SEMANTIC PROSODY OF THE LEMMA *VACCINE* IN THE MEDIA TEXTS

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This paper discusses the results of the corpus-based analysis of the semantic prosody of collocations with VACCINE in the broadsheet 'The Guardian'. The corpus has been processed with the help of Sketch Engine. Text passages containing collocations with VACCINE have been interpreted in order to state the prosody mode of the collocation in the context. The study mostly pays attention to the nouns modified by VACCINE as most frequently used in the media texts. The dictionary definition of VACCINE defines it as a word with positive semantic prosody. The discourse analysis demonstrates that collocations containing the lemma VACCINE can have positive, negative or neutral semantic colouring, which depends on the contextual meaning of the analyzed passage and which is also based on the semantic prosody mode of other words in the passage, which actually designates and presupposes the mode of the collocations in question. The nouns supply, safety, mask, uptake, access, protection, production, certification used in 'The Guardian' articles, having positive semantic prosody in the pattern noun + VACCINE, in general create a positive metaphorical image and defense from Covid-19. However, the nouns hesitancy, misinformation, availability and skepticism possessing negative semantic prosody, are mostly used to describe people's unwillingness to get vaccinated and their doubts about the effectiveness of the procedure. Collocations with type, mechanism, distribution, usage and VACCINE have a neutral semantic prosody, which shows that such collocations are used in text passages in the surrounding of neither positive nor negative words and the whole passage serves as a statement of some facts without being evaluated.

Key words: *semantic prosody, corpus analysis, collocation, VACCINE, media discourse, The Guardian.*

Сіваєва О. С.

Семантична просодія леми VACCINE у медіатекстах

Статтю присвячено корпусному аналізу семантичної просодії словосполучень з VACCINE у британській суспільно-політичній газеті "The Guardian". Для проведення дослідження створено та проаналізовано за допомогою комп'ютерної програми Sketch Engine корпуси текстів, до складу яких входять словосполучення з VACCINE. Розвідка в основному базується на корпусному аналізі колокацій noun+VACCINE як найчастотніше вживаної групи словосполучень у медіатекстах. У словнику лексема VACCINE пояснюється як слово, яке має позитивну семантичну просодію. Дискурс-аналіз отриманих даних демонструє, що словосполучення з VACCINE можуть отримати позитивне, негативне і нейтральне семантичне забарвлення, яке, головним чином, залежить від контекстного значення аналізованого уривка, а також ґрунтується на семантичній просодії інших слів в уривку, що фактично позначає та передбачає тип просодії відповідних колокацій. Іменники supply, safety, mask, uptake, access, protection, production, certification, які вживаються у газеті "The Guardian" і мають позитивну семантичну просодію, описують VACCINE як метафоричний образ захисту від Covid-19. Однак іменники hesitancy, misinformation, availability та skepticism, маючи негативне семантичне забарвлення, здебільшого використовуються для опису страху та невпевненості людей щодо ефективності вакцини. Колокації з type, mechanism, distribution, usage та VACCINE, що мають нейтральну семантичну просодію, яка демонструє, що такі колокації вживаються у текстових уривках в оточенні ні позитивних, ні негативних слів, а весь уривок служить констатацією деяких фактів без оцінки.

Ключові слова: *семантична просодія, корпусний аналіз, колокація, VACCINE, медійний дискурс, The Guardian.*

Introduction

The issue of vaccination has been widely discussed in various fields recently and it has become the object of interdisciplinary studies (Biller-Andorno & Germani, 2021; Wilson & Wiysonge, 2020) connected with vaccination and the media, demonstrating the concern of researchers working in the health field how the media encourage / discourage people to get vaccinated. It is pointed out that *people's willingness to get immunized against*

coronavirus disease 2019 (COVID-19) continues to shift (Raza & Lantos, 2021). Vaccine hesitancy has always been rather high among some social groups, but COVID-19 vaccination campaign is on the rise as anti-vaccination supporters are active in the digital media (Biller-Andorno & Germani, 2021) circulating misinformation about vaccine safety online, speculating about rapid development and deployment of a vaccine as well as side effects, anaphylaxis, or the duration of immunity, often inserting debunked disinformation into true one (Raza & Lantos, 2021). The role of the media proves to be rather influential during the pandemic time and therefore the aim of the article is to analyse how the issue of vaccination is discursively reflected in the Guardian articles. The material of the research is the corpus of the media texts which has been processed with the help of Sketch Engine (Sketch Engine). Collocations with the lemma *VACCINE* have been studied from the point of view of semantic prosody. The contextual meaning of passages with the lemma *VACCINE* has been taken into consideration for further division of the collocations into positive, negative or neutral.

Methods

The methodology of the research contains corpus analysis, which allows to single out collocations with VACCINE in the corpus; discourse analysis, which helps to interpret semantic prosody of collocations with *VACCINE* in the media texts and to explain meanings of text passages containing collocations with *VACCINE* as well as to investigate and create metaphorical meanings established in the studied text passages.

Theoretical background

Semantic prosody and corpus linguistics have been studied by many linguists. Louw interprets it as *a consistent aura of meaning with which a form is imbued by its collocates* (Louw, 2000), and he also defines it as the following: *"A semantic prosody refers to a form of meaning which is established through the proximity of a consistent series of collocates, often characterizable as positive and negative, and whose primary function is the expression of the attitude of its speaker or writer towards some pragmatic situation"* (Louw, 2000, p. 57). According to the definition, semantic prosody designates whole collocates rather than the key word itself, and what is more significant, semantic prosody goes beyond a lexico-grammatical level aligning to both semantics and pragmatics. Sinclair (2000), who depicts semantic prosody from the pragmatic point of view, underlines that semantic prosody explicates reasons why a certain lexical item has been chosen instead of another. Stubbs (1996) denotes semantic prosody as words that *"occur in characteristic collocations,*

showing the associations and connotations they have and therefore the assumptions which they embody" (Stubbs, 1996, p. 135), in such a way underlining the relation between semantic prosody and collocations. Partington (2003) regards semantic prosody not only as *the spreading of connotative coloring more beyond strongly single boundaries*, but also mentions that context plays a significant role in determining semantic and expressive meaning of words (Partington, 2003, p. 68). Hunston and Thompson (2000) consider that semantic prosody embodies *speakers' and attitudes, feelings and stances about facts in communications* (Hunston & Thompson, 2000, p. 5). Semantic prosody can be classified as positive, negative, and neutral (Stubbs, 1996). Positive semantic prosody is created when almost every word near the key word expresses positive meanings and coloring, at the same time in negative semantic prosody the key words contain collocates with unpleasant meanings giving a negative coloring to collocations, whereas neutral prosody includes both positive and negative collocates in the context.

Semantic prosody can be studied with the help of corpus linguistics as a quantitative methodology (McEnery & Hardie, 2011), which enables to proceed huge amounts of texts identifying and selecting particular lexical units for further studies.

Results and Discussion

The newspaper has been the "heart" of news sector for several hundred years and despite the increase of digital media newspapers are still read either in print or on a website. Media discourse, firstly newspaper texts, represents what is happening all over the world nowadays. So, the vital outputs of pandemic have accepted a lot of media attention recently. The broadsheet "The Guardian" covers issues connected with the Covid-19 pandemic. The n-gram (see *Figure 1*) demonstrates collocations with *VACCINE* in the corpus of text articles.

Figure 1. The n-gram of collocations with *VACCINE* in *The Guardian*

The frequency use of modifiers of *VACCINE* is 23, verb+VACCINE as object is 26, and nouns modified by *VACCINE* is 40, so the paper mostly concentrates on the pattern noun+*VACCINE* as the most representative in the given corpus. The following n-gram presents the mentioned above pattern.

Figure 2. The n-gram of collocations with nouns modified by VACCINE

The word *vaccine* in general has a positive implication, as it is defined in the dictionary as *suspension of weakened, killed, or fragmented microorganisms or toxins or of antibodies or lymphocytes that is administered primarily to prevent disease* (VACCINE). However, collocations with the lemma *VACCINE* can have negative, positive and neutral semantic prosody depending on the contextual meaning of the whole passage. The criterion to define the studied collocations with *VACCINE* as positive, negative or neutral is totally based on the positiveness / negativeness of the idea presented in the passage taking into consideration the verbs that describe actions either connected or triggering other positive or negative consequences or results as well as other phrases in the passage that can be identified as positive or negative. Thus, for example, in the given passage *"Many seem to think vaccine passports are a viable solution that would encourage uptake and allow businesses to remain open while ensuring restaurants, bars and nightclubs don't become Covid hotspots"* ("The Guardian"), the verbs *encourage* and *allow* together with the phrase *a viable solution* create a positive picture of introducing *vaccine passports*, so the given collocation is marked as a positive one. Accordingly, negative pictures in the passages where through verbs or phrases unfavourable situations are shaped collocations noun+*VACCINE* are considered to have a negative mode, e.g., *"More than a year on, the EU remains under fire for its failure to implement a credible response to disinformation, which has proved a huge threat to the global management of the pandemic, including by fueling vaccine skepticism"* ("The Guardian"). The analysis of the given passage enables to state the collocation *vaccine skepticism* as the one with negative semantic prosody being reinforced with other nouns *failure, threat, pandemic* also having negative semantic prosody, and all together depicting difficulties fighting anti-vaccinators. Speaking about collocations with neutral semantic prosody, they are rather few in the corpus studied. Such collocations depict the matter-of-fact states without giving either positive or negative images of the events described in the text, e.g., *"The following two charts show the vaccine distribution and estimated usage by states, territories, and primary care (run*

by the commonwealth)" ("The Guardian"). Actually, the idea of vaccine distribution may be seen as either positive, for regions having received it or negative, for territories deprived of it, but the contextual analysis shows that the collocation *vaccine distribution* outlines the picture of mere statistics presenting the current situation in the world.

Following the above described procedure collocations noun+Vaccine have been classified as having positive, negative and neutral semantic prosody and the results of this analysis is given in the table below (see *Table 1*):

Table 1

The mode of semantic prosody of collocations nouns+*VACCINE*

Positive	Negative	Neutral
efficacy	hesitancy	usage
supply	availability	mechanism
uptake	refusenik	type
safety	misinformation	distribution
access	measures	
mask		
production		
protection		
certification		

The following nouns *efficacy, supply, uptake, safety, access, mask, production and protection.* modified by VACCINE express positive prosody in the context. These nouns together with the lemma *VACCINE* create a metaphorical image of safety and sureness, when people are vaccinated, they can save themselves from the Covid-19 and return to normal life, e.g. *"Some epidemiologists would like to see more studies commissioned because of the potential to help with global vaccine supplies. The government has a moral duty to encourage vaccine uptake, though it must find a way to minimise the backlash. Waiting for further data on vaccine safety when infections are ripping through younger age groups isn't cautious, it's reckless. According to a White House readout of the call, Biden and the governors "discussed how important it is for residents in the storm's path to prepare now for significant impacts ... including by visiting Ready. gov, and the need to prevent the spread of Covid-19 through the use of vaccines, masks and social distancing if sheltering is required"* ("The Guardian"). In this way, the collocations with *VACCINE* with its positive semantic prosody can express hope and belief in the definite possibility to defeat the virus.

The nouns *hesitancy, availability, refusenik, misinformation* together with the lemma *VACCINE* express negative prosody in the context. Such collocations create an image of lack of confidence in the effectiveness of the vaccine. In addition, people do not want to be forced to get vaccinated, or to wear

masks urging different political forces to maneuver between two camps of vaccine supporters or opponents, e.g. *"However effective these campaigners were in promoting vaccine hesitancy at a time when smallpox still stalked the land, they were pussycats compared with the medical skeptics of the preceding 19th century. Removed the government's projections of future vaccine availability as they're not realistic. Many union members might take a different view about being obliged to work alongside vaccine refuseniks. Gary Bledsoe, president of the Texas State NAACP Conference, told the Associated Press such historic disparities combined with the politicisation of vaccines, misinformation and lack of access to shots to make it difficult to vaccinate more African Americans"* ("The Guardian"). Thus, collocations with *VACCINE* possessing negative semantic prosody cannot but create gloomy, unfavorable, sometimes pessimistic depiction of what is happening right now in the world, still presenting actions both governments and people take in order to cope with the situations.

Collocations nouns modified by VACCINE create neutrality to what is happening. People take it for granted, something without which we will not be able to live as before, e.g. *"Vaccine dose usage is estimated by the commonwealth government, based on the total doses administered and allows for a small amount of wastage. Last month Fiji received 150,080 doses of the Moderna Covid-19 vaccine from the US under the Covax vaccine dose-sharing mechanism. The Covid Near Me website, which provides a user-friendly interface for checking exposure sites near your location, has also started a new section that maps all vaccination locations, colours them to show which have availability in the near future, and allows you to filter by provider type, vaccine type and other information"* ("The Guardian"). Analysing the examples of patterns nouns modified by *VACCINE* with its neutral semantic prosody in the context we can see that they are colorless and express humility and understanding of the need for vaccination.

Discourse analysis of text passages with the lemma *VACCINE* has enabled to single out topics mostly often presented in the newspaper articles:

- freedom, which is represented through the collocations *vaccine measures* and *vaccine certification, vaccine passport*, the first one with the negative semantic prosody supported by negative colouring of the verb *to rally* and phrase *against the lockdown*, while the latter two are positive with the surrounding of such phrases as *a reasonable requirement for communal activities, entering restaurants, cinemas, trains and shopping malls*, e.g., *1) More than 2,000 people also gathered in Brisbane City Botanic Gardens on Saturday to rally against the lockdown and vaccine measures, 2) Vaccine certification seems a reasonable requirement for communal activities and*

one with historical pedigree, especially when the only barrier is misguided ideological opposition, 3) The plans for England's vaccine passports were announced shortly after France introduced its hardline "health pass" approach, which requires people entering restaurants, cinemas, trains and shopping malls to show proof of two vaccinations, a recent negative Covid test or recent recovery from infection ("The Guardian");

- disbelief, which is demonstrated through the collocation *vaccine resistance,* the negative prosody of which is backed by the lexical units *dangerous* and *to compel* and the phrase *an unacceptable invasion*, e.g., *Public health historian James Colgorve wrote in 2005 that vaccine resistance has, since vaccines first started circulating in the early 19th century, been "based on the linked claims that it was dangerous and that to compel it through law was an unacceptable invasion of personal liberty"* ("The Guardian");

- efficaciousness, which shows the positive side of vaccination through the positive semantic prosody of the collocation *vaccine protection,* which in the given passage is supported by the verb *affirm* and the phrase *remains high*, e.g., *Even though this new data affirms that vaccine protection remains high against the worst outcomes of Covid, we are concerned that this pattern of decline we are seeing will continue in the months ahead* ("The Guardian");

- political issues, protests, which reveals people's negative attitude to vaccination and mask regimes through the collocation *vaccine opponents,* which in its turn is supported with negatively coloured phrases *Covid deniers* and *anti-maskers*, which is demonstrated in the following example: *but in the US it's becoming ever clearer that the outright Covid deniers, vaccine opponents and anti-maskers — and the hold they have over the Republican party — are no joke.* The given passage outlines the negative semantic prosody of the collocation *mask and vaccine requirements* with the surrounding of only one verb *to repeal* which actually due to its negative meaning in this context underlines politicians' speculations to get more voices in order to get the post: *Elder has said he has been vaccinated but has vowed to repeal California's mask and vaccine requirements if he wins the governorship* ("The Guardian").

- the world arena, the following examples show the situation with vaccination in different countries: 1) *This consolation is particularly available in the United States at the moment, where a third of Americans*

eligible for the vaccine remain stubbornly unjabbed; 2) By contrast, in Britain, 88% of those eligible have received at least one dose; 3) Covid Australia vaccine rollout tracker: total number of people and per cent vaccinated, daily vaccine doses and rate of progress; 4) Last month Fiji received 150,080 doses of the Moderna Covid-19 vaccine from the US under the Covax vaccine dose-sharing mechanism; 5) Strapped for cash, Cuba's public health system has been forced to perform triage: focusing on expensive vaccine production at the expense of other medical supplies ("The Guardian"), so the vaccine is used all over the world, which is seen in the media discourse through the frequency use of the lemma *VACCINE* which is presented in as a lifesaver for people during the pandemic emphasizing on its positive quality, but still some text examples demonstrate its negative coloring in the context through fear and distrust of the use of an unexplored vaccine.

Conclusion

Further research is going to be based on the corpus of the British tabloid "The Mirror" presenting a comparative analysis with the results obtained in this research and a new one. I hope to see news pieces containing new collocations with the lemma *VACCINE* in the media discourse showing the ending of the pandemic.

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