**COVID-19 Metaphoric Blends in Media Discourse**

**Abstract**

The study aims at describing COVID-19 metaphorical representations in the media discourse. The analysis of conceptual metaphors in political and medical discourse enables a reconstruction of metaphorically based knowledge of coronavirus in English speech communities. Being produced by world political leaders and media presenters these conceptual metaphors influence both directly and indirectly the social understanding of the novel disease. The study is based on the Conceptual Metaphor theory, Conceptual Integration theory and Discourse analysis. The range of the target domain COVID-19 includes the following source domains: WAR and PERSON. The latter is further elaborated as GUEST, INTRUDER, ENEMY, CRIMINAL, SPY, TEACHER. The focus is on the cross-space mappings which present the sets of systematic correspondences between the target and source domains. The novel conceptualisations based on the conventional use of metaphoric patterns are analysed within the framework of the following cognitive devices: extending, elaboration, questioning, and combining. The conceptual blends and emergent structures that provide additional layers of COVID-19 interpretation are represented by means of Conceptual Integration Networks, namely, double- and multiple-scope models. The analysis reveals that the conceptual metaphor COVID-19 PANDEMIC IS WAR is mostly represented in the political discourse that refers to the disease as a general threat to the world. In the medical discourse the metaphor COVID-19 IS PERSON is objectified, with further elaboration of the source domain. The correlation COVID-19 IS TEACHER reveals positive connotations of the phenomenon.

**Keywords**: conceptual metaphor, conceptual integration network, COVID-19, mapping, media discourse.

**Introduction**

The COVID-19 pandemic struck the world unexpectedly, without anybody being prepared, causing much public anxiety among political authorities, medical researchers, and ordinary people. The world has faced a radical change dealing with the unpredictable. The novel coronavirus SARS-CoV-2 has posed a poorly understood but at the same time multi-interpretable threat to humanity worldwide. In terms of naming new diseases, the World Health Organization has announced an official name for this malady COVID-19, short for “coronavirus disease 2019” (WHO, 2020). The global COVID-19 research is rapidly emerging, generating metaphors spread by politicians and media. Discourse makers tend to exploit various metaphorical expressions and symbolic framings, conceptualising the pandemic in language cultures. Nations’ linguistic and cultural experience of illnesses is shaped differently, revealing numerous metaphorical models.

The new disease affected the world, making the figurative language appear to describe COVID-19, especially in terms of metaphors. They influence the way people talk about medicine, disease and health and also shape how they think and behave in cultural communities. In the article we are making an attempt to compare metaphoric representation of COVID-19 in political and medical discourse. The use of metaphors in the political discourse depends on the political agendas and underlying ideologies (see Chiang et al., 2007). Medical discourse focuses mainly on the phenomenon of the virus and its influence on the human body.

**Theoretical background**

Contagious diseases, natural disasters, social outbreaks, and important political events have always been in the focus of applied research in different fields and their linguistic interpretations. A language-based approach to understanding the public comprehension of contagious diseases has been successfully used in numerous researches: AIDS and metaphor (see Sontag, 1989), bird flu communication (see Ungar, 2008), swine flu pandemic (see Nerlich & Koteyko, 2011), media coverage of Zika (see Ribeiro et al., 2018), SARS linguistic interpretation (see Bates, 2020), COVID-19 (see Oswick et al., 2020).

This study conducts a comparison of media representations of COVID-19 in medical and political discourses. Since 31 December 2019 the virus has rapidly spread all over the world hitting some European countries and the USA which caused the WHO to declare a health emergency of international concern.

This comparative research explores emerging metaphorical correlations in media during the COVID-19 pandemic in political and medical discourse. In order to develop this perspective, we will appeal to the Conceptual Metaphor Theory (see Lakoff, 1980, 1993; Kövecses, 2010a, 2010b, 2015a, 2015b), Conceptual Integration Theory (see Fauconnier & Turner, 1998, 2002), and discourse analysis (see Van Dijk, 2002) which have become fundamental for analysing how reality is shaped in terms of the new coronavirus spread.

**Methods**

The study is based on the media sources concerning the coronavirus situation in Europe and the USA. The conceptual metaphors under study are viewed as knowledge structures being integral to a culture. Methodologically, the analysis of metaphors in the discourse can provide an insight into the metaphorical structures of the context of culture. Therefore, we admit that the analysis of conceptual metaphors in media discourse enables a reconstruction of metaphorically based knowledge of coronavirus in the English speech communities, since every specific discourse is situated within a cultural context, enabling a speaker to decode not only the immediate content of a message but also the structures of a specific context of culture. In this regard it is essential to view media discourse as a complex structure of knowledge shared by the speakers of a specific culture, English in particular.

For metaphor analysis in media discourse Charteris-Black’s (2004) Critical Metaphor Analysis (CMA) is used. CMA comprises three subsequent stages: identification, interpretation, and explanation. The Conceptual Metaphor Theory becomes a basic framework for the linguistic analysis in which COVID-19 is the target domain. At the first stage the collected data will be classified according to the range of the conceptual metaphors associated with the target COVID-19. By means of tracing selective mappings (see Lakoff & Johnson, 1980; Kövecses, 2015a), the systematic correspondences between the source and target domains will be established.

The discourse analysis presupposes the study of the situation which evoked the text and the context in which metaphorical expressions are used. The second stage aims at “establishing a relationship between metaphors and the cognitive and pragmatic factors that determine them”, which reveals how readers can interpret the metaphor (see Charteris-Black, 2004). While explaining metaphors we focus not only on the linguistic context, but also on ideology and cultural peculiarities.

The third stage presupposes tracing the cognitive mechanisms behind some novel metaphoric representations of COVID-19. We will consider the four cognitive devices discussed by Kövecses in (see Kövecses, 2010b, p. 53–55), namely: extending, elaboration, questioning, and combining.

Finally, to analyse the novel conceptual blends and emergent structures that provide additional layers of COVID-19 interpretation, the fundamentals of Conceptual Integration Theory will be used (see Fauconnier & Turner, 1998, 2002).

Embodied in human experience, conceptual metaphors tend to be found across different languages and cultures. Hence, the cross-cultural study of metaphorical symbols evokes a great interest of scholars all over the world (see Cienki & Müller, 2008; Semino, 2017), revealing the ideologies behind the figurative language (see Charteris-Black, 2011; Koller, 2005).

Metaphors are viewed as systematic relationships between two conceptual domains: “source domain” (the conceptual domain from which we draw metaphorical expressions) and “target domain” (the conceptual domain that we try to understand). Mappings present a way how elements in the two domains line up with each other (see Lakoff & Johnson, 1980).

Appealing to the Conceptual Metaphor Theory (see Lakoff, 1993), we agree that conventional metaphors are universally shared by language communities and their variations can be culturally specific. In this regard, Kövecses, following Sanford, suggests an emergentist view of metaphor and states that metaphors are best understood as entities that emerge out of language in use (see Kövecses, 2015a, p. 148). The dynamic and live communication presupposes the appearance of novel conceptualizations that are based on the conventional use of metaphoric patterns. Given the variety of cross-domain correspondences that emerge in conceptualisation of such a complex domain as COVID-19, a further analysis into the cognitive mechanisms behind emerging some novel conceptual properties will be done by considering the following cognitive devices discussed by Kövecses: *extending* (a new conceptual element is introduced in the source domain), *elaboration* (the existing element of the source is elaborated in a new, unconventional way), *questioning* (the very appropriateness of our common everyday metaphors is called into question), and *combining* (several everyday metaphors are activated at the same time) (see Kövecses, 2010b, p. 53–55).

The novel conceptual blends and emergent structures that provide additional COVID-19 interpretations will be analysed within the framework of Conceptual Integration Theory developed by Fauconnier and Turner. Conceptual network models represent “on-line, dynamical cognitive work people do to construct meaning for local purposes of thought and action” (see Fauconnier & Turner, 1998). The central process in focus is conceptual blending which is based on selective conceptual projection as an instrument of “on-line” thought. The blend develops structure not provided by the inputs by means of the three mental operations: composition (building up relations that do not exist in the separate inputs), completion (by the background knowledge) and elaboration (through imaginative mental simulation according to principles and logic in the blend) (see Fauconnier & Turner, 2002).

On the basis of these theories we will analyse COVID-19 metaphors in English media discourse in terms of shaping content, the media influence social opinion focusing public interest on particular issues and communicating messages to audiences (see Miller & Dinan, 2009; Philo, 2008). As ordinary people are not specialists in coronavirus, the way they understand it depends to a large extent on how it is presented in the media discourse, namely, political and medical. The way the disease is depicted in media not only reflects, but also shapes public attitudes and opinions and influences the development of events and people’s behaviour during the pandemic exploiting metaphors as a powerful tool. Moreover, linguistic reconstruction of any phenomenon in media, the novel coronavirus in particular, is perceived and interpreted according to the ideology and cultural background of a country. To demonstrate the key metaphoric interpretations of COVID-19 the speeches of political leaders, journal and newspaper articles by viral immunologists, and official press releases of the USA and European countries will be analysed in the article.

**Results and discussion**

The research has shown that the range of the target domain COVID-19 includes the following source domains: WAR and PERSON. The latter is further elaborated as GUEST, INTRUDER, ENEMY, CRIMINAL, SPY, TEACHER.

***COVID-19 PANDEMIC IS WAR***

Exploring the representation of the coronavirus disease in English, conceptual metaphor analysis reveals the metaphoric model ‘COVID-19 PANDEMIC IS WAR’ in media discourse. As the COVID-19 metaphor is the most frequently exploited in the analysed resources, it seems necessary to study the reasons behind it. War metaphors have been applied to describe each threatening epidemic (see Segal, 1997), explaining the novel and intimidating target domain of disease by means of a universal and familiar source domain of war. In their study Flusberg, Matlock and Thibodeau (2018) describe different reasons for the popularity of war metaphors. Firstly, war metaphors are based on well-defined, basic and commonly shared schematic knowledge for a typical war. Besides, war metaphors are meaningful because of first-hand or second-hand experience people have dealing with war personally or indirectly through social media, history classes, and video games. Moreover, being familiar and easy for people to process and comprehend, war metaphors become conventional and war domain is used as source domain to communicate about a wide range of topics (see Flusberg et al., 2018, Mirghani, 2011).

Since any disease is an inseparable part of human lives, involving the tough process of struggle with illness like a battle, the source domain of war is employed to schematically represent the concept of fighting a disease. The language of medicine is closely interwoven with the language of war, especially when it comes to diseases that pose uncertainty and threat to humanity (see Hudson, 2008; Li et all, 2010; Nie et al., 2016). Chiang and Duann (2007) claim in their study that SARS presented in newspapers was no longer a disease, but a fully-fledged war in a political sense. The authors emphasise that metaphoric representation of the disease is greatly influenced by the underlying ideologies of the newspapers.

Any war involves a struggle between two opposing forces: “good” (political leaders, doctors, peaceful people, etc.) and “evil” (diseases, coronavirus, etc.), who are engaged in a fight to achieve certain goals; to make strategic decisions about how to use resources for attack and defence. All this has been successfully presented in the latest issues of American and European magazines, newspapers, journals, describing the struggle against the novel coronavirus in the world by means of conceptual metaphors.

The metaphorical linguistic expressions that can prove the existence of the war metaphor in the media discourse of the USA and Europe are the following: *strategy, declare, defeat, global fight, wartime president, utmost mobilization, peacekeeping operations, wave a white flag, invisible enemy, battlefield, defence, a double-edged sword, shields, struggle, grapple, sea mine, bomb, blow up, battle with many fronts*. The source domain is *extended* by the following elements: pandemic is a declared war (1); war strategies are the behavioural changes in order to tackle the virus (2):

(1) *The World Health Organization* ***declared*** *COVID-19 a global pandemic on Wednesday…* (CNBC, 2020);

(2) *Tomorrow, the Prime Minister will set out a roadmap for the next phase in* ***our strategy to tackle coronavirus.******Changing our behaviour*** *is the single biggest thing that’s* ***beaten back this virus*** (GOV.UK, 2020a).

The analysis of conceptual metaphors in media discourse has revealed a certain hierarchy: a higher level of a military force with the leadership qualities for a general or president of the country, D. Trump for example, and a lower level for fighters like medics, microbiologists, and epidemiologists. Civilians, as the disease victims, present the lowest layer of this hierarchy (3-5):

(3) *President Trump claimed to the American people that he was* ***a wartime leader****…* (The Daily Progress, 2020);

(4) *I want to thank everyone who is working flat out to beat the virus.* ***Everyone from the supermarket staff to the transport workers, to the carers, to the nurses and doctors on the frontline***(GOV.UK, 2020b);

(5) *On the contrary we have so far collectively* ***shielded our NHS*** *so that our incredible* ***doctors and nurses and healthcare staff*** *have been able to* ***shield all of us from an outbreak*** *that would have been far worse* (Conservatives, 2020).

The source domain is *extended* as a dangerous bomb which spreads its pieces with the speed of light worldwide implying its highly contagious rate (6-7):

(6) *Look at it at another angle and you see a World War 2* ***sea mine about to explode and shatter it into a million of pieces*** (Leach, 2020);

(7) *The coronavirus has ended* ***blowing up*** *the model of global multilateral governance that has been functioning over the past few years…* (Sánchez Nicolás, 2020).

As any war, the novel coronavirus conveys a sense of risk and urgency. It naturally brings on fear and anxiety, feelings of despair, especially if the enemy is strong and unknown and fighting against it takes place on multiple fronts (8-11):

(8) *Trump is struggling against two* ***invisible enemies****: the coronavirus and Joe Biden* (The Conversation, 2020);

(9) *And we are buying millions of testing kits that will enable us to turn the tide on this* ***invisible killer*** (GOV.UK, 2020b);

(10) *And it’s a* ***battle with many fronts*** (GOV.UK, 2020c);

(11) ***The latest front in the widening global fight against COVID-19*** *emerged in Daegu, South Korea…* (QFM96, 2020).

As the disease progressed immensely and the coronavirus turned out to be more aggressive than expected (12), there was time when even political leaders were desperate and ready to surrender (13-14) and reduce “unnecessary” testing which resulted in the emergence of novel metaphorical expressions (12-15):

(12) *It’s the only way to**defeat the coronavirus* ***- the most vicious threat*** *this country has faced in my lifetime* (GOV.UK, 2020d);

(13) *<…> instead of taking responsibility, Trump has* ***waved a white******flag****, revealing that he ordered the slowing of testing …* (Richmond Times Dispatch, 2020);

(14) *Despite these extraordinary steps, there will be challenging times ahead. We* ***will not be able to protect every single job*** *or* ***save*** *every single business* (GOV.UK, 2020e);

(15) *You know testing is* ***a double-edged sword****. … When you test to that extent, you are going to find more people, find more cases. So I said to my people, ‘****Slow the testing down please****.’* (Thomas, 2020).

Though all the possible measures are said to be taken (16), preventive measures and self-isolations prove to be the most effective war strategies that should be strictly followed (17), (18):

(16) *In this* ***fight****, more than any other, we* ***must leave no stone unturned*** (GOV.UK, 2020c);

(17) *By* ***observing the lockdown****, and* ***sacrificing contact with friends and families****, everybody has played their part in* ***bringing the virus under control*** (GOV.UK, 2020j);

(18) ***If you don’t follow the rules the police will have the powers to enforce them****, including through fines and dispersing gatherings* (GOV.UK, 2020k).

Demonstrating positive attitude and optimism about victory is one of the main political leaders’ tasks during challenging times. Wartime framing in media discourse is useful for motivating behavioural change and justifying a certain course of action or intervention. Hence, declaring a war on COVID-19 gives hope that the disease will soon be conquered, as prototypical wars eventually end (19-20):

(19) *Thanks to the leadership of President Trump and the courage and compassion of the American people, our public health system is far stronger than it was four months ago, and* ***we are winning the fight against the invisible enemy***(Pence, 2020);

(20) *And always remember –* ***we will get through this, and we will beat it together***(GOV.UK, 2020f).

The mappings of cross-space correlations between the source domain of WAR and the target domain of COVID-19 PANDEMIC can be presented in the following way in **Table 1**:

**Table 1.** COVID-19 PANDEMIC IS WAR: cross-domain correspondences

|  |  |
| --- | --- |
| **Source Domain: WAR** | **Target Domain: COVID-19 PANDEMIC** |
| * generals | * politicians |
| * soldiers | * doctors, scientists, ***public service workers*** |
| * battlefield/front | * countries |
| * weapons | * medicine, ***testing,*** vaccine |
| * fortress | * human body |
| * winning/losing a battle | * slowing down/speeding up contagion rate |
| * winning/losing a war | * curing the disease/ ***failing in curing*** |
| * civilians | * people |
| * war strategies | * medical solutions for treatment and preventive measures, lockdown |
| * enemy | * virus SARS-CoV-2 (coronavirus) |

Common ways of comprehending COVID-19 involve the source domain of WAR, projecting a wartime mind set onto the pandemic situation. This way of interpreting coronavirus is mostly characteristic of political discourse, probably, due to the purpose of such accounts: i.e., politicians and public speakers make attempts at shaping the situation in general, outlining the changes and challenges that the people are currently facing, introducing possible actions towards the current situation as well as forming the general attitude to it. Thus, it is convenient to apply the highly structured, multifaceted, and recognisable source domain of WAR for the purpose of public interpretation of such a complicated situation as the coronavirus pandemic.

Given the variety of conceptual correspondences, it is interesting to focus on emergent structures that appear in the process of interpreting coronavirus in terms of war. Some emergent properties of the metaphoric blending can be explicitly traced by means of the conceptual integration model (see **Fig. 1**).

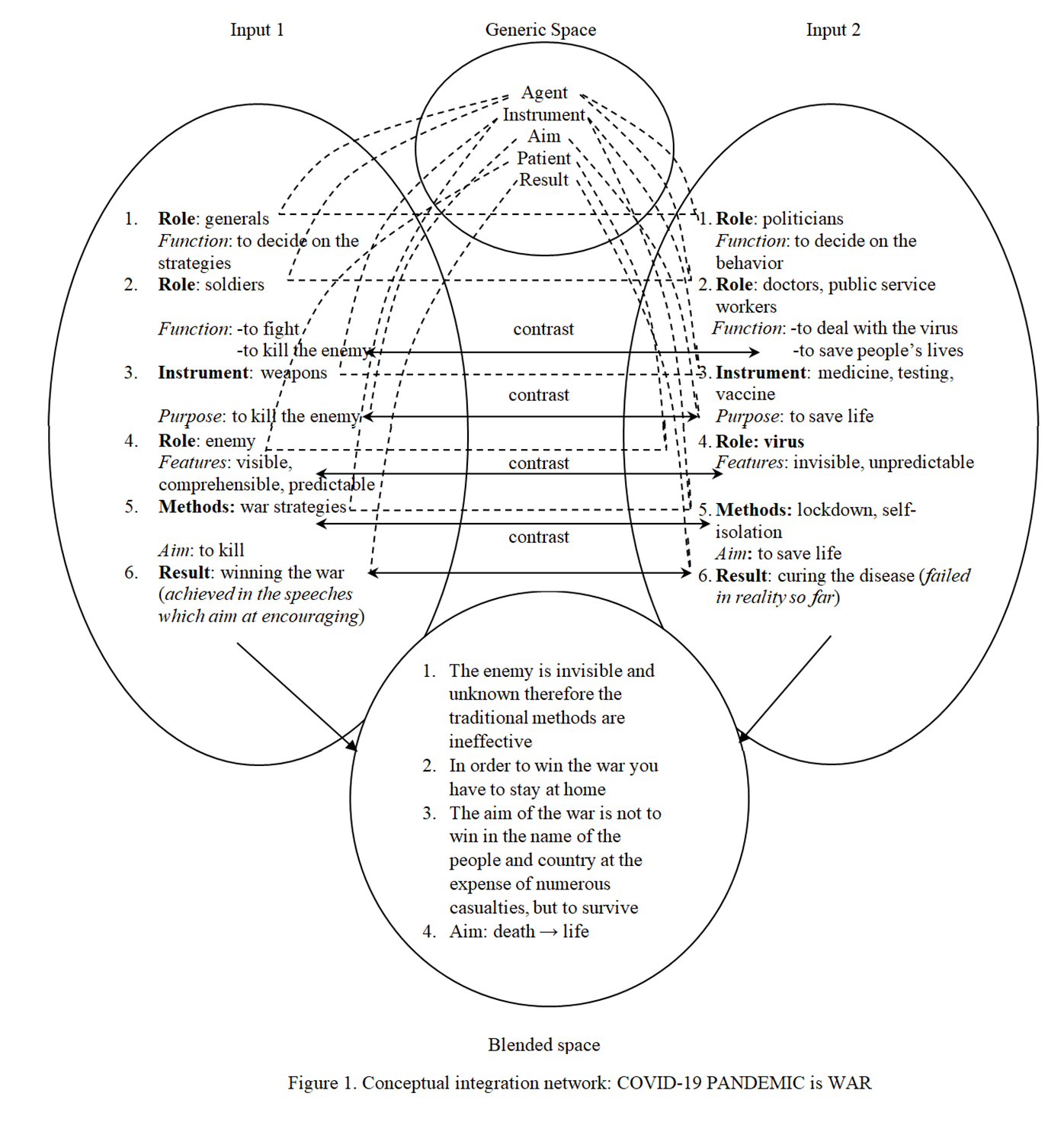
In the *double-scope network* (a network that has inputs with different (and often clashing) organising frames as well as an organising frame for the blend that includes parts of each of those frames and has emergent structure of its own (see Fauconnier, 2002, p. 131) the source input space 1 is structured by the domain of WAR, whereas the target input space 2 is structured by the domain of COVID-19 PANDEMIC and more generally is based on the domain of health care. This fact motivates the contrast between the aims set and the methods applied in both wars. The two inputs share the common structure, represented in the generic space, i.e. people fighting against the enemy. The dotted lines in the network show the cross-space correspondences between the input spaces, whereas solid lines (arrows) show the contrastive elements due to which the emergent properties appear, which are represented in the blended space.

Firstly, the enemy in the target domain obtains new characteristics. The virus is represented as an invisible killer (8), (9), (19). Within the domain of WAR the strategies depend on the type of a threat, though in the domain of COVID-19 the threat cannot be fully shaped. Thus, the struggle is done blindly and the traditional methods of dealing with the pandemic situations prove to be ineffective (15). The blend inherits the features of the virus as an invisible incomprehensible enemy, due to which the methods are reshaped. Besides, the main task of doctors and scientists proves to be not killing the enemy, which seems impossible, but finding the way to deal with it (2) as well as shielding the people from it (5).

Secondly, the mapping reveals that the war methods aimed at killing the enemy cannot be applied to the situation of COVID-19 pandemic, since the aim of any actions in this regard is to preserve life by all means. That is why the main strategy in the metaphoric war against the disease is a lockdown, i.e., self-isolation (17) and changing our behaviour (2). The traditional idea that everyone should leave their homes, families and participate in military actions to achieve victory is reinterpreted as well, since during the coronavirus pandemic the best thing one can do is, actually, to stay at home. The blend inherits the idea of war strategy as forcing activity from the input 1, and, by contrast, the idea of lockdown as reducing any activity, from the input 2.

Thirdly, the blend shows the shift in the purpose of war. Unlike the traditional war that is associated with numerous deaths which are meant to happen in the name of victory, the metaphoric war with the virus focuses on life protection, i.e., on survival rather than victory.

Lastly, the expected result of the war has not been achieved yet, though in the political discourse the opposite is often claimed with the aim to encourage people not to lose optimism and positive attitude (19), (20).



**Fig. 1.** Conceptual integration network: COVID-19 PANDEMIC is WAR

***COVID-19 IS PERSON***

In medical discourse coronavirus is described as a phenomenon itself, thus personification is a more common means of its representation. Doctors, immunologists aim at explaining the nature of COVID-19 rather than the way people are supposed to treat it and react to it. Personification of COVID-19 in the discourse is not surprising, since specifying an abstract entity as a human being has high metaphoric potential in our understanding of the world. As Lakoff and Turner mention, personification is not a single unified general process. Being an extension of ontological metaphor type, personification allows us to comprehend abstract phenomena in terms of human motivations, goals, actions, and characteristics. Each metaphor based on personifying differs depending on the specific type of person picked out (Lakoff, 1980: 33-34). The choice of a person (e.g., ENEMY, SPY, TEACHER, GUEST, etc.) gives us a very specific way of thinking about the phenomenon of COVID-19 as well as a way of acting toward it. Personification of coronavirus in terms of different types of people by means of imputing human features to it gives us a coherent account of a variety of possible aspects that this abstract entity may reveal.

Following the metaphoric representation of pandemic as war, in medical discourse there is a shift in framing the setting for this war. Thus, the human body is considered the territory of opposition. In this respect, the metaphoric correlations with the concepts of GUEST and ENEMY are the most productive. The source domain GUEST is further *elaborated* as INTRUDER, and the source domain ENEMY is *elaborated* as CRIMINAL and SPY. Additionally, the range of the metaphor includes the source domain TEACHER, evoking surprisingly positive connotations of the coronavirus phenomenon.

Personification of the virus makes it recognisable in the course of time. At the initial stage, the virus is metaphorically invisible (8), (9), (19), a stranger (21), and in order to deal with it we need to get acquainted with this stranger: to see his face (24), to know the image (24), to learn the signatures (22), etc. Once the stranger is recognised (23), becomes familiar (24), the cells are supposed to know what to do (25):

(21) *Because our teeming abdominal and nasal rain forests are of course contending with a* ***stranger****: SARS-CoV-2* (Heffernan, 2020);

(22) <...> *to give our immune systems time* ***to learn the signatures*** *of a new virus*(Heffernan, 2020);

(23) *We'll* ***recognize*** *this pathogen when it* ***comes around*** *again* (Heffernan, 2020);

(24) *There will likely be another Covid season, and another, and another. But* ***the virus will be known and seen – familiar*** (Heffernan, 2020);

(25) *Now their* ***image*** *is on a blacklist: If the body encounters Covid-19's* ***face****, the virus, it seems, is rapidly* ***disarmed*** (Heffernan, 2020).

So, the metaphor COVID-19 IS PERSON is *elaborated* as COVID-19 IS STRANGER. Due to the split in contextual connotations the source domain is further *elaborated* as GUEST (in the contexts of searching possible ways to deal with the phenomenon) and ENEMY (in the contexts of possible danger that the virus may bring).

Due to the aim outlined in the medical discourse – to learn how to live with the virus (26-27) – the metaphoric representation of COVID-19 as GUEST appears:

(26) *Human bodies* ***don't aim to murder a new virus*** (Heffernan, 2020);

(27) <…> *an important part of the next phase of the pandemic –* ***learning to live with the virus*** (Molteni, 2020b).

The metaphor COVID-19 IS GUEST is based on the conventional metaphor BODY IS A CONTAINER *elaborated* as BODY IS HOME. The *extending* of the source domain depends on the stages of recognizing the virus. At the first stage our body does not treat it with hostility. On the contrary, we welcome it to our body (28), (31), (36), and as hospitable hosts we try to satisfy its demands (29) not realising the danger it brings. The new (*extended*) elements in the source domain are: human immune system is a host (34), (35); microbes are residents in the body (30); nose, eyes, and mouth are the doors (entrance) for the virus (32). The connotations of the names of the virus are neutral, such as ‘visitor’ (33):

(28) <…> *humans did indeed* ***welcome the virus*** *in –* ***to our habitats, our houses, and our noses*** (Heffernan, 2020);

(29) *But if* ***their bodies hustle too obediently to satisfy the demands of the virus****, before immune cells announce the breach,* ***vital organs might be overrun*** (Heffernan, 2020);

(30) *When a virus* ***invades a human body****, it has to interact with the microbial community* ***already in residence*** (Molteni, 2020b);

(31) *Importantly, Sars-Cov-2 cannot* ***gain entry to our homes or bodies*** *by itself – we have to* ***let it in*** (Stamataki, 2020a);

(32) *Coronavirus* ***gains entry through our eyes, nose or mouth*** (Stamataki, 2020b);

(33) *But the virus will be known and seen – familiar as* ***a regular****, if troublesome,* ***visitor*** *to the jungle of bugs* ***inside*** *us* (Heffernan, 2020);

(34) *This was generally presumed to be a result of the virus knocking back the human immune system, allowing opportunistic bacteria to start* ***attacking its host*** (Molteni, 2020b).

The next stage of recognising the virus is marked by the shift in connotation of the latter. Thus, the names of coronavirus include: ‘violent guest’ (37), ‘intruder’ (36), ‘invader’ (37), ‘chaos agent’ (39). The source domain is *elaborated* as INTRUDER and the *extended* elements include: host becomes suspicious, though diplomatic (38); cells are doormen (38); the new antibody cells are rookies that are forced to play bouncers (39); coronavirus is the unwelcome guest who demands its territory in the body at the expense of the host (35), (36) and overruns vital organs (29):

(35) *The virus has been* ***accommodated****, but* ***at the expense of the organs of the******host*** (Heffernan, 2020);

(36) *Once* ***inside****, the virus* ***commandeers the cell*** *and borrows cellular machinery to build more viruses before* ***immune cells detect the intruders*** *and* ***raise the alarm*** (Stamataki, 2020а);

(37) *Our physiologies are now forced, on pain of death, to respond to this* ***violent guest****. We can't now* ***lock the virus out****, as if it were an* ***invader****. But nor can we* ***throw open our arms to it****, as if it were a friend* (Heffernan, 2020);

(38) *Our bodies must* ***make overtures to it*** *that combine the microbial version of* ***suspicion, curiosity, and detachment****. We have to become* ***doormen*** *to the virus, not doormats* (Heffernan, 2020);

(39) ***Rookies****, once initiated, are often asked* ***to do the worst chores****. So too the new antibody, with its powerful memory, will have* ***to play bouncer****, spotting and neutralizing* ***chaos agents*** *at a glance* (Heffernan, 2020).

At the third stage of the recognition the unwelcome guest becomes an enemy in the body. So, the image of coronavirus in the medical discourse is based on the *combining* of the metaphors: COVID-19 IS GUEST → INTRUDER and COVID-19 IS ENEMY.

Further conceptualisation of coronavirus as ENEMY in the medical discourse evokes such an important element as ‘the need to defend home’ (40-41). The metaphoric correlation COVID-19 IS ENEMY is obviously based on the conceptual pattern COVID-19 PANDEMIC IS WAR. Though, by contrast to the political discourse in which the countries suffering from the disease are referred to as the territories and fronts of the war (4), (10-11), in the medical discourse the territory of the war is the human body. So, the conventional metaphor BODY IS A CONTAINER *elaborated* as BODY IS HOME is characterised by the following elements that *extend* the source domain: cells are guards that patrol the body (40) in order to detect the virus (36), (40) and raise the alarm in case of invasion (36); immune system’s reaction is rich in defence arsenal (41):

(40) *These clever cells not only* ***recognise*** *that we’re suffering a virus infection, they are also able to* ***pinpoint*** *exactly which virus. How can they predict unknown threats? They can’t, so we have* ***hordes of them patrolling our bodies*** *with random recognition abilities for different parts of different germs* (Stamataki, 2020b);

(41) *There is none more impressive than* ***the******human immune system****, equipped as it is with* ***a rich arsenal to defend against*** *different types of pathogen* (Stamataki, 2020a).

The source domain ENEMY is *elaborated* as SPY (mostly in the medical discursive contexts representing the secret activity of the virus in the body) and CRIMINAL (both in the political and medical discursive contexts representing the obvious malicious activity of the virus).

Once the virus has become recognisable, it needs to hide and to enter the body unnoticed. The source domain ENEMY → SPY is *extended* by the following new elements: COVID-19 is a skilled SPY in a coat (42-45); COVID-19 is a master of disguise (44), (46) and changes its appearance quickly (44); the virus’s skills (tricks) evolve (47); human immune system needs a spyware to detect the virus (50); the spyware is constantly upgrading (51); human immune response is constant surveillance of the territory (51-52) with the help of radars (49):

(42) *To survive and thrive, a virus must operate like a* ***spy*** *in enemy territory,* ***skilled*** *at passing its genetic material from cell to cell* ***without alerting******the host’s immune response*** (Stamataki, 2020c);

(43) *In Covid-19,* ***the enemy*** *is a tiny piece of genetic material* ***wearing a lipid coat and a protein crown*** (Stamataki, 2020а);

(44) *A successful* ***spy*** *must be a master of disguise, and so it is with viruses: if they want to evade recognition by immune cells, they must* ***change their protein coat frequently*** (Stamataki, 2020c);

(45) *The first job of a virus that* ***enters our bodies*** *is to* ***invade*** *target cells so that it can* ***comfortably remove its coat*** *and deploy its RNA* (Stamataki, 2020а);

(46) *That was how Coronavirus (Covid-19)* ***stole******into our lives*** *virtually* ***undetected*** *and throwing the entire world into panic and a frenzy to find a cure and a vaccine.* (COCA, 2020);

(47) *Viruses have evolved to* ***trick, bypass and evade*** *these defences. Our immune systems have, in turn, learned to* ***recognize and deter*** *these virus* ***stealth tactics***(Stamataki, 2020а);

(48) *Sars-Cov-2 is expert at hopping from person to person, and in some people, it achieves* ***a stealthy existence*** *with mild or no symptoms* (Stamataki, 2020a);

(49) *The mutations that allow viruses* ***to fly under the radar*** *fall somewhere in between* (Stamataki, 2020c);

(50) *It should be increasingly clear that to end the pandemic and keep Covid-19 outbreaks to a minimum, we need to seriously* ***upgrade our spyware*** (Stamataki, 2020c);

(51) *We need* ***surveillance*** *teams of epidemiologists that* ***decipher patterns*** *of viral spread and molecular virologists* ***to track virus******evolution*** *so we can update our* ***defences*** (Stamataki, 2020c);

(52) <…> *passive disease* ***surveillance*** *may be an important part of the next phase of the pandemic* (Molteni, 2020b).

One of the leading roles the coronavirus takes on is that of a CRIMINAL. The criminal is especially dangerous, affecting not only the health and lives of people but also all the spheres of their existence, namely economy, and even elections (56). A brief look at some excerpts demonstrates that coronavirus has different names connected with the domain of CRIME: ‘culprit’, ‘physical assailant’, and ‘mugger’ (53-54). The source domain is *extended* by emphasising the global scale of the danger (55), (57) and by adding the element of the ‘coronavirus family’ (53):

(53) ***The culprit****, they say, is a virus never seen before in humans; a newly discovered member of* ***the coronavirus family****…* (Molteni, 2020a);

(54) *If this virus were* ***a physical assailant****, an unexpected and* ***invisible mugger****, which I can tell you from personal experience it is, then this is the moment when we have begun together* ***to wrestle it to the floor*** (Shropshire Star, 2020);

(55) <…> *it* *has* ***infected*** *millions of Americans and* ***killed*** *125,000, while causing the worst economic crisis since the Great Depression* (Zumbrun, 2020);

(56) *COVID-19* ***has sabotaged the usual election-year registration drives*** *that bring millions of new voters into the electorate, which could disadvantage Democrats who traditionally benefit from younger voters* (The Conversation, 2020);

(57) *If we all do our part, this little virus* ***holding the world to ransom*** *won’t stand a chance* (Stamataki, 2020a).

Despite all the crimes the virus has committed and all the evil it has caused the political leaders are not ready to put up with it. They are going to ‘wrestle it to the floor’ (54) and to take every possible measure to suppress the disease and at the same time re-start the economy:

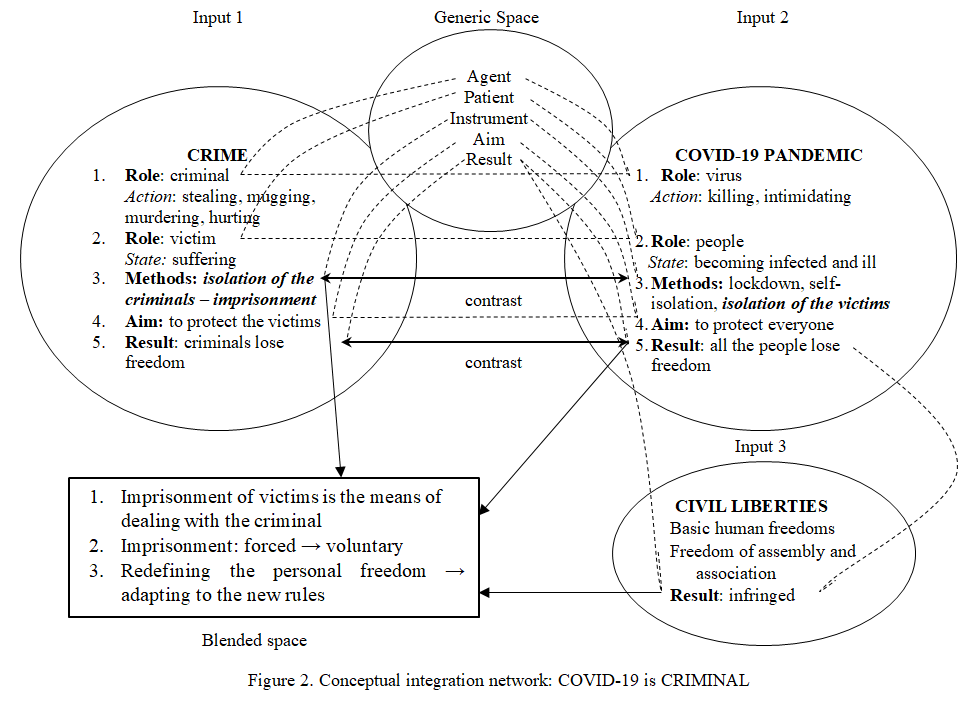
(58) *Now* ***coronavirus will not stop our mission*** *to level-up, to unite and to unleash the potential of this country* (GOV.UK, 2020g).

This certainly gives hope to people and evokes a positive attitude towards the government policy in the pandemic situation.

The logical outcome of dealing with the criminal is taking them to prison. Though during the COVID-19 pandemic, not the criminal but the victims are imprisoned. So, the appropriateness of the metaphoric correlation COVID-19 IS CRIMINAL is *questioned* in the context of introducing the preventative measures which lead to the loss of personal freedom. The emergence of the new connotations can be traced by means of modelling the *multiple-scope* conceptual integration model (see **Fig. 2**). In multiple-scope blends several inputs are projected either in parallel, or successively into intermediate blends, which themselves serve as inputs to further blends (see Fauconnier, 2002, p. 279, 283).

In the network input 1 is structured by the domain of CRIME and input 2 – by the domain of COVID-19 PANDEMIC. The two inputs share the common structure, represented in the generic space, i.e. ‘people dealing with the criminal’. The dotted lines in the network show the cross-space correspondences between the input spaces, whereas solid lines (arrows) show the contrastive elements due to which the emergent properties, which are represented in the blended space, appear. The emergent element in the blend ‘Imprisonment of victims is the means of dealing with the criminal’ appears due to the involvement of the domain of CIVIL LIBERTIES (input 3). “The measures taken to combat the pandemic caused by the Covid-19 virus have limited our freedoms and prevented us from doing many of the things we enjoy, such as meeting our friends and family to have dinner or a drink together, traveling, going to parties, celebrating birthdays and weddings, and even attending funerals” (see Santos, 2021).

The basic freedoms are being infringed in the time of the coronavirus pandemic, and the very idea of personal freedom is getting redefined in media discourse (17-18), (59-60). As Santos mentions, “if we continue to define freedom as everyone doing what they want, the most vulnerable will continue to suffer through this pandemic – because not only is their health at stake but so are their liberties. As a society, it is our moral responsibility to change the “be free” narrative to “let’s become free” (see Santos, 2021).

****

**Fig. 2.** Conceptual integration network: COVID-19 is CRIMINAL

In this context the concept of IMPRISONMENT reveals two properties: voluntary, i.e., according to the victim’s free choice to self-isolate, and forced, i.e., imposed by the new rules which are meant to be complied with (17-18), (61):

(59) *But also we care about* ***the restoration of social freedom and economic freedom too****… For now, we are working together to stay home. We are* ***impinging on the freedom of all****, for the safety of all* (GOV.UK, 2020h);

(60) *Importantly, it is true to say that moving beyond COVID will be a gradual process…* ***not a single-leap to freedom*** (GOV.UK, 2020a);

(61) *And though huge numbers are* ***complying*** *- and I thank you all - the time has now come for us all to do more* (GOV.UK, 2020a).

The human thought created other meanings in terms of metaphorical presentation of social roles, linking the leading role of a teacher to the role of the coronavirus in medical advance and human development. The metaphoric correlation COVID-19 IS TEACHER shifts the focus from mobilising military metaphors to enlightenment, guidance, and assistance. In this respect COVID-19 obtains the following conceptual properties: harsh and strict teacher who surely does not appeal to learners. On the other hand, its teaching methods correspond to the demands of the pandemic times, which require self-discipline and make students learn and react to the emergency quickly (62-63):

(62) *If this virus has* ***taught*** *us one thing, it is the absolute importance of being* ***flexible*** *and adaptable when we have to be* (GOV.UK, 2020h);

(63) *And* ***we are learning the whole time****. With each local outbreak, we see what works well and what not so well, so that we do better next time* (GOV.UK, 2020i).

The virus taught us that no matter how prototypical a war on a disease is, there is no conventional knowledge and standardised course of action on how to cope with its challenges. That is why communities have to ‘learn the whole time’ (63) to gain necessary knowledge and experience to deal with the unexpected in the future as it is presented in **Table 2**:

**Table 2.** COVID-19 IS A TEACHER: cross-domain correspondences

|  |  |
| --- | --- |
| **Source Domain: PERSON (TEACHER)** | **Target Domain: COVID-19** |
| teaching | gaining new knowledge on medical solutions and strategies |
| knowledge and skills | flexibility, adaptability, decisiveness |
| Students | people |
| Classroom | local outbreak |
| School | planet |
| teacher qualities: strict | severity of the virus |
| life-long learning | necessity of altering medical decisions |

**Conclusions**

The metaphoric interpretation of COVID-19 in cross-cultural and cross-language perspective reveals the influence of ideology and mentality on shaping reality. The study is focused on the conceptual metaphors that are used to present COVID-19 in the English media discourse. The corpus of data consisting of 212 metaphorical lexical units taken from COCA and media resources in English has been analysed. The conceptual metaphors COVID-19 PANDEMIC IS WAR and COVID-19 IS PERSON have been singled out as the most productive ones. The key examples of the above mentioned metaphors (1-63) have been discussed in this research.

With Covid-19 on the rise, some conceptual metaphors emerge in the media discourse, which convey both positive and negative meanings. The metaphoric correlations between the domains of COVID-19 and WAR reveal mostly negative connotations of the phenomenon, referring to it as a global threat that has to be tackled. The countries in focus are ready for fierce fight to protect their people and to defeat the enemy. Personification of the virus gives a range of its possible interpretations revealing its characteristics. The range of the metaphor includes GUEST, INTRUDER, ENEMY, CRIMINAL, SPY, TEACHER. The choice of a person provides a very specific way of thinking about the phenomenon of COVID-19 as well as a way of acting toward it. Conceptualising of the virus as GUEST and ENEMY with further elaborations of the source domains reveals negative connotations and evokes hostile and stressful emotions to keep people alert and in suspense. The source domain TEACHER evokes positive connotations of the coronavirus phenomenon and focuses on self-development, self-discipline, and assistance to others in difficult times.

Being novel and urgent in modern media discourse, the concept of COVID-19 calls for further analysis in terms of its metaphoric expression in different languages to reveal other conceptual properties of the disease that caused so much fear and struggle in the world.

**References**

Bates, B. (2020). The (in)appropriateness of the WAR metaphor in response to SARS-CoV-2: A rapid analysis of Donald J. Trump's rhetoric. *Frontiers in communication*, *5*, 50.  [http://dx.doi. org/10.3389/fcomm.2020.00050](https://doi.org/10.3389/fcomm.2020.00050)

Charteris-Black, J. (2004). Critical metaphor analysis. *Corpus approaches to critical metaphor analysis*. Palgrave Macmillan, London.  [http://dx.doi. org/10.1057/9780230000612\_12](https://doi.org/10.1057/9780230000612_12)

Charteris-Black, J. (2011). Metaphor in political discourse. *Politicians and rhetoric.* Palgrave Macmillan, London.  [http://dx.doi. org/10.1057/9780230319899\_2](https://doi.org/10.1057/9780230319899_2)

Chiang, W.-Y. & Duann R.-F. (2007). Conceptual metaphors for SARS: 'war' between whom? *Discourse and society, 18,* 579-602.  [http://dx.doi. org/10.1177/0957926507079631](https://doi.org/10.1177/0957926507079631)

Cienki, A. & Müller, C. (2008). Metaphor, gesture, and thought. In R.W. Gibbs, Jr. (Ed.), *The Cambridge handbook of metaphor and thought* (pp. 483-501). Cambridge University Press.  [http://dx.doi. org/10.1017/CBO9780511816802.029](https://psycnet.apa.org/doi/10.1017/CBO9780511816802.029)

CNBC (2020). World Health Organization declares the coronavirus outbreak a global pandemic. In *CNBC*, March 11. <https://www.cnbc.com/2020/03/11/who-declares-the-coronavirus-outbreak-a-global-pandemic.html>

COCA (2020). <https://www.english-corpora.org/corona/>

Conservatives (2020). Boris Johnson: If we keep going, we will beat coronavirus together. In *Conservatives*, April 27. <https://www.conservatives.com/news/coronavirus-five-tests-speech>

Fauconnier, G. & Turner, M. (1998). Conceptual integration networks. *Cognitive science, 22*(2), 133-187.

Fauconnier, G. & Turner, M. (2002). *The way we think: Conceptual blending and the mind’s hidden complexities.* N.Y.: Basic Books.

Flusberg, S.J., Matlock, T., & Thibodeau, P.H. (2018). War metaphors in public discourse. *Metaphor and symbol, 33*(1), 1-18.  [http://dx.doi. org/10.1080/10926488.2018.1407992](https://doi.org/10.1080/10926488.2018.1407992)

GOV.UK (2020a). Transport Secretary's statement on coronavirus (COVID-19): 9 May 2020. In *GOV.UK*, May 9. <https://www.gov.uk/government/speeches/transport-secretarys-statement-on-coronavirus-covid-19-9-may-2020>.

GOV.UK (2020b). Prime Minister's statement on coronavirus (COVID-19): 23 March 2020. In *GOV.UK*, March 23. <https://www.gov.uk/government/speeches/pm-address-to-the-nation-on-coronavirus-23-march-2020>

GOV.UK (2020c). Health and Social Care Secretary's statement on coronavirus (COVID-19): 18 June 2020. In *GOV.UK*, June 18. <https://www.gov.uk/government/speeches/health-and-social-care-secretarys-statement-on-coronavirus-covid-19-18-june-2020>

GOV.UK (2020d). Prime Minister's statement on coronavirus (COVID-19): 10 May 2020. In *GOV.UK*, May 10. <https://www.gov.uk/government/speeches/pm-address-to-the-nation-on-coronavirus-10-may-2020>

GOV.UK (2020e). Chancellor's statement on coronavirus (COVID-19): 26 March 2020. In *GOV.UK*, March 26. <https://www.gov.uk/government/speeches/chancellor-outlines-new-coronavirus-support-measures-for-the-self-employed>

GOV.UK (2020f). Prime Minister's statement on coronavirus (COVID-19): 22 March 2020. In *GOV.UK*, March 22. <https://www.gov.uk/government/speeches/pm-statement-on-coronavirus-22-march-2020>

GOV.UK (2020g). Communities Secretary's statement on coronavirus (COVID-19): 6 May 2020. In *GOV.UK*, May 6. <https://www.gov.uk/government/speeches/communities-secretarys-statement-on-coronavirus-covid-19-6-may-2020>

GOV.UK (2020h). Education Secretary's statement on coronavirus (COVID-19): 19 June 2020. In *GOV.UK*, June 19. <https://www.gov.uk/government/speeches/education-secretarys-statement-on-coronavirus-covid-19-19-june-2020>

GOV.UK (2020i). Prime Minister's statement on coronavirus (COVID-19): 3 July 2020. In *GOV.UK*, July 3. <https://www.gov.uk/government/speeches/prime-ministers-statement-on-coronavirus-covid-19-3-july-2020>

GOV.UK (2020j). Prime Minister's statement on coronavirus (COVID-19): 16 June 2020. In *GOV.UK*, June 16. <https://www.gov.uk/government/speeches/pm-statement-at-the-coronavirus-press-conference-16-june-2020>

GOV.UK (2020k). Prime Minister's statement on coronavirus (COVID-19): 23 March 2020. In *GOV.UK*, March 23. <https://www.gov.uk/government/speeches/pm-address-to-the-nation-on-coronavirus-23-march-2020>

Heffernan, V. (2020). Metaphors matter in a time of pandemic. In *Wired*, March 19. <https://www.wired.com/story/metaphors-matter-in-pandemic-coronavirus/>

Hudson, C. (2008). Singapore at war: SARS and its metaphors. In J.H. Powers & X. Xiao (Eds.), *The social construction of SARS: Studies of a health communication crisis [Discourse approaches to politics, society and culture 30]* (pp.163-179).Hong Kong Baptist University.  [http://dx.doi. org/10.1075/dapsac.30.13hud](https://doi.org/10.1075/dapsac.30.13hud)

Koller, V. (2005). Critical discourse analysis and social cognition: Evidence from business media discourse. *Discourse and society, 16,* 199-224.  [http://dx.doi. org/10.1177/0957926505049621](https://doi.org/10.1177/0957926505049621)

Kövecses, Z. (2010a). Metaphor and culture. *Acta universitatis sapientiae: Philologica, 2,*197-220.

Kövecses, Z. (2010b). *Metaphor. A practical introduction*. Oxford University Press.

Kövecses Z. (2015a). Metaphor and emergentism. In B. MacWhinney & W. O'Grady (Eds.), *The handbook of language emergence* (pp. 147-162). John Wiley & Sons.

Kövecses, Z. (2015b). *Where metaphors come from: Reconsidering context in metaphor.* Oxford: Oxford University Press.

Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and thought* (pp. 202-251). Cambridge University Press.  [http://dx.doi. org/10.1017/CBO9781139173865.013](https://doi.org/10.1017/CBO9781139173865.013)

Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.

Leach, M. (2020). Coronavirus: When a metaphor is more than a metaphor. In *National catholic reporter*, May 12. <https://www.ncronline.org/news/coronavirus/soul-seeing/coronavirus-when-metaphor-more-metaphor>

Li, Z. & Long, T. (2010). *The meaning management challenge: Making sense of health, illness and disease.* Oxford: Inter-Disciplinary Press.

Miller, D. & Dinan, W. (2009). Journalism, public relations and spin. In K. Wahl-Jorgense & T. Hanitzsch (Eds.), *Handbook of journalism studies* (pp. 250-264). New York: Routledge.

Mirghani, S. (2011). The war on piracy: Analyzing the discursive battles of corporate and government-sponsored anti-piracy media campaigns. *Critical studies in media communication, 28*(2), 133-134.  [http://dx.doi. org/10.1080/15295036.2010.514933](https://doi.org/10.1080/15295036.2010.514933)

Molteni, M. (2020a). China's swift ID of a new virus is a win for public health. In *Wired*, January 13. <https://www.wired.com/story/chinas-swift-id-of-a-new-virus-is-a-win-for-public-health/>

Molteni, M. (2020b).Microbe mappers are tracking Covid-19's invisible traces. In *Wired*, April 29, 2020. <https://www.wired.com/story/microbe-mappers-are-tracking-covid-19s-invisible-traces/>

Nerlich, B. & Koteyko, N. (2011). Crying wolf? Biosecurity and metacommunication in the context of the 2009 swine flu pandemic. *Health and place, 18*, 710-717. [http://dx.doi. org/10.1016/j.healthplace.2011.02.008](https://doi.org/10.1016/j.healthplace.2011.02.008)

Nie J.B., et al. (2016). Healing without waging war: Beyond military metaphors in medicine and HIV cure research. *American journal of bioethics, 16*(10), 3-11. http://dx.doi. org/10.1080/15265161.2016.1214305

Oswick, C., Grant, D. & Oswick, R. (2020). Categories, crossroads, control, connectedness, continuity, and change: A metaphorical exploration of COVID-19. *The journal of applied behavioral science*, 56.  [http://dx.doi. org/10.1177/0021886320936257](https://doi.org/10.1177/0021886320936257)

Pence, M. (2020). There isn’t a coronavirus ‘second wave’. In *The Wall Street journal*, June 16. <https://www.wsj.com/articles/there-isnt-a-coronavirus-second-wave-11592327890>

Philo, G. (2008). Active audiences and the construction of public knowledge. *Journalism studies, 9*(4), 535-544.  [http://dx.doi. org/10.1080/14616700802114217](https://doi.org/10.1080/14616700802114217)

QFM96 (2020). New threats emerge in outbreak while China voices optimism. In *QFM96*, 2020. <https://qfm96.com/news/030030-new-threats-emerge-in-outbreak-while-china-voices-optimism/>

Ribeiro, B. et al. (2018). Media coverage of the Zika crisis in Brazil: The construction of a ‘war’ frame that masked social and gender inequalities. *Social science and medicine, 200*, 137–144. [http://dx.doi. org/10.1016/j.socscimed.2018.01.023](https://doi.org/10.1016/j.socscimed.2018.01.023)

Richmond Times Dispatch (2020). Biden on Trump. In *Richmond times dispatch*, July 11. <https://richmond.com/news/national/govt-and-politics/biden-on-trump/article_b4ed55b7-3ea4-55a4-be47-17be875190be.html>

Sánchez Nicolás, E. (2020). Borrell: Coronavirus has 'blown up' global order. In *EUOBSERVER*, May 8. <https://euobserver.com/coronavirus/148296>

Santos, B. (2021). (Re)defining freedom: Covid-19. In *Insights*, April 29. <https://www.ie.edu/insights/articles/redefining-freedom-covid-19/>

Segal, J.Z. (1997). Public discourse and public policy: Some ways that metaphor constrains health (care). *Journal of medical humanities, 18,* 217–231. http://dx.doi. org/10.1023/A:1025645904106

Semino, E. (2017). Corpus linguistics and metaphor. In Dancygier B. (Ed.), *The Cambridge handbook of cognitive linguistics* (pp. 463-476). Cambridge: Cambridge University Press.

Shropshire Star (2020). PM: Coronavirus like unexpected and invisible mugger. In *Shropshire star*, April 27. <https://www.shropshirestar.com/news/uk-news/2020/04/27/pm-coronavirus-like-unexpected-and-invisible-mugger/>

Sontag, S. (1989). *Aids and its metaphors*. New York: Farrar, Straus and Giroux.

Stamataki, Z. (2020a). Here’s how your body gains immunity to coronavirus. In *The Guardian*, April 10. <https://www.theguardian.com/commentisfree/2020/apr/10/heres-how-body-gains-immunity-coronavirus>

Stamataki, Z. (2020b). Is anyone safe from Covid-19? This is what we know so far about immunity. In *The Guardian*, August 19. <https://www.theguardian.com/commentisfree/2020/aug/19/covid-19-immunity-natural-defences-eliminate-virus-data>

Stamataki, Z. (2020c). Why is coronavirus so frighteningly successful? In *The Guardian*, April 20. <https://www.theguardian.com/commentisfree/2020/apr/20/coronavirus-master-of-disguise-scientists-viruses-covid-19#_=_>

The Conversation (2020). Trump is struggling against two invisible enemies: the coronavirus and Joe Biden. In *The Conversation*, June 28. <https://theconversation.com/trump-is-struggling-against-two-invisible-enemies-the-coronavirus-and-joe-biden-139667>

The Daily Progress (2020). Biden on Trump. In *The Daily progress*, July 11. <https://dailyprogress.com/news/national/govt-and-politics/biden-on-trump/article_32ca214f-d7d3-55b6-941a-af8cc8b3f1bd.html>

Thomas, P. (2020). Trump says he asked for coronavirus testing to be slowed down because there were so many cases. In *Independent*, June 21. <https://www.independent.co.uk/news/world/americas/us-election/trump-rally-speech-tonight-coronavirus-testing-tulsa-covid-19-a9577576.html>

Ungar, S. (2008). Global bird flu communication*. Science communication, 29*, 472 - 497.  [http://dx.doi. org/10.1177%2F1075547008316219](https://doi.org/10.1177%2F1075547008316219)

Van Dijk, T. (2002). Discourse, ideology and context. *Journal of Asian economics, 35*, 11-40.  [http://dx.doi. org/10.1515/flin.2001.35.1-2.11](https://doi.org/10.1515/flin.2001.35.1-2.11)

World Health Organization (2020). Novel coronavirus (2019-nCoV) situation report – 22. <https://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/>

Zumbrun, J. (2020). Coronavirus slump is worst since great depression. Will it be as painful? In *The Wall Street journal*, May 10. <https://www.wsj.com/articles/coronavirus-slump-is-worst-since-great-depression-will-it-be-as-painful-11589115601>

Date of Submission

2021, November