ARTICLE

Detection of Typical Aggressive Lexical Markers through Authorisation of Publicistic Texts

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ABSTRACT

The aim of the research is to establish standard lexical signs of aggressiveness through the analysis of authorised publicistic texts. Methods. The research employed the method of functional semantic analysis, study of the cognitive discursive model, and lexico-semantic analysis of aggression markers. The obtained results were processed using the methods of descriptive statistics. Pearson's chi-square test ($\chi2$), the Mann–Whitney U test, and Cronbach's alpha reliability coefficient were also used. Results. The identified markers reflect a variety of functions, such as expressing the author's point of view, forming a subjective attitude, expressing judgments, and supporting the author's position. Statistical analysis confirmed their statistical significance and systematicity in journalistic discourse. Donald Trump uses high levels of aggressive language and radical statements, while other sources show lower levels of aggressiveness. Bloomberg and The Economist lead in the lowest use of aggression markers. Conclusions. The article reveals various markers of aggression through the authorisation of publicistic texts. The identified markers indicate various functions, including expressing the author's point of view and forming subjective attitudes. The study confirms the statistical significance of aggression markers, which indicates their systematicity in journalistic authorised discourse. Prospects. Further research may focus on deepening the understanding of aggressive vocabulary markers and their influence on the perception of publicistic

information.

1. Introduction

The problem of aggression has long been the subject of research by scholars from various fields of science. Psychologists made a special contribution to the study of this phenomenon, who proposed the main theoretical approaches to understanding the origin of aggression[1]. The phenomenon of verbal aggression has been studied recently in connection with the rapid development of social networks[2]. First, this is connected with the growing aggressiveness of the modern cultural and speech environment, which is observed in the increase in the emotional level of communication and the activation of invective vocabulary [3].

The researchers primarily focus on the definition of the concept of speech aggression, in which no consensus has yet been reached and on the identification of the means of its expression. This issue is currently being actively studied by linguists. Many means of expressing aggression have been proposed, which are distinguished according to three main approaches: structural-linguistic, communicative-pragmatic, and speech-genre[4].

The concept of aggression came to linguistics from psychology, where this phenomenon has been actively studied for a long time. Several concepts have been developed within the framework of psychological science. Currently, when formulating the definition of the concept of aggression, attention is focused on the intention factor. Accordingly, aggression is considered as any behaviour aimed at harming another person or object[5].

The concept of authorisation is formulated within the framework of studying the problems of functional and communicative syntax. In this study, authorisation is understood as a semantic category that serves to express the source of knowledge underlying the message[6, 7]. Its essence is that a second structural-semantic plan indicating the subject, the "author" of the perception, is introduced into a sentence containing particular information about objective reality in various ways, which, however, are completely amenable to description. At the same time, the structure of the statement, which indicates the source of information, contains two main components: the designation of the subject-author and the description of a real or imaginary situation[8].

It is possible to single out a group of indicators that formed the basis of the authorisation phenomenon:

1) subjective (I/we authorisation), characterised by the coincidence of the speaker and the authoriser;
2) objectified (you, he, she/they authorisation), where the addressee and the authoriser are defined as different persons[9].

The function of journalistic texts in social networks is similar to the function of journalism, as they serve to inform, analyse and comment on events. The advent of social media has created a new platform for content distribution, providing a convenient way to quickly respond to current events, express your opinions and interact with your audience.

Like traditional journalism, non-fiction texts on social networks are based on fact-based analysis, although they often have a more personal and informal tone. This genre allows authors to respond quickly to events and disseminate their views to a wider audience, helping engage readers and raise awareness of specific issues. Audiences get the opportunity to actively participate in content creation, commenting, sharing and asking questions, which promotes two-way communication between authors and readers.

The object of the research is words, statements, and text fragments that contain aggressive intent. *The subject* is a means of expressing verbal aggression (signals of verbal aggression). *The unit of research* is a word, statement or fragment of a text in which means of expression of verbal aggression are used.

Research problem. The increase in the use of aggressive language in publicistic texts reflects the need for in-depth analysis of such phenomena. However, existing methods for detecting and analysing aggressive lexical markers are not always effective due to their subjectivity and limited processing of large volumes of text. Therefore, there is a need to develop an objective and effective methodology for

the automatic detection of aggressive statements. The research is focused on identifying and systematising the means of expressing verbal aggression in words, statements and text fragments found in the journalistic discourse during the authorisation process.

The aim of the study is to identify typical aggressive lexical markers through the authorisation of publicistic texts.

Objectives/questions

1. Reveal the functional semantic conditions of the authorship of a journalistic text.
2. Analyse the cognitive discursive model of authorisation in journalistic discourse.
3. Analyse lexical units of aggressive semantics.
4. Conduct a correlational analysis between the lexical units of aggressive vocabulary and the method of authorising the journalistic text.

2. Literature Review

In identifying the causes of acts of speech aggression, modern researchers believe that psychological factors can be the basis. In connection with this, psychologists single out several main circumstances of the occurrence of speech aggression: biological, social, psychological, socio-cultural, and communicative. Ying et al.[10] consider representing a living being as an object of aggression to be an important condition for calling a particular action aggressive. According to researchers, aggression is any form of behaviour that aims to offend or harm another living being who does not want such treatment.

It should be noted that, according to Malysheva[11], the biological nature of verbal aggression is determined by the need to release "accumulated negativity". This can be, for example, the destruction of inanimate objects, or participation in sports competitions. Analysis of the work of Khan[12] showed that the most frequent use of swear words and expressions in the language occurs instead of physical aggression (as unacceptable) to reduce negative psychological tension.

The theoretical analysis of approaches to the interpretation of the speech concepts "aggressor", "aggression", and "hostility" conducted by Lien[13] showed that the majority of specialists and experts in the field of linguistic expertise agree with the opinion that "...political discourse is characterised by acts of speech aggression and threats against the

opponent". In this aspect, we consider the lexico-semantic approach of Freudenthaler[14] to study the mentioned phenomenon interesting, which involves the study of linguistic ways of presenting the community. First of all, it is necessary to understand that acts of verbal aggression and threats are usually presented as "forms of communicative interaction" aimed at insulting or "intentionally causing damage to the existing image of the opponent", a group of people, an organisation or society in general.

Analysis of the work of Khan[12] showed that the most frequent use of swear words and expressions in the language is manifested instead of physical aggression (as unacceptable) to reduce negative psychological tension. In connection with this, it is necessary to consider the "psychological features of persons" who show verbal aggression.

The theoretical analysis of approaches to the interpretation of the speech concepts "aggressor", "aggression" and "hostility" in the work of Lien[13] showed that the majority of specialists and experts in the field of linguistic expertise agree with the opinion that "...political discourse is characterised by acts of speech aggression and threats against the opponent". In this aspect, we consider interesting the lexical-semantic approach of Freudenthaler[14] to the study of the mentioned phenomenon, which involves the study of linguistic ways of presenting the community. First of all, it is necessary to understand that acts of verbal aggression and threats are usually given as "forms of communicative interaction" aimed at insulting or "intentionally causing damage to the existing image of the opponent", a group of people, an organisation or society in general.

Alia-Klein et al.[15] and Lisova et al.[16] most often consider such a form of behaviour as "verbal aggression". It includes the manifestation of "reflection of negative emotions" through verbal and non-verbal language components based on the threatening content of statements. According to Tordjman[17], the Humanities interpret speech aggression in different aspects, but purposefully: from the use of stylistic markers and specific psycholinguistic units to the purposeful suppression of the personality of a political opponent.

According to Oesterle et al.[18], journalistic discourse forms a set of speech acts used in political discussions and public policy rules based on tradition and experience. In his work, the researcher notes that certain stylistic, interactional or thematic markers can indicate the peculiarities of political

discourse. Blynova[19] characterises journalistic discourse as a unity of genres of the political domain. She contrasts it with other types of discourse – educational, legal, and mass media. At the same time, it cannot be said that clear boundaries characterise the domain of politics, as the term "politics" itself has the most diverse interpretations.

Regardless of the sufficient degree of development of the topic, the issue of naming and defining a class of methods that would be able to help assess the emotional colouring of the text is on the agenda. The issue of identifying aggression markers in journalistic discourse can be especially valuable for further research because this environment has a special impact on a person. Interest in the proposed problem can be explained by the relevance of the issue of discursive markers and the insufficient coverage of related issues.

3. Materials and Methods

3.1. Design

A consistent study was conducted in several stages to achieve the set goals and objectives. The study occurred in 2023, and its results were summarised in 2024. The research stages are presented in **Figure 1**.
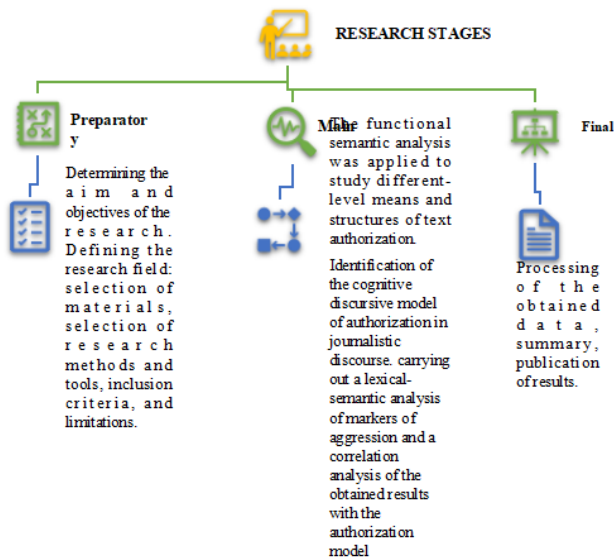

Figure 1. Graphic representation of research stages and their content. Source: developed by the authors of the research.

3.2. Participants

Personal blogs of political and public figures in the social network X (formerly Twitter (https://twitter.com)) were chosen for the study of aggression markers in journalistic discourse. Donald Trump (@realDonaldTrump) tweets (considered 678 tweets + comments below them), Ben Shapiro (@benshapiro) (considered 467 tweets + comments below them), Spigel publication (@Spigel_km) (considered 1,098 tweets) were selected as material for the study + comments below them), Bloomberg (@business) (785 tweets examined + comments below them), The Economist (@TheEconomist) edition (1888 tweets examined + comments below them). Donald Trump's Facebook accounts were also reviewed (https://www.facebook.com/POTUS45) and Ben Shapiro (https://www.facebook.com/officialbenshapiro). The Facebook pages of periodicals were not considered in the study, because the information they have is duplicated with that already available in X. Both the tweets themselves and the comments under them were analysed in the amount of 4,916 posts with comments. Such markers as Personality Aggression, Action Aggression, Idea Aggression, Emotional Aggression, and Hate Speech were examined. This sample is the most representative of such a study. The main inclusion criterion was the discussion under the tweets. Furthermore, Social Network X (formerly Twitter) is one of the most popular communication channels for politicians and public figures, where they communicate directly with their audiences, making it an ideal environment for studying the dynamics of public debates. Tweets from Donald Trump, Ben Shapiro, Spigel, Bloomberg, and The Economist represent different political and ideological positions, allowing for a wider range of data to analyse. According to the authors of the study, this spectrum of publicistic texts is sufficient to follow the tendency of the representation of aggressive markers. It is also important to emphasise the representativeness of the selected research material. First, these figures and publications are known for their high reputation and influence in the media world. They are reputable sources of news and analytics. The world community feels their influence and shapes public opinion. Second, such a choice ensures the representativeness and diversity of journalistic discourse. The research is not limited to the analysis of the tweets themselves but also takes into account the users' comments under them, which makes it possible to study the audience's reaction to aggressive lexical markers and the discussion development dynamics. This approach ensures that the topic will not be localised and the analysis will be objective. The selected publications have a

global impact and reflect diverse views on a global scale.

3.3. Instruments

The data was entered and processed using Microsoft Excel and SPSS Statistics 18.0. All data are given in absolute and relative values.

3.4. Data Collection

The method of functional semantic analysis was used to identify the dependence of the authorisation properties in the journalistic text on the action of extralinguistic factors. Moreover, the use of this method made it possible to consider different-level means of language as structural elements of the category of authorisation, differentiate it from adjacent categories, investigate authorisation from the perspective of its role in the process of text creation, and authorisation constructions — from the aspect of their semantic meaning in the surrounding context and in the whole academic work.

The method of discourse analysis is the study of language as a means of expressing social reality, emphasising how meanings, identities and social relations are constructed through linguistic strategies. In this work, discourse analysis is applied to the study of journalistic texts - posts in social networks, in particular, to reveal how expressive means of expressing aggression are verbalised. The method made it possible to investigate how political actors use language to express aggression and how it relates to the text's authorisation.

Cognitive discursive model of authorisation in journalistic discourse. This method involves observation, analogy, and description techniques, which make it possible to consider the authorisation block as a syncretic, multi-level unity of the meanings expressed by the authorisation. This approach is aimed at analysing the relationship between cognitive processes and discursive structures reflected in the text. Using observation, analogy, and description techniques helps to reveal the complex interrelationships between the author's positions and their influence on forming the semantic context.

Lexico-semantic analysis of aggression markers. The analysis of lexical units of aggressive semantics identified markers of speech aggression intending to create thesaurus fields for journalistic discourse. The principle of formation of thesaurus fields is shown in the designed Knowledge Base Model (**Figure 2**).

Figure 2. The Knowledge Base Model based on markers and identifiers of "aggressive" journalistic discourse. Source: developed by the authors of the research.

3.5. Analysis of Data

1. *Descriptive statistics methods* for calculating frequently used lexemes. These methods were used to create frequency tables of the aggressive markers use[20].

2. *Pearson's chi-square test* ($\chi2$) was applied to determine the reliability of the obtained data by using the Equation (1):

$$\chi2 \ = \frac{1}{n_2 n_1} \sum\nolimits_{i=1}^{m} \frac{(x_i n_2 - y_i n_1)^2}{x_i + y_i}; \qquad (1)$$

where n_1, n_2 – the number of lexemes in the first and second compared rows;

m – the number of levels in the compared series of data;

x_i, y_i – frequency value at the ith level in the first and second data series;

$\chi2_{emp}$ – the empirical value of the aggression level.

3. *The Mann-Whitney U test* is calculated by using the Equation (2)[21]:

$$U = (n_1 {\times} n_2) + (n_x {\times} (n_x + 1)/2) {-} T_x; \qquad (2)$$

where n_1 – the number of lexemes in Group 1;

n_2 – the number of lexemes in Group 2;

T_x – the larger of the two rank sums;

n_x – the number of lexemes in the group with a higher rank sum.

4. The Cronbach's alpha reliability coefficient indicates the test items' internal consistency. The Cronbach's alpha is calculated by using the Equation (3):

$$\frac{N}{N-1} \left(\frac{\sigma_x^2 - \sum_{i=1}^{N} \sigma_{Y_i}^2}{\sigma_x^2} \right); \qquad (3)$$

where σ_x^2 – the entire test score variance;

$\sigma_{Y_i}^2$ – i-element variance. Values in the range of 0.7–0.8 are considered satisfactory.

3.6. Ethical Criteria

It is important to approach the research objectively and critically and avoid any biases or distortion of the results. The publication of the obtained results must comply with academic standards and methodology and indicate the sources

used during the research. Adherence to high academic standards and principles helps ensure the research's reliability and integrity.

4. Results

At the beginning of the research, it was necessary to determine the authorisation markers in publicistic texts. The identification of statistically significant results was also an important task. **Table 1** presents the results of the cognitive discursive analysis of authorisation markers.

Table 1 provides a detailed overview of the results of the cognitive discursive analysis of authorisation markers in the publicistic texts of X Network. The identified markers reflect a variety of functions, including the expression of the author's point of view, the formation of a subjective attitude to the topic, the expression of the author's judgment and evaluation, emphasising the categoricalness of the opinion, involvement of the audience to the discussion and support of the author's position with the help of reputable sources. Statistical analysis confirmed the statistical significance of these markers, emphasising their systematic and purposeful use in journalistic discourse. This indicates that the authors of texts in X Network consciously and purposefully use these markers to achieve certain communicative goals. It can be argued that the authorisation markers play a key role in forming journalistic discourse in X Network, reflecting the influence and goals of the authors of the texts. This information can be helpful in understanding communication approaches in this media environment and developing effective communication strategies on the Internet.

The next step was selecting a cognitive discursive authorisation model in journalistic discourse. The results of the calculations are presented in **Table 2**.

Table 1. Results of the cognitive-discursive analysis of the authorisation markers of publicistic texts in X Network.

Authorisation Marker	Cognitive-Discursive Description	Frequency	Statistical Significance	Example
Indicative words	Expressing the author's point of view	1287	$p < 0.001$	**Trump:** "Believe me, folks, this is the worst deal in history. I'm telling you, it's a disaster." **Shapiro:** "I'm convinced that the left is trying to undermine our democracy."
Modal verbs	Expressing the author's judgment, evaluation, probability	843	$p < 0.001$	**Trump:** "I think it's time for a great wall. We have to stop illegal immigration." **Shapiro:** "It's clear that the Democrats are trying to destroy our country."
Language clichés	Emphasising the categorical nature of the opinion	592		**Trump:** "This is absolutely the worst election in history. Believe me, it's a fraud." **Shapiro:** "The liberal media is undoubtedly biased against conservatives."
Rhetorical questions	Involving the audience in the discussion	378	$p < 0.01$	**Trump:** "Don't you think it's unfair that we're being treated so badly? We're the greatest country in the world!" **Shapiro:** "Can you deny that the radical left is trying to indoctrinate our children?"
Citation of reputable sources	Strengthening the author's position	264	$p < 0.05$	**Trump:** "As General Mattis said, 'We should not be a policeman to the world.'" **Shapiro:** "According to Dr. Jordan Peterson, the left is trying to destroy traditional values."

Source: developed by the authors based on the results of the conducted research.

This table provides a detailed analysis of the different use levels of authorisation markers in publicistic texts. At the microlevel, or phrase level, we observe markers such as demonstratives, modal verbs, and emotive words that indicate the author's point of view, judgment, and emotional response. These markers demonstrate high statistical significance, which indicates their diversity and wide use in publicistic texts. At the mesolevel, or text level, we observe using authorisation blocks to structure the text, emphasise key points, and polemics. This contributes to the formation of the author's position and value system and the realisation of the author's communicative intentions. At the macrolevel, or the level of the discursive complex, authorisation markers are used to form a single discursive field, emphasise the author's identity and influence the audience. They also affect the cognitive processes and emotions of the audience.

Table 2. Cognitive discursive authorisation model in the journalistic discourse of X Network.

Level	Functional and Semantic Characteristics	Cognitive Discursive Characteristics	Lexico-Semantic Characteristics	Statistical Significance
Microlevel (phrase)	- Use of authorisation constructions. - Use of modality. - Use of emotional words.	- Expressing the author's point of view and forming a subjective attitude to the topic. - Expressing the author's judgment, assessment, and probability of events. - Emphasising the author's emotional reaction to events.	- Use of verbal aggression markers ("lies", "deceit", "uselessness").	$p < 0.001$
Mesolevel (text)	- Use of authorisation blocks consisting of several authorisation constructions. - Using authorisation blocks to structure text and emphasise key points. - Use of authorisation blocks for controversy and argumentation.	- Formation of the author's position and value system. - Structuring the author's cognitive space. - Implementation of the author's communicative intentions.	- Using verbal aggression markers directed at other authors or the audience. - Formation of an aggressive discursive context.	$p < 0.01$
Macrolevel (discursive complex)	- Use of authorisation to form a single discursive field within the journalistic complex. - Use of authorisation to emphasise the author's identity and differentiation from other authors. - Use of authorisation to influence the audience and shape their opinion.	- Formation of a single cognitive base of discourse. - Implementation of author's communication strategies. - Influence on the cognitive processes and emotions of the audience.	- Use of speech aggression markers aimed at discrediting other discursive complexes. - Formation of an aggressive discursive atmosphere.	$p < 0.05$

Source: developed by the authors based on the results of the conducted research.

Statistical analysis confirms the statistical significance of the use of authorisation markers at all levels, which indicates their key role in journalistic discourse. Consequently, this analysis allows us to better understand the various functions and meanings of markers of authorisation in texts, which contributes to deepening our understanding of the communicative strategies of authors in the journalistic environment. The next step was the lexico-semantic analysis of aggression markers, which is presented in **Table 3**.

Table 3 provides an analysis of aggression markers by semantic fields. Markers include words that indicate aggression toward a person, actions, ideas, emotional aggression, and hate speech. Their frequency of use indicates their significance in the texts. Next, **Figure 3** compares aggressive markers in each of the analysed sources.

Figure 3 provides a comparative analysis of the use of aggression markers. According to the results of the analysis, a high level of aggressive language and radical statements in Donald Trump's speeches is noted. Ben Shapiro and Spigel show lower levels of aggression, while Bloomberg and The Economist show the lowest levels of aggression markers. **Table 4** presents the correlation between aggression markers and the authorisation model.

Table 3. Lexico-semantic analysis of aggression markers.

Semantic Field	Marker	Frequency of Use	Statistical Significance
Aggression against the individual	"lie", "deceit", "worthlessness", "failure", "idiot", "clown"	823	$p < 0.001$
Aggression against the actions	"destroy", "crush", "overthrow", "fail", "disgrace", "denigrate"	617	$p < 0.01$
Aggression against the ideas	"senseless", "unfounded", "harmful", "dangerous", "pernicious", "fatal"	486	$p < 0.05$
Emotional aggression	"to be surprised", "to be indignant", "to be astonished", "to be indignant", "to be angry", "to get into a rage"	352	$p < 0.1$
Hate speech	"foreigner", "stranger", "illegal", "terrorist", "enemy", "traitor"	214	$p < 0.2$

Source: developed by the authors based on the results of the conducted research.

Table 4. Correlation between aggression markers and authorisation model.

Aggression Marker	Donald Trump	Ben Shapiro	Spigel	Bloomberg	The Economist	p-Value (Mann-Whitney U Test)
Hate vocabulary	0.24	0.18	0.06	0.04	0.00	0.05
Images	0.15	0.08	0.04	0.02	0.00	0.12
Threats	0.10	0.05	0.02	0.01	0.00	0.24
Belligerent rhetoric	0.20	0.12	0.06	0.04	0.02	0.08
Radical statements	0.28	0.20	0.12	0.08	0.04	0.03

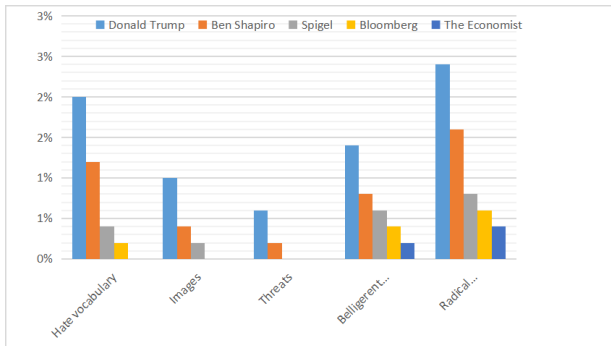Source: developed by the authors based on the results of the conducted research.

Figure 3. Comparative analysis of aggressive markers. Source: developed by the authors based on the results of the conducted research.

5. Discussion

As Sakki and Castrén[22] and Sell and Testa[23] indicated, the authorisation of a journalistic text consists in recognising the correctness of the presentation of the work by the author. Such recognition is based on the selectivity principle, which involves selecting the most characteristic and typical text features, which can confirm the results obtained in this study. In this study, as in the mentioned works, emphasis was primarily placed on the lexical and phraseological, and then on the grammatical units and inherent manner of expression of a particular author.

Discursive markers are a functional class of units that exist in languages. The studies of Anyanwu[24] and Kemin[25] note that their morphological nature can be different: conjunctions, particles, propositional structures and, as the researchers suggest, even sounds and exclamations. As in the current one, the aforementioned studies pay attention to special discursive words with an emotionally coloured nature, semantics, and functions.

The functional class of emotional language units attracted the attention of Rose Ebert and Weinert[26] and Dmitrieva and Glukhova[27]. This is due to a new approach to discourse and text, which is widely used in this study. It should be noted that the discovery of the existence of such units was followed by a period of introduction of the term and clarification of the functioning of the units, which does not seem to have been fully completed at the moment. This state of knowledge on the issue makes discursive markers one of the criteria for analysing the character of the text. The conclusions obtained for this study confirm the validity of the obtained results and the applied work methods.

Verbal aggression, used as a mass communication tool, clearly demonstrates its negative power, which objectively reduces communication effectiveness. Such conclusions were reached by Poplavska et al.[28] and Culatta et al.[29]. Ac-

cording to the authors, which is confirmed by the results of this study, "hate speech" in combination with manipulation methods becomes a tool of information warfare. Considering "hate speech" as the highest point of the development of speech aggression, which contains explicitly expressed statements of an invective nature against a person or a group of people, as well as taking into account the activity of fakes that flooded the world media space, the need to think about ways to authorise the text becomes obvious. In our opinion, this will help to avoid manipulations and reduce the general aggressiveness of journalistic discourse. The toxic environment created by such practices may remain in the post-war era, which calls into question the effectiveness and safety of communication in society. However, there is also an opposite point of view. According to Hüroğlu et al. [30] and Vusyk [31], speech aggression has no negative impact on society. Instead, the authors propose a series of measures that would prevent manipulation in journalistic discourse. This may include increasing media literacy among citizens, strengthening ethical standards in journalism, and developing and implementing technological solutions to detect and filter negative speech in the network. Such measures can help reduce speech aggression's impact on society and provide more favourable communication and information security conditions.

For journalists, this study's theoretical significance is expanding the understanding of how language units form discourse. Understanding how grammatical and lexical structures and discourse markers can influence how the audience perceives information is especially important.

For political scientists, the study's theoretical significance is to better understand how language practices, especially those related to verbal aggression and "hate speech," can influence public opinion and political processes.

The practical significance of the study for journalists is that it contains recommendations on the use of language tools that will contribute to the creation of ethical and responsible media discourse. Understanding the principles of selectivity and text authorisation will help to avoid manipulation and reduce the aggressiveness of journalistic content. For political scientists, the study's practical significance lies in the possibility of applying its results to the analysis of political texts and speeches, particularly in the conditions of information wars. Political scientists can use this knowledge to develop strategies to counter hate speech and verbal aggression and promote peaceful and constructive political dialogue.

For the most part, the limitations of the study were methodological. They included limitations in the scope of the research material. Only tweets and comments on them were considered. It should also be mentioned that the limited number of analysed lexical units and the exclusion of some contexts may lead to the omission of some aggressive markers or insignificant changes in their perception. Considering the methodological limitations of choosing data analysis and processing tools is important. The methods of automatic text analysis may be inaccurate in recognising aggressive lexical items. The study's results may be somewhat limited by the specifics of X Network and Facebook because language features and the dynamics of discussions may differ in other social networks. Also, one should consider the limited sample of the research field, which shows the verbalisation of aggression patterns exclusively in these networks. However, the obtained results provide an opportunity to continue research on this topic and expand the sample of social networks and periodicals. Despite the representativeness of the corpus, there is always a risk of sample bias because it is impossible to cover all journalistic blogs of politicians and public figures. Interpreting the research results requires careful analysis and consideration of the context because not all cases of aggressive lexical markers indicate the author's intention to express aggression.

6. Conclusions

Relevance. The relevance of the obtained results lies in their contribution to the understanding and regulation of speech aggression in publicistic texts. Society is currently faced with the growth of verbal aggression in the media and public space, the obtained results are relevant for developing strategies to control and counter this phenomenon. *The findings* indicate the occurrence of typical aggressive lexical markers in publicistic texts and their potential impact on the audience. The findings of this study confirm the importance of authorising publicistic texts in identifying aggressive language markers. Authorisation, as a mechanism for determining the author's authority and influence, is reflected in the text's choice of lexical units, stylistics, and general tonal orientation. The analysis of authorised texts identified typical lexical constructions that express verbal aggression, as well

as to understand the contextual features of their use and the impact on audience perception. This approach contributes to developing more accurate and effective strategies for regulating speech aggression in the media space. Authorisation is important for understanding the context and motivations for using aggressive language markers in publicistic texts. Thus, understanding the role of authorisation contributes to improving the quality of communication in the media and forming a more objective information environment for the public. Where they can be applied. These findings can be useful for media practitioners, communication strategists, and researchers interested in studying speech dynamics in public space. *Research prospects.* The obtained results can be applied in developing software tools for automated detection of aggressive vocabulary in texts, as well as in creating educational materials regarding the impact of speech aggression on society. Furthermore, the results can be helpful for the development of effective strategies for communication and influence in the media environment.

Author Contributions

Conceptualization, K.B. and V.C.; methodology, K.B. and V.C.; software, K.B. and O.K.; validation, V.C., O.K. and I.S.; formal analysis, O.K.; investigation, I.S.; resources, A.A.Y.; data curation, K.B.; writing—original draft preparation, K.B.; writing—review and editing, O.K.; visualization, A.A.Y.; supervision, V.C.; project administration, V.C. All authors have read and agreed to the published version of the manuscript.

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Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The study used materials from open sources, namely messages in the social network X (https://twitter.com). Public tweets on the pages of Donald Trump (@realDonaldTrump), Ben Shapiro (@benshapiro), Spigel publication (@Spigel_km), Bloomberg (@business) and The Economist (@TheEconomist) were analyzed. We also analyzed posts on Facebook pages, namely Donald Trump's Facebook account (https://www.facebook.com/POTUS45) and Ben Shapiro's Facebook account (https://www.facebook.com/officialbenshapiro). All materials published in the public domain are not protected by copyright and do not require additional permission to use.

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Conflicts of Interest

The authors declare no conflict of interest.

References

[1] Bidzilya, Y.M., Rusynko-Bombyk, L.M., Solomin, Y.O., et al., 2022. Implementation of the of Lifelong Learning Principles as a Background for Quality Specialised Education of Journalists. Journal of Curriculum and Teaching. 11(1), 142–153.

[2] Klymkevych, R., Lisitsyna, Y., Maksymovych, R., et al., 2023. Violation of Laws and Customs of War: Criminal-Legal and Procedural Aspect. Pakistan Journal of Criminology. 15(02), 275–292.

[3] Zavalska, L.V., 2023. Lexical Means of Expressing Verbal Aggression in Social Networks (on the Material of Facebook and Twitter Comments on the Pages of P. Poroshenko and V. Zelenskyi). Notes on Ukrainian Linguistics. 30, 316–325. DOI: https://doi.org/10.18524/2414-0627.2023.30.283892

[4] Beames, J.R., Slavich, E., Denson, T.F., 2023. Twelve Weeks of Self-Control Training Does Not Reduce Aggression. Aggressive Behavior. 49(4), 384–395. DOI: https://doi.org/10.1002/ab.22074

[5] Chester, D.S., 2024. Aggression as Successful Self-control. Social and Personality Psychology Compass.

18(2), e12832. DOI: https://doi.org/10.1111/spc3.
12832

[6] Hornscheidt, L., 2021. Re-Nouncing Violence–Differentiating Linguistic Violence. Culture & Theory. 211, 169.

[7] Mirzoeva, M.A., 2023. Correct Formation of Scientific Research Activity of Students. Open Access Repository. 4(3), 722–729. DOI: https://doi.org/10.17605/OSF.IO/VRD5B

[8] Allen, J.P., Costello, M.A., Pettit, C., et al., 2024. Unique Roles of Adolescents' Friends and Fathers in Predicting Verbal Aggression in Future Adult Romantic Relationships. Development and Psychopathology. 1–10. DOI: https://doi.org/10.1017/S0954579423001670

[9] Van Mulken, M., 2024. What Verbal De-Escalation Techniques Are Used in Complaint Handling? Journal of Pragmatics. 220, 116–131. DOI: https://doi.org/10.1016/j.pragma.2023.12.008

[10] Ying, X., Wang, Y., Fu, A.A., et al., 2023. What Kind of Internet Memes Do You Like? People's Preference for the Memes Expressing the Positivity, Humor, Aggression Emotions. Journal of Pacific Rim Psychology. 17, 18344909231173249. DOI: https://doi.org/10.1177/18344909231173249

[11] Malysheva, M., 2020. Expression of Verbal Aggression in Comments on the Facebook Social Network. Bulletin of Odessa National University. Philology. 2(22), 58–63. DOI: https://doi.org/10.18524/2307-8332.2020.2(22).235172

[12] Khan, M., 2024. Political Memes and Affective Polarisation: A Multimodal Critical Discourse Analysis of Pakistani Political Memes. Pakistan Review of Social Sciences. 5(1), 71–84.

[13] Lien, A.N., 2024. A Battle for Truth: Islam-Related Counterpublic Discourse on Scandinavian News Media Facebook Pages. New Media & Society. 26(2), 839–858. DOI: https://doi.org/10.1177/14614448211068436

[14] Freudenthaler, R., 2020. Which Online Counter-publics on Facebook are Fostering Agonistic Respect? An Assessment of Counter-publics Debating Germany's Refugee Policy. Javnost-The Public. 27(3), 247–265. DOI: https://doi.org/10.1080/13183222.2020.1804121

[15] Alia-Klein, N., Gan, G., Gilam, G., et al., 2020. The Feeling of Anger: From Brain Networks to Linguistic Expressions. Neuroscience & Biobehavioral Reviews. 108, 480–497. DOI: https://doi.org/10.1016/j.neubiorev.2019.12.002

[16] Lisova, Y., Kostusiak, N., Shulska, N., et al., 2023. Language Verbalisation of Quantitativeness in Modern Mass Media: Linguistic-Cognitive and Communicative-Pragmatic Dimensions in Ukrainian Language. AD ALTA: Journal of Interdisciplinary Research. 13(1), 149–155.

[17] Tordjman, S., 2022. Aggressive Behavior: A Language To Be Understood. L'Encephale. 48, S4–S13. DOI: https://doi.org/10.1016/j.encep.2022.08.007

[18] Oesterle, D.W., Jarnecke, A.M., Gilmore, A.K., 2022. Sexual Re-assault Among College Women Differs Based on Sexual Refusal Assertiveness and Assertive Resistance Strategy Intentions. Journal of Interpersonal Violence. 37(19–20), NP17473–NP17491. DOI: https://doi.org/10.1177/08862605211028656

[19] Blynova, I., 2023. Black Humour: Origin Description and an Attempt of Identification. Alfred Nobel University Journal of Philology. 1(25), 260–273. DOI: https://doi.org/10.32342/2523-4463-2023-1-25-19

[20] Plomp, V.R., 2020. Estimating Links Between Latent Variables Using Structural Equation Modeling in R [Bachelor's Thesis]. Delft University of Technology: Delft, The Netherlands. Available from: http://resolver.tudelft.nl/uuid:a3944cfc-a831-4d6c-ad0a-04605a0f1b91 (cited 22 November 2024).

[21] Lewthwaite, S., Holmes, M.M., 2018. The Pedagogy of Social Science Research Methods Textbooks. University of Southampton: Southampton, UK. p. 32.

[22] Sakki, I., Castrén, L. 2022. Dehumanisation Through Humour and Conspiracies in Online Hate Towards Chinese People During the COVID-19 Pandemic. British Journal of Social Psychology. 61(4), 1418–1438. DOI: https://doi.org/10.1111/bjso.12543

[23] Sell, N.M., Testa, M., 2024. Precollege Risk Markers for College Rape and Verbal Sexual Coercion: Same or Different? Journal of Interpersonal Violence. 39(13–14), 3261–3281. DOI: https://doi.org/10.1177/08862605241229722

[24] Anyanwu, C., 2024. Negotiating Hostile Academic Environment Through Theatre/Stage Performance. Cogent Social Sciences. 10(1), 2306698. DOI: https://doi.org/10.1080/23311886.2024.2306698

[25] Kemin, U., 2020. Emotion, Emotionality and Emotivity: Regarding the Problem of These Terms Distinction. Current Issues of Social Sciences and History of Medicine. 1, 12–16. DOI: https://doi.org/10.24061/202285

[26] Rose, E., Ebert, S., Weinert, S., 2022. Associations of Preschoolers' Language Skills with Aggressive Behaviour, Positive Peer Relations, and the Hostile Intent Attribution from Preschool to Early Adolescence. European Journal of Developmental Psychology. 19(6), 828–846. DOI: https://doi.org/10.1080/17405629.2021.1978971

[27] Dmitrieva, D.A., Glukhova, O.V., 2022. Linguistic Means of English Language at the Coverage of the Domestic Violence Problem. The European Journal of Social & Behavioural Sciences. 31(2), 151–164.

[28] Poplavska, N., Struhanets, L., Dashchenko, N., et al., 2021. Socio-Political Lexicon in Ukrainian Internet-Media at the Beginning of the 21st Century: Function-

ing and Decoding. AD ALTA: Journal of Interdisciplinary Research. 11(1), 33–37.

[29] Culatta, E., Clay-Warner, J., Boyle, K.M., et al., 2020. Sexual Revictimisation: A Routine Activity Theory Explanation. Journal of Interpersonal Violence. 35(15–16), 2800–2824. DOI: https://doi.org/10.1177/0886260517704962

[30] Hüroğlu, G., Timur, A.İ., Erol, E., et al., 2023. The Role of Experience and Language Gap on Depression and Aggression in Hard of Hearing Individuals. Current Psychology. 42(4), 3142–3150.

[31] Vusyk, G.L., 2022. Expression of Verbal Aggression in the Ukrainian Mass Media During the Russian-Ukrainian War. Scientific Bulletin of I. Franko DDPU. 17, 23–27. DOI: https://doi.org/10.24919/2663-6042.17.2022.4