was integral to making these guidelines and they lay out a pretty clear path for faith communities to reopen. (USA, 86)

In the UK corpus, the number of people testing positive for Covid-19 was referred to as being on a *path* that can go up and down:

(13) The first slides are very familiar to people watching these briefings. The first one is the number of people testing positive for COVID-19 in the UK. And as you can see, that has been on a steady downward path (…) (UK, 56)

The Prime Minister of Canada referred to the population as being on a vaccine-enabled *path* leading through the pandemic to safety:

(14) They got up to around 3,000 doses a day administered during peak moments which is incredible. (…) We’re seeing people continue to come in – lots of people for second doses, but still people are stepping up on first doses as well. The fact that we can continue on that path to safety so we can get through this pandemic and back to full normal lives as quickly as possible is really, really important. (Canada, 115)
Finally, from the Australia corpus, example (15) describes a \textit{pathway} from merely suppressing the virus to managing it like any other infectious disease in the community:

\begin{quote}
(15) A pathway from a pre-vaccination period, which is focused on the suppression of the virus, on community transmission cases, to one that sees us manage COVID-19 as an infectious disease like any other in our community. (Australia, 129)
\end{quote}

Similar to example (14), this pathway seems to be enabled by the presence of vaccines. Unlike the war metaphor, which “background[s] the possibility of adapting to and living with it” (Semino, 2021, p.51), the journey metaphor highlights exactly this possibility. It allows Covid-19 to be viewed as something that is possible for a community to co-exist with. What it hides, then, is the necessity of defeating and eliminating Covid-19 swiftly. Example (15) stands in contrast with Prime Minister Morrisons' statement in example (4), discussed in section 4.1, where he highlighted the need to eliminate the virus swiftly while hiding the possibility of living with it.

The journey metaphor paints the metaphorical image of moving forward through the pandemic on a road or path. The goal can be either going back to life as it was pre-pandemic or managing to live alongside the virus. The journey metaphor highlights the possibility of making choices that can affect the metaphorical road ahead while backgrounding the possibility or need to eliminate it completely.

\textbf{5. Conclusion}

This study aimed to investigate how frequently the conceptual metaphors DISEASE IS A WAR, DISEASE IS A NATURAL FORCE, and DISEASE IS A JOURNEY were used in political discourse relating to Covid-19. The political discourse was limited to transcriptions of spoken data where the political leaders of the UK, the USA, Canada, and Australia were the main speakers. One corpus for each country was compiled. The second aim of this study was to investigate if there were any differences in the choice of metaphor between the corpora of the four countries and if so, what these were.
The results of this study showed that with the method used, the UK corpus contained more metaphors from the three areas than any of the other countries and that the Australia corpus contained the fewest. The most frequently used metaphors in the UK and Canada corpora were those using a natural force as the source domain. In contrast, no natural force metaphors were found in the USA or Australia corpora. The USA corpus contained a majority of war metaphors, which were more frequent here than in the other corpora. In fact, they were found double to three times as often in the USA corpus compared to the corpora for the other three countries. The two metaphor areas that were found in the Australian corpus, war and journey metaphors, were used at about the same frequency.

An obvious limitation of this study is the relatively small size of the corpora as well as the fact that only three metaphor areas were looked at. This entails the possibility of other metaphor areas used in regards to Covid-19 being overlooked. Furthermore, using search words to search the corpora might mean that some metaphors within the chosen areas were not found. For example, commonly used words such as way, there, and go can be used in the DISEASE IS A JOURNEY metaphor, but were not used as search lemmas in this limited study. Furthermore, not all tenses of the search lemmas were searched for in the corpora which might have resulted in relevant metaphor usage being overlooked. Despite this, the results of this study indicate that there is a difference in both frequency and choice of conceptual metaphors between the political leaders investigated. In addition, this study has pointed to some potential purposes and effects of choosing a specific metaphor in order to highlight or hide an aspect of the pandemic. This is something that future studies might use as a starting point for further investigation. A final result of this study was the possibility of contributing to the #ReframeCovid initiative started by Paula Pérez-Sobrino (University of

[6](https://sites.google.com/view/reframecovid/)
La Rioja) and Inés Olza (University of Navarra) and later joined by Veronika Koller and Elena Semino (Lancaster University). #ReframeCovid is a crowdsourced collection of Covid-19 metaphors that anyone can contribute to in any language. The project first emerged as a reaction to the use of war metaphors in Covid-19 discourse and aims to present alternatives to the war metaphor and to inspire people to see the situation from a different perspective.

Any future research in this area would benefit from including more metaphor areas and search words and by using a larger corpus. This would allow for both a broader and more detailed view into the purposes and effects of metaphor usage in political discourse regarding Covid-19.
References


Appendix A: Links to retrieved transcripts

Links to UK transcripts


Links to USA transcripts


Links to Canada transcripts


Links to Australia transcripts


Appendix B: Identified metaphors from the corpora

Metaphors found in the UK corpus
1. We’ll be back tomorrow or there’ll be another update tomorrow here from Downing Street on the fight against coronavirus.
2. Two weeks ago, I updated you from this podium on the progress we had made as a country in our fight against coronavirus.
3. First of all, I want to update you on the latest data in our fight against Coronavirus.
4. For month after month, our collective fight against coronavirus was like fighting in the dark against a callous and invisible enemy until science helped us to turn the lights on and to gain the upper hand.
5. And I want to thank everyone in the NHS, the frontline of the fight against coronavirus (…).
6. They will be absolutely crucial in the fight against this virus.
7. So we definitely would like that, not to fight the disease, but to support the NHS.
8. Can I ask the medics as well, if we already have the kinds of numbers of tests that you would like to see, how much of a difference would it have made to your ability to fight the disease?
9. Let me go first and say that we’re all fighting the same pandemic across the whole of the European continent, and indeed around much of the much of the world.
10. When I asked you to go into lockdown exactly a year ago, it seemed incredible that in the 21st century, this was the only way to fight a new respiratory disease.
11. (…) we were fighting a novel disease under very different circumstances, I think, than any previous government had imagined.
12. In broader terms, how transformational do you think this will be in terms of fighting Coronavirus?
13. (…) we will protect crucial services, including the staffing of our hospitals and our care homes, in supplies of food, water, and electricity, the medicines, the running of our trains, the protection of our borders, the defense of our realm.
14. (…) I have had more than enough of this disease that attacks not only human beings but so many of the greatest things about our country: our pubs, our clubs, our football, our theatre and all the gossipy gregariousness and love of human contact that drives the creativity of our economy.
15. We have the opportunity now, the firebreak of the school holidays, plus we have the risk of opening up in the colder months and the point of the epidemic at this stage (…).
16. Maybe it’s just a delay because of that, or maybe it’s a delay because the vaccine is actually providing a firebreak, a barrier to reduce the transmission up the ages into those who are most vulnerable.
17. So, if there’s a flare-up in a particular part of the country in a town or in a village, which we detect with our COVID alert system, then we will be firefighting, doing whack-a-mole to deal with that issue.
18. And what you can see is a very close increase overlap of cases increasing, very similar between the autumn wave and the current wave, and you can see the autumn wave then topped out at slightly lower levels.
19. And you can see again, the autumn wave and the winter wave with unfortunately large numbers of people who succumbed to COVID infection.
20. And you can see the size of the autumn wave, then the winter wave, and then on the right hand side of the slide where we are now.
21. But then the first part of the second wave and then when we got the new variant, the second part of the second wave, which is now fortunately again due to a combination of everyone’s work on lockdown, which is bringing the rates right down and vaccines which are protecting the most vulnerable, these are falling and falling rapidly.
22. When you look at admissions, the number of admissions was higher in the autumn wave and went up sooner.
23. But after warnings about a second wave and these latest restrictions, some people who might be feeling slightly apprehensive.
24. (...) So the autumn wave is in orange and the current wave is in blue
25. We’re in the middle of a third, not insignificant, wave of COVID.
26. And you can see the size of the autumn wave, then the winter wave (...).
27. And along the bottom is the number of days since the start of the wave
28. A rather lower one in the first bit of the second wave.
29. (...) which presumably would help prevent that third wave in the EU from reaching our shores.
30. Had that not arrived, I think the pattern of the second wave in the UK would have been very different.
31. Opening up into an increasing wave, as predicted, will lead to a further increase.
32. But the opening up into an increasing wave does carry specific risks of increased infection, which is then mitigated by the presence of vaccinations.
33. And the curves for the two waves have just been overlaid.
34. So, whereas in the winter wave, we were up to around 60,000 people testing positive per day, we are now somewhere up towards 50,000.
35. We’re very confident that the majority of people who died in the second half of the second wave, which is by far the bigger one, were from the new variant.
36. What you have is the dotted line here shows the average number of deaths, the five-year average, and you can see very clearly the very substantial spike we had in mortality at the first wave.
37. We must be very wary of the potential for third wave.
38. Do you think that this is the beginning of the second wave?
39. There is another wave building on the European continent, amongst our friends.
40. Are the new variants enough to explain why the second wave killed more people than the first?
41. How is the government planning to stop the spread of the third wave from continental Europe into the UK?
42. I don’t think it’s probably sensible to think about this as a second wave that’s somehow traveling around the world.
43. But you’ve got to respect local issues, local flare-ups, local problems.
44. Today, we reached the fourth step on our roadmap and I know that with cases increasing steadily and with more and more people being asked to self-isolate there will of course be those who would rather that we waited weeks or months longer and kept on social distancing and all the legal restrictions that we’ve been placing on our lives.
45. And those both deaths and hospitalizations, as I said, are sadly rising, these numbers are well within the margins of what our scientists predicted at the outset of the roadmap.
46. The only way we can make the roadmap irreversible, Dan, is by continuing to be cautious, and that, I’m afraid, is why we’ve got to continue to the measures that we are, continue with the routines that we have.
47. If you look back at the roadmap right from February and the modeling, it predicted that levels would go up following Step Three and they’d go up further following Step Four.
48. You all said the roadmap was cautious but irreversible with so much uncertainty over how high infection rates and hospitalizations could get.
49. These are your four tests for moving to the next stage of the unlocking of the roadmap.
50. If we think that the alert level is in danger of going up again, then that’s going to mean that we cannot proceed with the steps that we’ve outlined in our roadmap.
51. But I urge everyone to exercise the greatest caution because the choices we each make in the coming days will have a material effect on the road ahead.
52. We are concerned about this variant and that’s the purpose and we’re serving notice that we do think, or I think, it certainly may cause disruption to our attempts to continue down the roadmap, but they don’t, at the moment, change the assessment about step three.
53. Where does seeing family again fit into the roadmap out of lockdown (…)
54. And it’s thanks to all of you therefore that we can continue on our roadmap to freedom (…) And cautiously but irreversibly, step-by-step, jab by jab, this country is on the path to reclaiming our freedoms.
55. Millions would have seen your roadmap today and seeing what it meant for their jobs, people in nightclubs, aviation, the tourism sector, all these sectors that quite frankly are going to really struggle to ever get their jobs back.
56. The first slides are very familiar to people watching these briefings. The first one is the number of people testing positive for COVID-19 in the UK. And as you can see, that has been on a steady downward path and is stable in terms of the overall numbers at this point in time.

Metaphors found in the USA corpus

57. But before I discuss a very historic breakthrough in our fight against the China virus (…)
58. It’s an important moment in our fight against the pandemic.
59. There are three facts everyone should know about where we are in this fight against this pandemic.
60. And it’s clear than ever, the more people we get vaccinated, the more success we’re going to have in our fight against this virus.
61. In early April, early in our fight against COVID-19 (…).
62. We’ve hit another milestone, a key milestone in our nation’s fight against COVID.
63. The FDA, MIT, Harvard, and Mount Sinai Hospital have also found convalescent plasma to be a very effective method of fighting this horrible disease.
64. They’ve been fighting this stuff their whole life, between Ebola and swine flu and, I don’t know, I’m not sure I’d love your life, but that’s what you like, right?
65. Our duty, our jobs, take care of one another and fight this to the finish.
66. Americans who have tested positive for and recovered from COVID-19 can go to coronavirus.gov to find out a quick, convenient way to play a potentially lifesaving role in our fight.
67. They fight disease, and you know what? There’s nobody that does it better.
68. More than a century to fight off infectious diseases.
69. The war against COVID-19 is far from won.
70. I want to start today by highlighting several critical developments on both the testing and treatment that will help us win our war against the coronavirus.
71. And we’re bolstering our defenses, but this war is far from won.
72. Vice President Pence and I had the opportunity to speak before and the way we’re going to win this war is with great logistics, and UPS is going to be part of that effort.
73. I promised you we’d marshal a war time effort to defeat this virus and that’s just what we’ve doing.
74. I’ll close with this, we’re in the midst of a war time effort to beat this pandemic.
75. We still are in a war with this deadly virus.
76. Social distancing, that’s the way you win.
77. They want to win. They want to win the battle against the virus.
78. We will win, and when we do, we will rebound with astonishing force and speed.
79. In our present crisis, the strength of our people is our single most important asset, and together we will defeat this invisible curse, this invisible enemy, and rise to incredible new heights.
80. Unfortunately, the enemy is death.
81. I spoke to great people today that have done a great job, and one day they’re at the top of their business, they’re celebrity chefs, they’ve got the most successful restaurants, and in one day they have nothing, they’ve gotten wiped out, one day, from our enemy, this invisible, horrible scourge.
82. Today, I’m pleased to make a truly historic announcement in our battle against the China virus that will save countless lives.
83. (...) America has done more than any other country to expand the arsenal that we have to battle COVID-19.
84. This is a powerful therapy that transfuses very, very strong antibodies from the blood of recovered patients to help treat patients battling a current infection.
85. We can’t hold them if they think there might be a problem weeks down the road.
86. The President wants to see these communities open. Dr. Birx was integral to making these guidelines and they lay out a pretty clear path for faith communities to reopen.
87. And the President has laid out a clear path.
88. The CDC has laid out a clear path for this to take place, for our First Amendment to be exercised in a way that is safe and robust.

Metaphors found in the Canada corpus
89. Vaccinations remain our top defense against the virus (...).
90. Are we losing the battle?
91. Are we losing this battle?
92. We’re still very much in a third wave.
93. It’s a reality. We live in cities, we are social beings, and it could be a challenge to prepare for this potential second wave.
94. We have more tools in the fall than we did in the past, and we’ll be able to do what needs to be done in order to take control of this second wave.
95. Across the country, we’re deploying additional support to provinces and territories that have been hit hardest by this third wave.
96. We are working together in order to minimize the impact of the second wave.
97. (...) it is with the cooperation of the public that we were able to get the result that we did in the initial wave, and we need to see that again.
98. But again, I’ll reiterate from all chief medical officers that the AstraZeneca vaccine deployed in the middle of a third wave has saved lives and prevented serious illnesses.
99. I think what the complexities of this current wave is that we’re trying to, at different levels, be as targeted as possible.

100. In our four biggest provinces, the second wave isn’t just starting – it’s already underway.

101. There are second waves just about everywhere, some higher, some lower than here.

102. But at the same time, we recognize that as the economy reopens as perhaps a second wave might hit us, we need to be ready, and that’s why we continue to draw on even more PPE.

103. What I was saying is that I think much is in place, much has been learned since the first time we tried to suppress a wave of this virus.

104. I think every different wave or every different situation will require a different approach and tools.

105. So just because some of the numbers are going up, just because it’s not as high as the first wave right now, we cannot let this accelerate.

106. Now that we’re all doing this, it’s up to Canadians throughout the country to do their part, to wear their mask, to maintain physical distancing, unfortunately, to not get together with their families and friends for Thanksgiving so that we can take control of this second wave so that we can all celebrate at Christmas.

107. I think we were always aware that there was a possibility of a second wave that we needed to prepare for.

108. Together, we have the power to get this second wave under control.

109. Regarding the second wave, we’ve been warned from the very beginning that it would happen. It’s happening. You can see the numbers in Quebec that are much higher than we had anticipated after the first wave. (…) Regardless of all the measures that were taken, we’re here in the second wave.

110. Canadian jobs and businesses depend on stable and productive economies in other countries so it matters to us how everyone weathers this storm.

111. I’ve been speaking to many leaders about these issues and about the importance of global cooperation. This includes chancellor Merkel of Germany and president Macron of France just yesterday and leaders from the Caribbean and from across Africa, Latin America and the Pacific. And key international financial experts like Canada’s own Mark Carney are getting involved too. To address this pandemic, to keep people safe, to help our economies weather the storm (…) we need to collaborate. And with this forum, Canada will be there to help lead the way forward.

112. I want to speak directly to you today because Canada is at a crossroads.

113. We are at a crossroads, and the future is in our hands. There are many days to go before we get to the other side of this. But there are also many of us to get us there, so long as we each remember to do our part.

114. He’s been a really important part of our path through this pandemic as chair of the Cabinet Committee on the federal response to the Coronavirus disease (COVID-19) and many other things.

115. They got up to around 3,000 doses a day administered during peak moments which is incredible. (…) We’re seeing people continue to come in – lots of people for second doses, but still people are stepping up on first doses as well. The fact that we can continue on that path to safety so we can get through this pandemic and back to full normal lives as quickly as possible is really, really important.

116. So why does it seem like the Liberals at the National Defense Committee are trying to prevent her from testifying, and would you be okay with her testifying?
Metaphors found in the Australia corpus

117. I want to assure you that we’re in two fights.
118. But we will continue to fight on in this period, but we need and we'll continue to do everything we possibly can to vaccinate the population as fast as possible.
119. In relation to my review of the national COVID vaccine rollout, I have now completed my initial review and I am engaging with the states and territories to understand their plans for their jurisdictions and on Tuesday next week we will be joining together to conduct what I call a war game (…).
120. Winning in the post-vaccination phase looks very different to winning in the phase we're in now
121. Winning now means we suppress the virus as best as we can, which means that from time to time, such as we're experiencing in New South Wales, we have to go through these experiences.
122. Or do you believe that hotel quarantine is as good a defense as canceling flights?
123. Our hotel quarantine system has been a very effective and important defense in the vast majority of cases.
124. I want to assure you that we’re in two fights. We are battling this thing on two fronts, and they’re both important. We’re battling this virus with all the measures that we’re putting in place, and we’re battling the economic crisis that has been caused as a result of the Coronavirus. Both will take lives, both will take livelihoods, and it’s incredibly important that we continue to focus on battling both of these enemies to Australia’s way of life.
125. This is a difficult time when people are dealing with the restrictions, but that has been our experience over these past 18 months as our country has battled COVID-19, like every country has
126. It is I think, a welcome sign that we are on the road back.
127. But, Prime Minister, so do you agree though that, if you had gone down the mass vaccination route, more people would be safe right now and vaccinated?
128. (…) a national challenge, a challenge that has gone on now for a long time, and there is still quite a journey ahead of us.
129. A pathway from a pre-vaccination period, which is focused on the suppression of the virus, on community transmission cases, to one that sees us manage COVID-19 as an infectious disease like any other in our community.
130. Now, there is still some pathway from here to there, but the pathway we have agreed today I think, gives all Australians encouragement and I think much needed hope, in what has been a very difficult time.
131. That has always been there for the international education industry, the large universities and others to go down that path. They haven't chosen to go down that path.
132. The good news I have for Australians who are subject to restrictions today is we have agreed a new deal for Australians on the pathway out of COVID-19.
133. COVID-19, managing your way through COVID-19, is unchartered waters, and anyone who thinks there is always a pathway that is without risk, that is without vulnerabilities, clearly doesn't understand the significant challenge that all nations face in dealing with COVID-19.
134. Well, we have no plans to go down the path you’ve suggested.