

**TILTM 2020****Topical Issues of Linguistics and Teaching Methods in Business and Professional Communication****VIRUS IMAGE IN THE CHINESE MEDIA: COMPARATIVE ANALYSIS OF CORONAVIRUS AND EBOLA METAPHORIC REPRESENTATION**

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***Abstract***

This article presents the results of a comparative analysis of the representation of the 2014 Ebola virus outbreak and the 2020 coronavirus epidemic in the Chinese media. Adopting a cognitive-discursive approach, the author carries out a content-analysis of two DIY-corpora of media texts, after which the results are supplemented by an analysis of conceptual metaphorical models with the VIRUS target domain in the headlines and leads of the news reports. The results suggest serious differences in the representation of the image of the virus, indicating a significant dependence of metaphorical models on extralinguistic factors. The image of Ebola appears as a dangerous phenomenon. The authors of media messages describing the coronavirus avoid information about the causes and consequences of the virus, the image of the virus is not supplied with a large number of estimative adjectives. The analysis of metaphorical models demonstrated the dominance of the WAR metaphor in both corpora, but the entailments of this metaphor were very different. In the case of Ebola, we encounter a large number of enemy attack metaphors, where health workers are war heroes. Texts about the coronavirus draws the image of public protecting against an external enemy. In general, the coronavirus appears to be dangerous but not capable of causing catastrophic consequences. The Chinese media paint the image of the coronavirus as an external enemy, which attacked the country out of the blue. At the same time, the consequences of this attack are minimized by all means.

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## 1. Introduction

The outbreak of the coronavirus epidemic (2019-nCoV) in the capital of China's Hubei province can be considered as one of the most significant international events of early 2020. At the same time, the virus spreads not only to those who are in its immediate vicinity, but through the mass media it "infects" many people around the world with a sense of concern and torpidity. Thus, in spite of the fact that as of February 1, 2020 no cases of coronavirus infection were revealed in Russia, numerous surveys showed that more than half of the citizens of the country were seriously afraid of the disease. As sometimes it is impossible to protect oneself from an invisible deadly disease, it is also impossible to protect one's mind from information about it.

By reporting on an epidemic, the media creates an image of the disease, thus influencing their audience in a certain way. The image of the virus is formed in the consciousness, it correlates with already existing knowledge structures and acquires new conceptual signs through them, and as a result the image of the disease is categorized in mind. It is well-known that the correlation of a phenomenon with a certain category in the consciousness in many respects forms the attitude to this phenomenon.

When we encounter a large-scale information wave regarding mass disease, the image of a pandemic is extremely important, because the attitude towards the disease largely determines its course and the speed of recovery.

## 2. Problem Statement

There are many approaches to identifying the image of an event in media texts, but the most relevant to the objective of our study is a cognitive-discursive approach. As Popova and Sternin (2007) note, "a word is a means of access to the conceptual knowledge" (p. 79). At the same time, it is known that the word "becomes alive" in discourse, which means that conceptual knowledge is manifested mainly through discursive practices. The cognitive-discursive approach makes it possible to combine the study of ideologically determined discourse models with the form of their conceptualization (Hart, 2011; Hart & Lukes, 2007; Wodak, 2006). Wodak stresses the importance of cognitive research "as a mediator between discourse and society, since the processes of production and understanding of a text depend on cognitive models and frameworks that are associated with social stereotypes and prejudices in the consciousness of the recipient of information" (p. 182).

A fundamental theoretical basis for this analysis was the combination of qualitative (Hsieh and Shannon, 2005) and quantitative (Neuendorf, 2017) content analysis and techniques to investigate conceptual metaphors (Kövecses, 2016). A computer-assisted content analysis of a large corpora of texts to make up lists of the most frequent words and concordances paves the way for identifying the main essential features of the object under study and lays the groundwork for understanding metaphorical transfers. Actually it is a well-known and widely spread research technique (Kryshtaleva, 2019; Patterson, 2018;). According to the Conceptual Metaphor Theory (Lakoff, 2008; Lakoff & Johnson, 1980; Xu et al., 2016), metaphorical mapping is comprehension of conceptual peculiarities of one sphere of knowledge (target domain) through another (source domain). Usually, this conceptual understanding is based on the correlation of human experience in these two spheres. Qualitative content analysis methods to explore

conceptual metaphors are an applicable approach for exploring different discourses (Agbo et al., 2018; Brugman et al., 2019; Chan & Nyback, 2015; Kimmel, 2009).

### 3. Research Questions

This paper uses a comparative approach, it examined the images of two viruses: Ebola, which peaked in West Africa in 2014, and Coronavirus, whose epicenter was the central provinces of China.

Such an approach will make it possible not only to reveal the peculiarities of the virus's metaphorical image in the media, but also to correlate these peculiarities with different socio-political situations. Such a comparison makes it possible to include in the comparative analysis the important extra-linguistic factor, namely the "involvement" of the collective author of texts in the event whose image is being formed. In other words, we compare the image of a virus "outside" and a virus "inside".

The main hypothesis of the study is that the representation of essentially similar events highly depends on extra-linguistic factors. Through differences in the metaphorical images of Ebola and the coronavirus, it will become apparent how much pragmatic characteristics of a statement influence the content of a speech message in the media.

### 4. Purpose of the Study

The object of this study was a mass-media discourse in Chinese, with metaphorical images of viruses, namely Ebola and coronavirus, being in its focus.

The main objective of this work is to identify the metaphorical images of the two viruses in the Chinese media, compare them, and define the dependence of mass diseases' representation on extra-linguistic factors.

### 5. Research Methods

The material of the study was the two DIY-text corpora: coronavirus and Ebola media kits. The Ebola corpus included all media coverage (350 articles of various sizes) published in the Chinese segment of the Internet from January to December 2014 totalling 156,100 words (162,230 characters without spaces). The Coronavirus corpus represents certain news reports (302 articles of various sizes) about the coronavirus totalling 157,149 words (163,212 characters without spaces), which were published from January 9 to February 9, 2020. When compiling the corpora, we focused on achieving the same volume of the corpora in hieroglyphs, rather than the equality of sizes of individual articles.

The research method consisted of several consecutive steps:

1. A quantitative content analysis conducted in the AntConc program (Anthony, 2013). We made a list of the most common significant words and collocations for the keyword 病毒 ("virus").

2. A qualitative content analysis breaking down to analyzing keyword collocations and identifying the most characteristic metaphorical models of the virus image.

4. A linguistic-cognitive analysis of media message headers and leads conducted to identify metaphorical models of the virus image.

In my opinion, such a sequence of practical tasks fully meets the requirements of a discursive-cognitive research and makes it possible not only to gain an understanding of the content side of the virus image in mass media discourse, but also to reveal the deep differences in cognitive modelling of this image in the consciousness of a mass addressee. By conducting the research on the text-to-cognitive metaphorical models principle, we move from "semantics to cognitive, from content to understanding".

## 6. Findings

Before presenting the results, it is necessary to note that while having approximately the same volume, the two investigated corpora differ significantly in the number of articles that were included in them. A simple calculation shows that the average volume of news about Ebola and the coronavirus is 446 and 540 words respectively. Undoubtedly, this difference can be a statistical error, however, in my opinion, the difference can also be caused by differences in the nature of news reports: texts of the informational nature in mass media are usually more concise and less emotionally coloured than those of analytical nature.

The quantitative content analysis revealed differences in the image of the viruses in the corpora as follows:

1. Difference in the frequency of vocabulary for the transmission of cause-effect relations. For example, for the corpus "Ebola" the words 由于 (because of), 因为 (because of) and 结果 (because of) were met 70, 66 and 50 times respectively, and in the corpus "coronavirus" only 27, 34 and 24 times.

2. Difference in the frequency of lexical units of the semantic field "consequences". The words 导致 (lead to), 造成 (arise, shape) in the "Ebola" corpus were met 73 and 64 times, and in the "coronavirus" corpus - 27 and 9 times, respectively.

3. Dramatic difference in the frequency of lexical units of the semantic field "danger". The words 风险 (danger), 风险 (risk) were met 38 and 79 times in the "Ebola" corpus, and 10 and 8 times in the "coronavirus" corpus.

4. Significant difference in the frequency of lexical units of the semantic field "death". The word 死亡 (death) together with derivatives (e.g. 死亡率 - mortality) of the "Ebola" corpus was met 222 times, and in the "coronavirus" corpus – 49 times. It should be noted that in the coronavirus corpus, the counted word 例 (case) is very frequent (322 times) and is used for representing death cases.

5. Stark difference in the frequency of lexical units of the semantic field "control, protection". The words 防控 (prophylaxis and control), 预防 (prophylaxis and prevention), 防护 (protect) in the Ebola corpus were met 60, 71 and 49 times, and in the Coronavirus corpus – 220, 153 and 84 times respectively.

The analysis of collocations using a special function of the AntConc program was the next stage of the practical part of the study (Anthony et al. 2018). In this study, a collocation is understood not as a stable word combination with the lexical units in question, but as any word within a certain span to the left and right of the KWIC.

The analysis of collocations of the keyword "virus" in both cases showed the following results:

1. Absence of collocations with word 死 (death) in the Coronavirus corpus, and 51 such collocations in the other corpus.

2. Dramatic difference in collocations with the word 爆发 (to burst, to burst), in the Ebola corpus - 79, in the Coronavirus corpus - 10.

3. Large number of collocations with other diseases (SARS - 52, 肺炎 - pneumonia - 40) in the Coronavirus corpus, and the absence of such in the corpus of Ebola.

4. Absence of collocations with evaluative adjectives (强 - powerful, strong, 严重 - serious) in the Coronavirus corpus and presence of them in the Ebola corpus, 3 and 9 times.

The third and final stage was the analysis of conceptual metaphorical models. The materials for this research were the headlines and leads of news reports, i.e. the first paragraph of the news, usually containing the gist. In our analysis, we relied on the identification of metaphors using the MIP (Metaphor Identification Procedure) (Nacey et al., 2019; Pragglejaz Group, 2007), which involves comparing the contextual and basic vocabulary meanings of each lexical unit to identify conceptual metaphorical mappings.

A total of 154 metaphors in the Ebola corpus and 171 metaphorical models in the Coronavirus corpus were identified. Taking into account the difference in the number of articles, we can conclude that the metaphorical description of the coronavirus is slightly higher, 44% in the Ebola corpus vs 57% in the Coronavirus corpus. At the same time, a more important indicator is not the number of metaphors but the distribution of metaphors through source domain and metaphorical entailments, which, according to Kövecses (2005), "imply additional meanings within the metaphorical transfer" (p. 7).

So, the most frequent model for both corpuses was VIRUS is MILITARY ENEMY, and its variation FIGHT AGAINST VIRUS is WAR: in the Ebola corpus it was met 121 times, constituting 78.5%, and in the Coronavirus corpus - 128 times, accounting for 74.8% of all metaphors.

Although the metaphorical models in both corpora are similar in general, we see a big difference in metaphorical entailments, presented in Table 01.

**Table 01.** Entailments of the WAR metaphor

Entailment	Ebola (nbr/%)	Coronavirus (nbr/%)
To fight the virus is to protect against the enemy	23 / 19%	58 / 45.3%
To fight the virus is to attack the enemy	49 / 40.5%	35 / 27.3%
Medical workers – war heroes	38 / 31.4 %	16 / 12.5%
Fighting the virus is a common war	0	9 / 7%
Contamination region is a battlefield	5/ 4.1%	10 / 7.8 %
Patients are war victims	6 / 4.99%	0

We can see a key difference in the essence of metaphorical mappings in representing the two viruses. The Ebola virus appears as an offensive war, where heroes of the war are health workers and the patients are victims. At the same time, the fight against the coronavirus is mainly a defensive war, having the public struggling and no victims, with GZ in the city of Wuhan. It should be noted that in the Coronavirus corpus,

the distribution of metaphorical models by the time of publication of the news is interesting: defensive metaphors dominated in January, giving the way to offensive war models in early February.

In addition to the metaphorical model with the WAR source domain, other metaphors revealed were those of a natural disaster, an evil animal, and fear. However, their distribution is statistically insignificant and does not allow identifying any inertial patterns.

## 7. Conclusion

The image of the coronavirus in the Chinese media is more neutral. It is the enemy after all, but it is less terrible, less dangerous, not so deadly, and according to the mass media probably will not bring serious consequences. The fight against the coronavirus in this case requires the mobilization of the entire nation, evoking the image of protection against an external enemy, which is very similar to the traditional Chinese Response to External Challenges model.

As we can see, given the similar nature of the described events, extra-linguistic factors, namely the involvement of the collective author of media messages in the described events, plays a significant role in creating the ultimate image of both events. The description of the virus "from the outside", i.e., representation of Ebola, appears to be more unbiased; this very image of the disease is largely consistent with the description of epidemics in the media of other countries (Joffe & Haarhoff, 2002; Trčková, 2015; Washer, 2004). The virus "inside" the country is characterized by a more balanced assessment by journalists, and the image of the coronavirus is used as one of the means to combat it.

In my opinion, the consistent attitude of the Chinese media to the representation of the coronavirus and the portrayal of the disease as "dangerous but unable to lead to terrible consequences for the country" have largely helped prevent panic among the population while enforcing all the precautions prescribed by the authorities. In the Chinese case, the representation of the coronavirus was part of the government's response to the epidemic, and the image of the disease was linked to specific administrative measures, all of which helped the country cope with the difficulties quickly and effectively.

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