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Research Article

Words with the Prefix De- in the Ukrainian Online Media: Structure, Semantics, Tonality

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Abstract

The article is devoted to the analysis of the words with the prefix de- used in the language of mass media before the war (basing on the materials of Den newspaper published in September 2021) and during the war (on the example of Den newspaper materials published in October-November 2022 and some other online media). The research provides structural and semantic, etymological, statistical analysis and studies the tone expressed by the examined lexemes found in the texts. The prefix de- originates from Latin and means negation in the new-formed words. In the 51 materials of Den newspaper devoted to the economic and political events of the pre-war period (September 2021), 6 words with prefix de- were found. During the war, 19 units, including 4 units which were often repeated at the beginning of the persiod, were found in the analyzed resources. These lexemes are divided into three semantic groups, namely 1) downward movement, decline; 2) reduction, cancellation; 3) elimination, liquidation. It is marked that since the Russian invasion to Ukrainian, journalists have started to actively use the words directly related with the war: demilitarization, demobilization, demoralization, denazification, denationalization, deoccupation, desatanization, destabilization. The lexemes demilitarization, denazification, denationalization, desatanization express irony in the materials of Ukrainian journalists because these words are used by the aggressor to justify goals of the military invasion to Ukraine. In the majority of words, the prefix de- is used to make a word negative, but if a word is initially of negative meaning, the new-formed word with the prefix de- gets positive semantics. Most lexemes with the prefix de- attribute the text with a positive tone. Nevertheless, there are sentences with a negative, a neutral and an ironic tone. According to the etymology, almost all words with prefix de- are of foreign origin. According to the way of formation, the words with the prefix de- are divided into 1) those formed from nouns by adding the prefix; 2) those formed from verbs by adding the suffix. It is confirmed that lexemes like detoxification, de-shadowing, decommunization, destabilization, deregulation, demonopolization are not found in the Dictionary of the Ukrainian Language in eleven volumes, but are recorded in the Dictionary in twenty volumes. It means that these words have been first used in the 21st century. The lexemes de-Stalinization, desatanization, de-russification, depigmentation, deoccupation, debureaucratization are not found among the words registered in these explanatory dictionaries.

1. Introduction

Modern Ukrainian information space is characterized by the intense use of new borrowings from other languages. In the 21st century, not only language units, but also morphemes are borrowed to form new words. Researchers observe an active use of foreign structural elements, particularly prefixes like *a-, anti-, de-, in-, re-,* etc. A particular attention is paid to the intense use of lexemes with the prefix *de-*in the current language of mass media.

Language units with the prefix *de-* have long existed in the Ukrainian language. The lexicographic sources of Ukrainian prove, however, the number of them has significantly increase as compared to the previous century. Nowadays, words with the prefix de- are actively used in the public space, especially in the language of mass media. Among them, there are words which have already existed in the language earlier, as well as those which have recently appeared and are not recorded in the Dictionaries of the Ukrainian language.

The goal of the research is to analyze the lexemes with the prefix *de-* used in the pre-war period (using materials of Den newspaper of September 2021) and during the war (using materials of Den newspaper of October-November 2022 and other Ukrainian online media).

To achieve the goal of the study, several tasks should be completed:

1. To find lexemes with the prefix *de-* in the materials of Den newspaper in the mentioned periods;
2. to specify the structural ad semantic groups and to conduct etymological analysis of the found words with the prefix *de-*;
3. to identify tone of text messages containing the words with the prefix *de-*;
4. to make comparative analysis of the lexemes used before and during the war;
5. to find out if activation of the *de-*words use is caused by the Russian invasion to Ukraine;
6. to determine a conditional time of the found words presence in the Ukrainian language according to their registration in the explanatory Dictionaries.

2. Related Works

The prefix de-, as well as a few others (anti-, des-, re-, etc.), belongs to Latin borrowings. The Latin language is a source of replenishment of the Ukrainian language lexicon, in particular medical, criminalistic, law, educational terminology, and it enriched our language not only with whole verbal units, but also with separate structural elements.

It is stated in the twenty-volumes Dictionary of the Ukrainian language that de- is "a prefix meaning removal, separation, cancellation, termination, privation of something, e.g.: *deaeration, unblock, dehumanize, decoded*" [1].

Researchers study the prefix de- on the material of different languages, consider it as one of the means of morphological negation. A. Paslavska, outlining the general features of affixal negation in Germanic, Romance and Slavic languages, notes that the prefix de- is negative in these languages [2]. According to Marjana Vaneva, «negative prefixes show privative meaning when by adding the negative element to the base we deprive the base of the thing expressed with the basic element» [3]. Bruno Cartoni, Marie-Aude Lefer note, that «de- attaches to verbs and nouns to form reversal and removal verbs, which are frequently nominalised or adjectivalised» in different languages [4]. Some researchers of negation on the English language material don't consider the prefix de- to be one of the most productive negative prefixes. For example, on the opinion of Dedy Subandowo «the most frequently used negative prefixes are: *dis-, in-, non-, un- and anti-*» [5]. OLha Mihorian also does not mention the prefix de- among the means of negation [6]. In Italian, the prefixes de-, dis- and s-express privation, «these prefixes mainly attach to nouns to express the lack of the entity denoted by the base» [4]. Shrikant Yoshi notes that in French «the negative affix dé is used for direct negation as we have seen in some examples, like découronner, where it negates the action of crowning somebody» [6]. According to Hafissatou Kane, «negative expressions also vary from one language to another like the other grammatical constructions» [7].

Scientific research of words with the prefix de- on the material of the Ukrainian language relate to a certain field of terminology, less often to general issues of term formation and are only part of complex theoretical investigations. Y. Kostiuk, analyzing socio-political innovations with the prefix de-, distinguishes the following meanings: «to deprive something, to cancel the action called the motivating verb»; «perform an action opposite to the action of a motivative word» and gives examples: *decommunize, deoligarchize, depoliticize, decentralize* [8].

We agree with T. Leleka's observations that the process of enrichment of new vocabulary and the emergence of neologisms is intensifying in the 21st century, and morphemes, which previously occurred only as parts of borrowed words,

enter word formation: prefixes anti-, archi-, hyper-, neo-, de-, inter-, etc. [9].Using words with this and other negative prefixes, productivity of prefix word formation are caused, in particular, by the «general tendency to save language resources, expressive possibilities of words with this prefix, tendencies to update the lexical structure of language due to foreign borrowings, to complicate language structure and verbal differentiation » [10].

Therefore, the prefix de- is most often used in the terminology systems of medicine, forensics, politics, jurisprudence, nanoelectronics, philosophy, etc. This affix can mean negation, opposite, elimination, separation, absence, violation, and disorder. Scientists outline these meanings in one word - negative semantics, although in some cases, in particular, in French «prefix dé- (doublement / dédoublement) acquires a ZERO meaning. Such ZERO meanings would not be included in the negative meanings of the affix » [6].

This type of negation called affixal or morphological negation does not, however, affect the remainder of the sentence [7]. On the other hand, the rest of the sentence can determine the expressive load of words with negative prefixes; researchers note that the connotations of such words «are motivated not only by the internal structure of the language unit, but also by the textual environment, background knowledge, individual meaning, which is attributed to the words of the speaker » [10].

3. Methods and Materials

To reach the goal and complete the tasks of the scientific article, a complex of methods was used. Contextual method was applied to analyze definitions of the concepts in dictionaries and to outline meanings of the found lexemes. Descriptive method was used by the author to analyze historiography of the research, to make review of scientific articles devoted to the studied topic, as well as to classify the found language units by different criteria. Component analysis helped to distinguish lexemes with the prefix de- in the materials of online media and to identify tones of the found language units. Elements of statistical method of research were used to calculate the found lexemes in the classification by different criteria of the study. Comparative analysis was applied to compare lexemes with de- found in the language of mass media before and during the war.

The research was carried out basing on the materials published by Ukrainian online media in the pre-war period (September 2021) and during the war (mostly October-November 2022): online version of Den newspaper, online portals of Delo.ua, Narodytska hromada, online sources Ukrinform, Defense express, Ukrainska pravda, FREEDOM, Economic expert platform, online page of the Department of Civil Defense and Healthcare of Population of Rivne regional state administration.

4. Experiment

In the materials of Den newspaper issued in the pre-war period (news of economics and politics – 51 materials have been studied) from 1 September to 30 September 2021, a few words with the prefix de- were found. Among them, the lexemes which mean:

1) downward movement, decline:

degradation means "a situation in which somebody has lost all self-respect and the respect of other people; the process of something being damaged or made worse", e.g.: Condemning that population layer to degradation and slow dying, the state makes the same humanitarian mistake which was made by the industrial civilization when being admired by fossil fuels it paved the way to a technological disaster) [11];

2) reduction, cancellation:

Demonopolization means "action of the verb to demonopolize "deprive anyone of any right to monopoly (the only meaning)", e.g.: When somebody has a monopoly to something, it means possessing a powerful instrument of corruption. Demonopolization of the economy is, however, the step which had to be done long ago [12].

deregulation means "action of the verb to deregulate "decontrol or cease the state regulation in some sphere of social relations", e.g.: The draft law №5388 on introduction of amendments to the legislation on labor relations deregulation [13].

decentralization means "a system of administration when some functions of the power of a central government, organization, etc. are given to local bodies around the country; extension of the rights of smaller power authorities" e.g.: This is, how I see the picture of full-scale decentralization: when not only Kyiv, but even small regional centers become venues of impressive art events, when the national and local budgets support projects in provinces, which would be desired by big theatres [14].

3) elimination, liquidation:

decarbonisation means "removal or reduction of carbon", e.g.: I even saw the definition that the carbon tax is the innovative tool of protectionism. Do you agree to such interpretation? How is the issue of decarbonisation considered in Ukraine? [12].

de-russification means "a process or public policy in different states, aimed at restoring national identity of indigenous peoples, lost due to russification", e.g.: Without an actual, effective, competent program of protection and development of Ukrainian studies at Universities and learning the Ukrainian language and literature at schools, we should stop dreaming about de-russification of the national cultural space… [11].

Media materials published in October – November 2022 include more words with the prefix de-. All lexemes of that period are also divided into three groups by their semantics. They are:

1) reduction, cancellation of smth:

Debureaucratization means "a complex of measures made by democratic power, political parties, public organizations, public movements, aimed to reduce bureaucracy" [15], e.g.: The reform is implemented in several directions: recovery and development of the economy; reforming of the tax system and customs legislation; institutional reform; simplified administrating; debureaucratization; demonopolization of the economy and reduction of the state impact [16]. The word is recorded in neither of the Dictionaries of the Ukrainian Language. It proves the fact that the phenomenon defined by the word has recently appeared in our society and belongs to the economic terminology.

demobilization means "1. the process of standing down a nation's armed forces from combat-ready status; 2. reduction of the number of armed forced after the end of a war; 3. the act of releasing somebody from military service, especially at the end of the service period", e.g.: Because a person who serves in the army when there is no war understands that he/she gets social support and will be able to buy housing, or get to know how to live after demobilization [17]. The word is recorded both in the eleven-volume [18] and the twenty-volume Dictionaries [1] and has some derivatives: mobilized, demobilize.

demonopolization means "action of the verb to demonopolize "deprive anyone of any right to monopoly (the only meaning)", e.g.: The reform is implemented in several directions: recovery and development of the economy; reforming of the tax system and customs legislation; institutional reform; simplified administrating; debureaucratization; demonopolization of the economy and reduction of the state impact) [16]. The word is recorded in the Dictionary of the Ukrainian Language in twenty volumes.

deregulation means "action of the verb to deregulate "decontrol or cease the state regulation in some sphere of social relations", e.g.: The VerkhovnaRada has registered a draft law №7689 "On introduction of amendments to certain legislative acts of Ukraine concerning simplification of the conditions of business running (deregulation) [19]. The word is recorded in the Dictionary of the Ukrainian Language in twenty volumes, and also has some derivatives: deregulated, deregulate, deregulatory.

destabilization means "the act of making a system, country, government, etc. become less well established or successful; the fact of being like this", e.g.: It is the issue of your and our energy security in order to stop destabilization of the energy markets used by Russia as a weapon [20]. The word is absent in the Dictionary in eleven volumes, but recorded in the Dictionary of our language in twenty volumes with derivative: destabilizing.

Decentralization means "a system of administration when some functions of the power of a central government, organization, etc. are given to local bodies around the country; extension of the rights of smaller power authorities", e.g.: Decentralization: 15 November – the information session for the potential partners of the grant USAID program "Hoverla" for one year) [21]. The word is recorded in the Dictionary of

the Ukrainian Language in 11 volumes, and also has derivative: decentralized.

2) elimination, liquidation:

decommunization means "action of the verb to decommunize "eliminate communism ideology from social, political and legal life", e.g.: The majority of Ukrainians approve decommunization and de-russification [22]. The word is recorded in the Dictionary in twenty volumes and has two derivatives: decommunized and decommunize.

Demilitarization means "the process of removing military forces from an area. In the international law, demilitarization of borders, means removal of the armed forces from the area according to the international treaty. Demilitarization of area – is liquidation of military fortifications and buildings on some area in compliance with the international treaty or the national act". The word is used by Ukrainian journalists in the ironic tone, because the lexeme is taken from the russian aggressor's speech (along with some other words, like denazification, desatanization) on justification of the goals of the "special operation", e.g.: That day we got to know about putin's "special operation" and that its main goals were "demilitarization and denazification" of Ukraine) [23]. The word is recorded in the Dictionary in eleven volumes and has some derivatives: demilitarized, demilitarize.

Denazification means "a system of measures aimed to liquidate Nazism (Fascism) in the political, economic and public life of German society after the defeat of Hitler Germany" (Big Explanatory Dictionary -BED), e.g.: That day we got to know about putin's "special operation" and that its main goals were "demilitarization and denazification" of Ukraine) [23]. The word and its root word денацифікувати are recorded in the Dictionary in 11 volumes, as well as in the one in 20 volumes with some derivatives: denazified, denazifying.

denationalization means "loss of national features (language, culture, etc.); the process of selling a company or an industry so that it is no longer owned by the state but becomes a private business" (BED), e.g.: The announced absolutely psychopathic goals of the Russian invasion to Ukraine are "denazification" and "denationalization", which have been already for eight months promoted by Russian propagandists, in spite of the fact that most Russians aren't even able to pronounce the words, one more goal has been added [24]. The word and its derivativedenationalized are recorded in the Dictionaries in 11 volumes and in 20 volumes.

deoccupation means "a complex of legal, military, political, diplomatic, administrative, economic, information, social and other measures, aimed to restore the state sovereignty and territorial integrity within the state borders of Ukraine" (Law of Ukraine №5093 "On deoccupation" (Formula of Freedom), e.g.: Since the start of deoccupation measures in Kharkiv region, 2435 war crimes have been registered) [25]. The word is not found in any dictionary of the Ukrainian language.

depigmentation means "lightening of the skin or loss of pigment" (Melnychuk Dictionary), e.g.: Depigmentation is caused by the lack of melanocytes in the affected parts of skin) [26]. The word is not found in the Dictionary in 11 volumes,

but recorded with derivatives depigmented, depigmentingin the Dictionary in 20 volumes.

Deputinization "elimination of putinization": Denazification happens when everybody kills a small Hitler inside. In Germany it happened after 25 years. Nowadays, all Russians are united around putin. Deputinization similar to denazification happens when each Russian person kills a small putin inside but it can take a period of one generation [27].

de-russification means "elimination of russification" (BED), e.g.: The majority of Ukrainians approve decommunization and de-russification [22]. The Dictionary in 20 volumes fixes only the verb forms of the word, i.e.derussified and derussify.

desatanization, e.g.: Why Russia wants "desatanization" of Ukraine – an opinion of the religious scholar [28]. That is the word used by the aggressor to describe one of the reasons and goals of the "special operation" in Ukraine.

de-Stalinization means "a series of political reforms in the Soviet Union after the death of long-time leader Joseph Stalin", e.g.: The "Khrushchov's mistake" formula is also not good, i.e. speaking about the Crimea it is the best loved thesis of Stalinists, who hate "Mykyta" for the XX meeting, i.e. for de-Stalinization although inconsistent [29]. The word is not found in the Ukrainian explanatory dictionaries.

de-shadowing means "brining business operations and structures out of the shadow and start of their legal performance", e.g.: The problem of labor de-shadowing needs complex and differentiated approaches [30]. The word is recorded only in the Dictionary in 20 volumes and has no derivatives.

detoxification means "the process of removing harmful substances or poisons from the body of people or animals", e.g.: When our native things are underestimated, disrespected or even ignored, such "coordinate system" is false. It is of urgent necessity to make detoxification (to purify from poison, that is disclosed in the book called "Detox" [31]. The word is recorded in the Dictionary in 20 volumes and has only one derivative, i.e.detoksykatsiinyi (Eng. Detoxification).

3) decline, downward movement:

Demoralization "from French demoralisation, from Latin de… - means "without" and moralis – means "moral") 1. moral decline, immorality. 2. loss of discipline, mood, ability to act" (Melnychuk), e.g.: The army is getting more and more demoralized [32]. The Dictionary in 20 volumes includes records of only derivative such as demoralized, whilst in the Dictionary in 11 volumes, one can find such derivatives as demoralized and demoralizing.

Text messages containing words with the prefix de- can express different tones that are influenced by some factors. In particular, it depends on the meaning of the very lexeme the prefix is added to. Apparently, if the prefix de- is added to a lexeme with positive semantics, the new-formed word gets a negative meaning and vice versa, if the prefix is added to a word with negative semantics, the new-formed word gets a positive meaning. The analyzed contexts are divided into the following groups:

Messages with a *positive tone*. 1. The word *decentralization* with other lexemes makes the sentence positive: By the way, this is how I imagine a picture of full-blooded decentralization: when events of great artistic importance take place not only in Kyiv, but also in small regional centers, when projects are implemented in the province with the support of state and local budgets, which would be the envy of every big theater [14].

To verify the results obtained in this study, several popular electronic tools for analyzing the tonality of the text were used.

1. Text tonality analysis module from the MonkeyLearn-service [33].

It has a free online version that allows you to analyze text entered from the keyboard, imported from .csv files, etc. Does not support the Ukrainian language. Works only with text, does not analyze emojis and other graphic elements. The developer also offers advanced paid versions of the tool (Figure 1).

Analysis for an example from a message with a positive tone "By the way, this is how I imagine a picture of full-blooded decentralization: when events of great artistic importance take place not only in Kyiv, but also in small regional centers, when projects are implemented in the province with the support of state and local budgets, which would be the envy of every big theater" were first translated into English, then their tonal analysis was carried out and the following results were obtained (Figure 2):
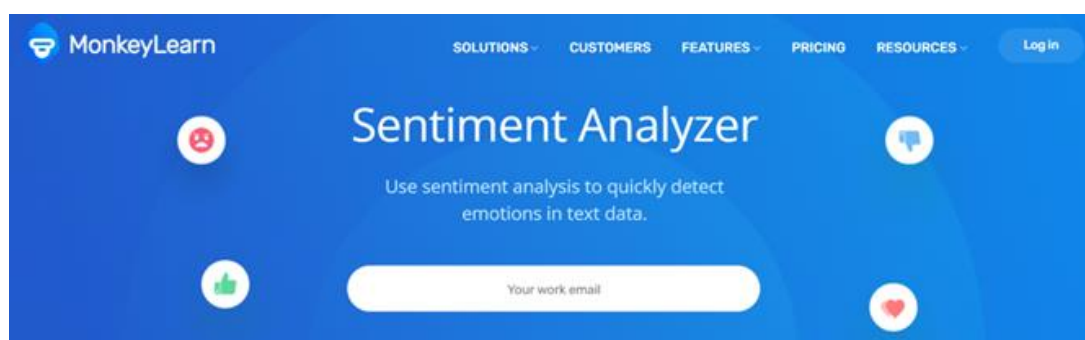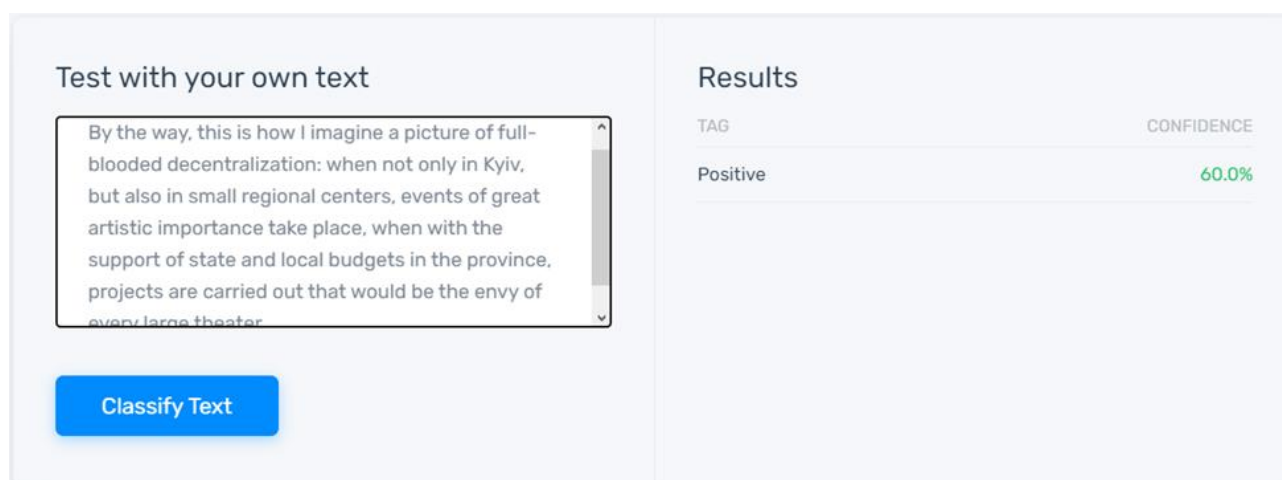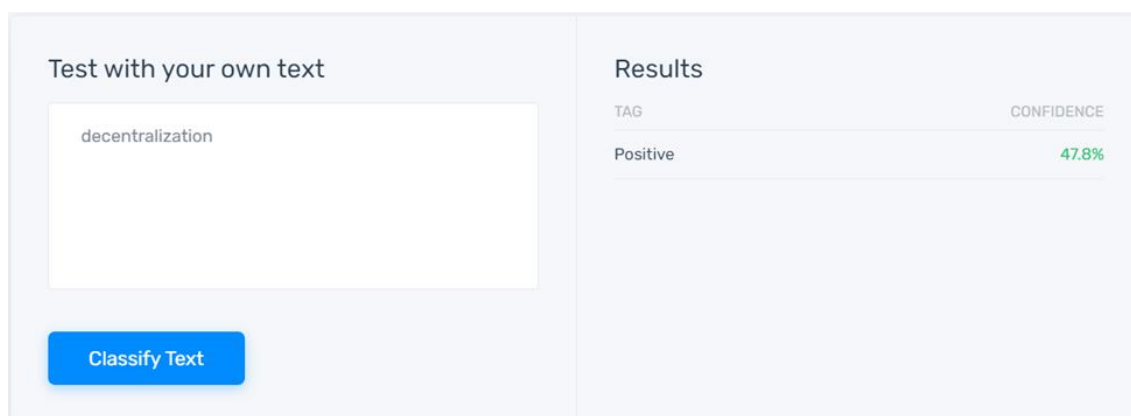

Figure 1. MonkeyLearn sentiment text analyzer.

Figure 2. Sentiment analysis for a positive tone message with word "decentralization" using MonkeyLearn text analyzer.

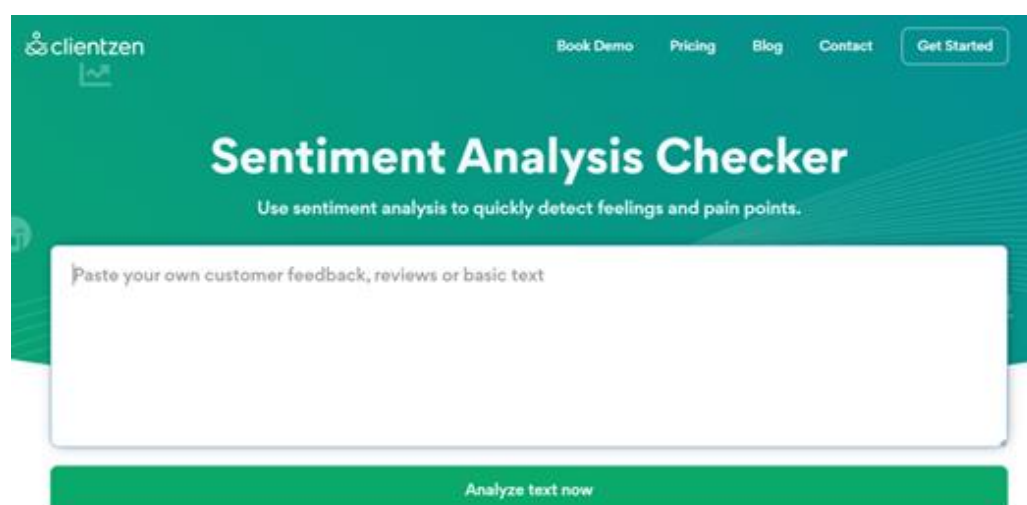If we analyze the term "decentralization" separately, we get the following results (Figure 3).

Figure 3.Sentiment analysis for a word "decentralization" using MonkeyLearn text analyzer.

2. Text Tonality Analysis Module from Clientzen [34]

Figure 4. Clientzen sentiment text analysis checker.

The application has a free online version that allows you to analyze only the text entered from the keyboard. Supports the Ukrainian language.
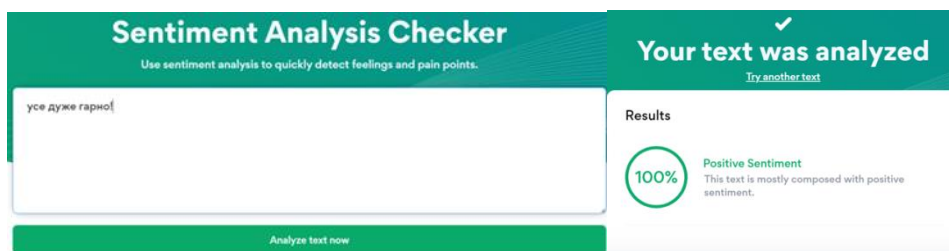

Figure 5. Analysis of a message in Ukrainian with Clientzen sentiment text analysis checker.

Analysis for the same example of a message with a positive tone in Ukrainian "By the way, this is how I imagine a picture of full-blooded decentralization: when not only in Kyiv, but also in small regional centers, events of great artistic importance take place, when with the support of state and local budgets in the province implement projects that would be the envy of every large theater" gave the following results.
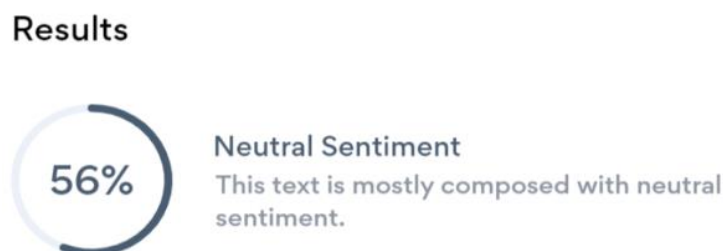

Figure 6. Analysis a positive tone message with word "decentralization" with Clientzen sentiment text analysis checker.

3. Another Tool is Available at the Link [35]

The product is paid, in the online mode it gives the user 30 minutes of free text analysis. Does not support Ukrainian. Does not provide explanations and statistics based on the results of the analysis.
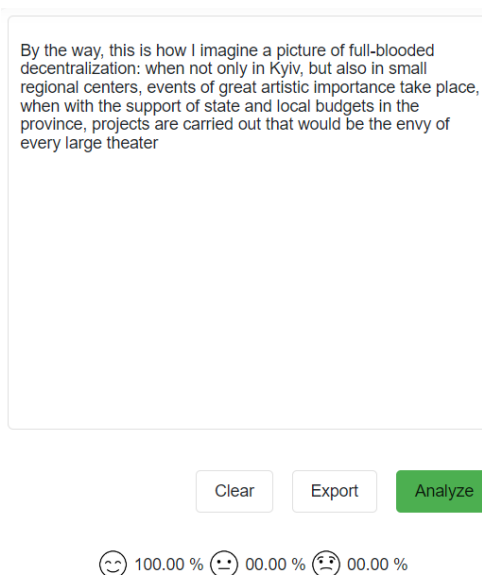
The result for the same example:

Figure 7. Analysis of a positive tone message with word "decentralization" with Speakai text analysis tool.

The machine analysis confirmed the results of the manual analysis. The word decentralization with positive semantics gives the sentence a positive tone.

The word *demonopolization* exert a positive tone to the sentence. The word is formed by adding the negative prefix to the word with a negative meaning. Even a more positive tone is expressed by contrasting the first sentence having definitely negative semantics to the second sentence with the positive one: When somebody has a monopoly to something, it means possessing a powerful instrument of corruption. Demonopolization of the economy is, however, the step which had to be done long ago [12].

A positive tone is expressed in the following examples by the words with a positive meaning, such as debureaucratization and demonopolization: The reform is implemented in several directions: recovery and development of the economy; reforming of the tax system and customs legislation; institutional reform; simplified administrating; debureaucratization; demonopolization of the economy and reduction of the state impact [16] destabilization, decommunization and de-russification: It is the issue of your and our energy security in order to stop destabi-

lization of the energy markets used by Russia as a weapon [20]; detoxification: When our native things are underestimated, disrespected or even ignored, such "coordinate system" is false. It is of urgent necessity to make detoxification (to purify from poison, that is disclosed in the book called "Detox" [31]; denazification, deputinization: Denazification happens when everybody kills a small Hitler inside. In Germany it happened after 25 years. Nowadays, all Russians are united around putin. Deputinization similar to denazification happens when each Russian person kills a small putin inside but it can take a period of one generation [27].

A message with a negative tone. The word degradation has negative semantics and in the given example also adds a negative tone to the sentence, which is also achieved with the help of other words with a negative meaning (Extinction), tragic mistake, man-made disaster: "Dooming this layer to degradation and slow extinction, the state repeats in the humanitarian sphere the tragic mistake that industrial civilization made in seizing fossil fuels, preparing itself for a man-made catastrophe [11];" Consider the use of text tonality analysis software products for other examples.
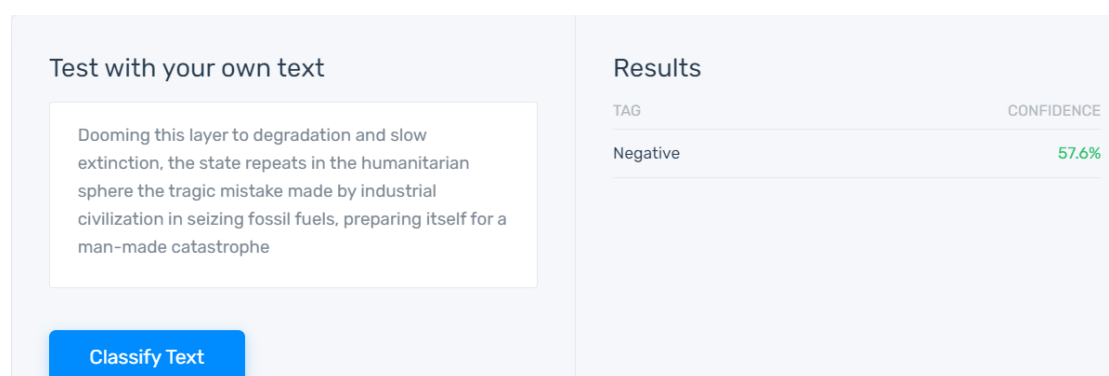

Figure 8. Sentiment analysis for a negative tone message with word "degradation" using MonkeyLearn text analyzer.

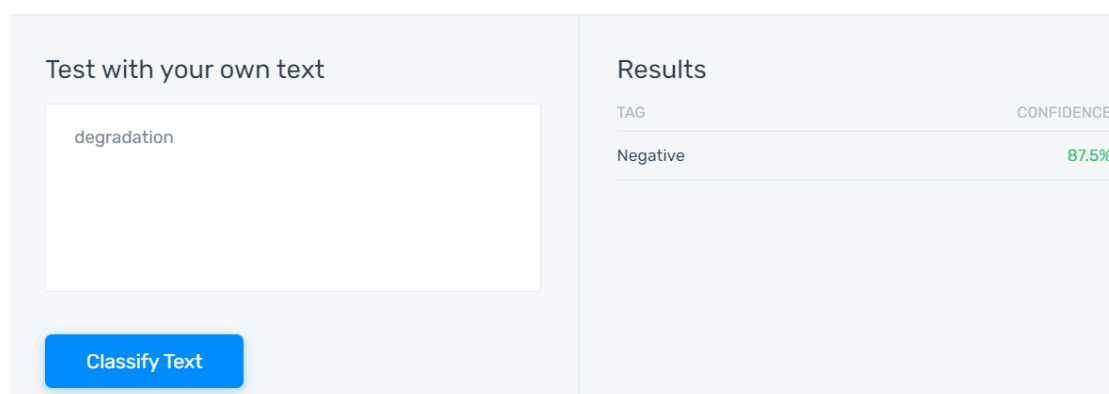Separately, the word "degradation" has a more negative tone.

Figure 9. Sentiment analysis for a word "degradation" using MonkeyLearn text analyzer.

The results of machine and manual analysis coincide and showed the negative meaning of the word degradation and the negative tone of the sentence in which it is used. However, computer analysis showed that the word itself has a 30% more negative tone than the sentence.

The word de-russification carries a positive meaning which is provided by the negative meaning of the prefix and the root. In the sentence, however, the negative tone is supported by the proposition without and the word combination "stop dreaming", etc., e.g.: Without an actual, effective, competent program of protection and development of Ukrainian studies at Universities and learning the Ukrainian language and literature at schools, we should stop dreaming about de-russification of the national cultural space… [11].

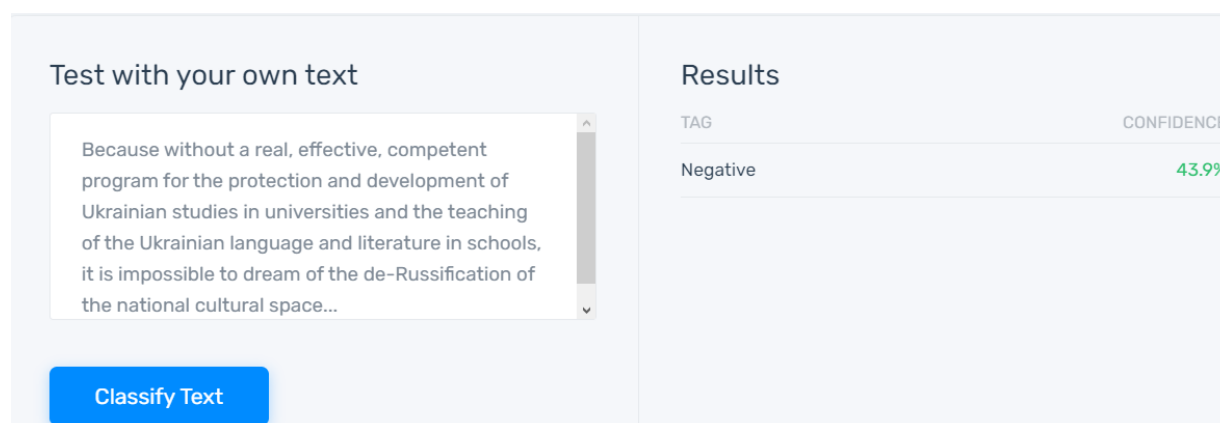The text analysis module from the MonkeyLearn service gives the following results:

Figure 10. *Sentiment analysis for a message with word "derussification" using MonkeyLearn text analyzer.*

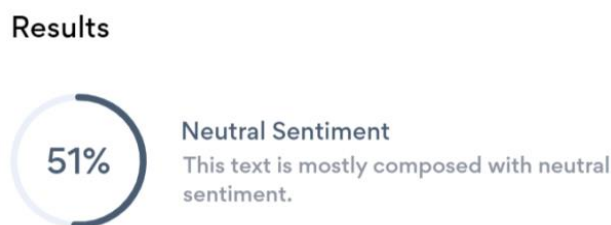The text tonality analysis module from Clientzen is as follows:

Figure 11. *Sentiment analysis for a message with word "derussification" using Clientzen sentiment text analysis checker.*

Machine analysis confirmed that the sentence with the word derussification has a more neutral tonality than a positive one.

In the examined materials, there are text messages containing words with the prefix de- and expressing a neutral tone. In the analyzed case, it is the official title of the draft law: The draft law №5388 on introduction of amendments to the legislation on labor relations deregulation [13] and the polysemic word demobilization that is of neutral meaning and tone in this specific context, e.g.: Because a person who serves in the army when there is no war understands that he/she gets social support and will be able to buy housing, or get to know how to live after demobilization [17]. The words depigmentation and de-shadowing have positive meanings, whilst the analyzed sentences are mostly of a neutral tone, e.g.: "Within foci of depigmentation, pigmented, in rare cases, hyperpigmented areas of the skin, located mainly on the borders of the foci, may remain" [36]; The problem of labor de-shadowing needs complex and differentiated approaches [30]. The word de-carbonisation is used figuratively, although in the studied sentence it is of a neutral tone, e.g.: I even saw the definition that the carbon tax is the innovative tool of protectionism. Do you agree to such interpretation? How is the issue of decarbonisation considered in Ukraine? [12].

Text messages with an ironic tone. In the conditions of the Russian invasion to Ukraine, journalists are inventing a lot of new words, as well as words with new meanings to vividly depict the war-related events. In numerous materials, media people ironically mention about the aggressor's imaginary, psychopathic goals. It is revealed in the words like demilitarization, denazification, denationalization, desatanization, e.g: "That day we got to know about putin's "special operation" and that its main goals were "demilitarization and denazification" of Ukraine) [23]; The announced absolutely psychopathic goals of the Russian invasion to Ukraine are "denazification" and "denationalization", which have been already for eight months promoted by Russian propagandists, in spite of the fact that most Russians aren't even able to pronounce the words, one more goal has been added [24]; Kremlin announced a new goal of invasion to Ukraine [24].

For an example of a text message with an ironic tone, "That's when we learned about Putin's "special operation" and that one of its main tasks is the "demilitarization and denazi-

fication" of Ukraine," we have the following results of machine sentiment analysis:

1) The text tonality analysis module from the MonkeyLearn

service gives the following results:

The word "demilitarization" has a negative connotation.
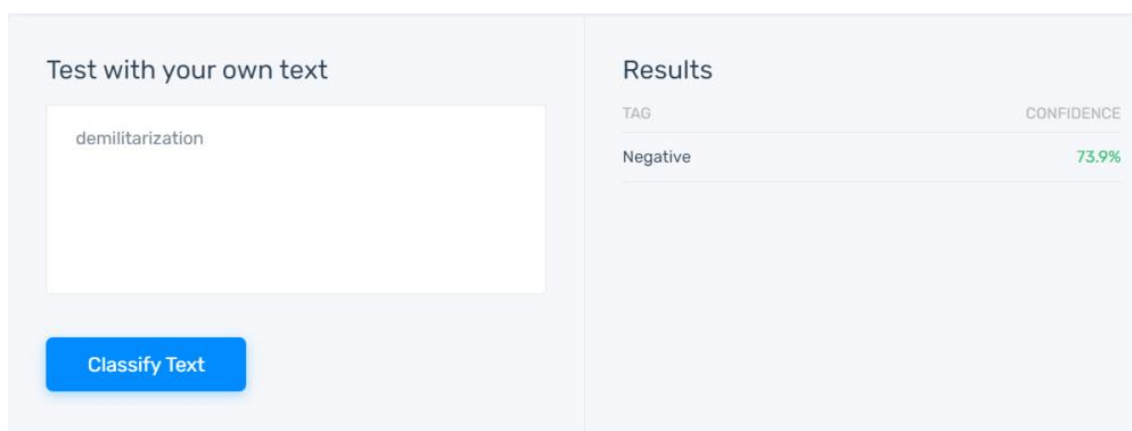
Figure 12. Sentiment analysis for a message with word "demilitarization" using MonkeyLearn text analyzer.

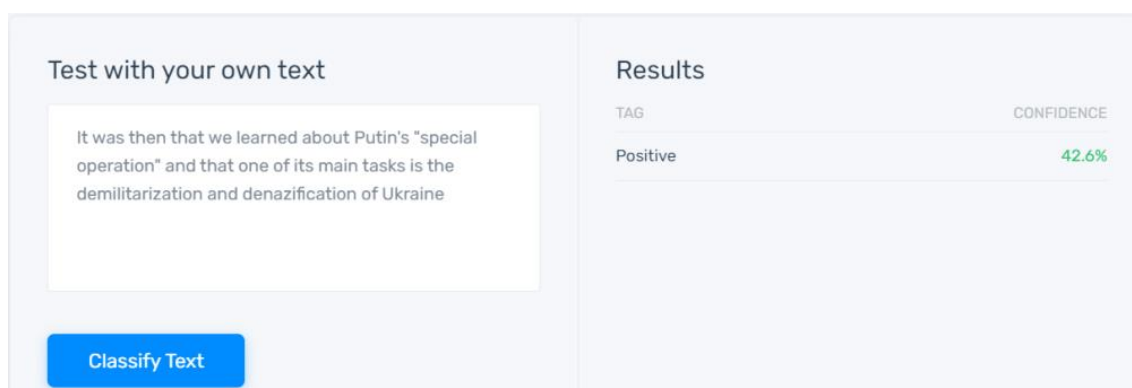And in sentences with an ironic mood, it has such a tone.

Figure 13. Sentiment analysis for an ironic message with word "demilitarization" using MonkeyLearn text analyzer.

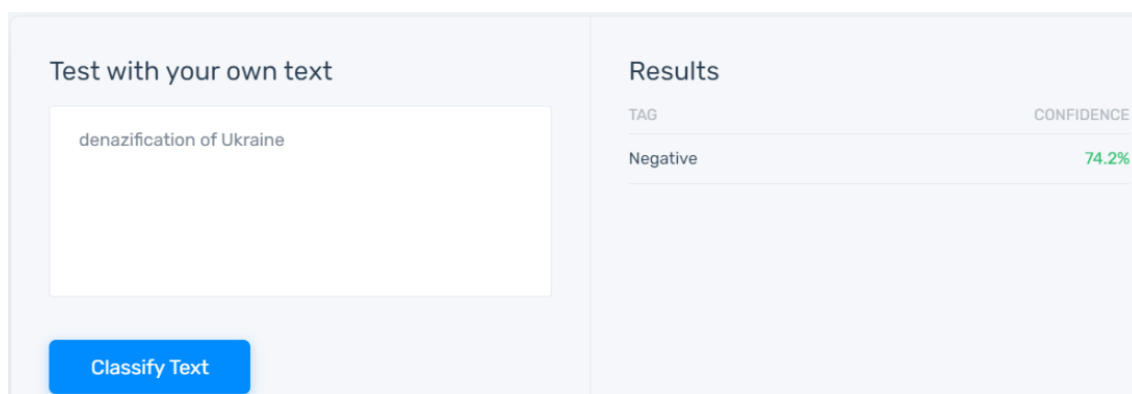If we analyze the phrase "denazification of Ukraine" separately, the tone is negative.

Figure 14. Sentiment analysis for a message "denazification of Ukraine" using MonkeyLearn text analyzer.

Machine analysis of sentences in which journalists, in our opinion, resort to irony, managed to determine that irony appears when the meaning of a word in the textual environment becomes the opposite of its individual dictionary meaning.

Thus, to identify the tone of journalistic texts, the following aspects are considered, namely 1) meaning of the prefix and the root word (that is the principal aspect in determination of a positive tone); 2) semantics of other words and word combinations, prepositions, sense of the whole sentence (especially when determining a negative or a positive tone); 3) the situation (mainly in the texts of a neutral tone); 4) the subject and the public, goal, sense of the message, i.e. who informs and why (especially in case of irony).

The analyzed lexemes are made in two ways: by adding the prefix to nouns (8): debureaucratization (<bureaucratization), demobilization, deoccupation, depigmentation, deputinization, de-shadowing, detoxification, decentralization and by adding the suffix to verb roots and the -ation formant (13): degradation (to degrade), decarbonisation, decommunization, demilitarization, demonopolization, demoralization, denazification, denationalization, deregulation, de-russification, desatanization, destabilization, de-Stalinization.

The etymological analysis of the studied lexemes with the prefix de- confirms the following regularities: 1) these words are mainly borrowed from French: debureaucratization (<bureaucratization), bureaucrat – from Fr. bureau - “writing table, stationary”; degradation (to degrade) – Fr. dégradation “demotion, deprivation; decline”; decommunization – Fr. communism; demilitarization – Fr. militarisme; demobilization – “movable, changeable, variable”; demoralization – borrowed from French with Russian intermediary; Fr. demoralisation formed from “moral”; 2) lexemes having the stems of Latin origin: decarbonization – Latin carbon; demonopolization – Latin monopōlium “the right of monopoly sale”; denationalization – Latin nātiō “birth, origin; nation”; depigmentation – Latin pigmentum “colour, colorant”; desatanization – Greek σατανᾶς originates from śāṭán “counteracting”; decentralization – Latin centrum “compass leg; circle centre; bone of fruit”; detoxification– Greek τοξικός “poisonous”; 3) words with German roots: denazification – Nazísmus is formed from Názi “national socialist”; deoccupation – Okkupatión “occupation”, Fr. Eng. occupation “тс.” refer to Latin occupātiō “occupation, capture”; deregulation – regulíeren “to regulate” originates from late Latin regulo “I regulate, arrange, teach”; destabilization – Ger. stab í, Eng. stabile, Fr. stable; 4) lexemes of old Slavonic origin: de-shadowing – there is a convincing opinion about the relation of the old Slavonic stěnь “shadow” and sěnь.

5. Results and Discussions

In the mentioned media of the studied periods, 21 lexical

units with the prefix de- were found, namely debureaucratization, degradation, decarbonisation, decommunization, demilitarization, demobilization, demonopolization, demoralization, denazification, denationalization, deoccupation, depigmentation, deputinization, deregulation, de-russification, desatanization, destabilization, de-Stalinization, de-shadowing, detoxification, decentralization.

The semantic analysis of the recorded words with the prefix de- found in the online media has shown that almost all these words are related with the social and political events, business and war (19 units). Only one lexeme is from the sphere of medicine (depigmentation), and one unit (detoxification), although being a medical term in its direct meaning, refers to the social and political life in the analyzed context.

Such words as demilitarization, demobilization, demoralization, denazification, denationalization, deoccupation, deputinization, desatanization, destabilization (9 units) are related immediately with the Russian invasion to Ukraine. Moreover, demilitarization, denazification, denationalization, desatanization are used ironically by Ukrainian journalists because these words are used by the aggressor to justify the military invasion to Ukraine.

According to the structural and word-formation characteristics, the words with the prefix de- are divided into the lexemes of the prefix (8 units) and suffix derivation (13 units).

By their origin, almost all lexemes are foreign and derived from Latin, French, and German.

By the registration in the Dictionary of the Ukrainian language in eleven volumes and the Dictionary of the Ukrainian language in twenty volumes, the analyzed words can be divided into: 1) the words recorded in the Dictionary in eleven volumes and in the Dictionary in twenty volumes (2): denazification, demobilization; 2) the words recorded only in the Dictionary in eleven volumes (4): demoralization, denationalization, demilitarization, decentralization; 3) the words recorded only in the Dictionary in twenty volumes (6): detoxification, de-shadowing, decommunization, destabilization, deregulation, demonopolization; 4) the words not recorded in the mentioned Dictionaries (6): deputinization, de-Stalinization, desatanization, de-russification, depigmentation, deoccupation, debureaucratization.

Although researchers qualify the prefix de- as negative, the conducted analysis proves that the studied words have positive meaning in the variants where they have been derived from the lexemes of negative meaning: debureaucratization, demobilization, decentralization, detoxification, de-shadowing, decommunization, deregulation, demonopolization, de-Stalinization, de-russification, depigmentation, deoccupation, deputinization. The words denationalization, demilitarization, denazification, desatanization are used with irony in the analyzed materials. The words degradation, demoralization and destabilization express a negative sense.

Computer analysis of words with the prefix de- confirmed the idea that this prefix has a negative meaning,

because it negates the meaning of the original word. However, at the level of tonality, the meaning of the word with the prefix de- affects the tonality of the sentence. If the word has positive semantics, then the sentence has a positive tone. And vice versa: the negative semantics of the word gives a negative tone to the sentence. Irony in journalists' text messages appears when the word de- in the sentence has the opposite semantics to the one specified in the dictionaries.

The interesting fact is that the words related with Russian invasion to Ukraine are characterized by irony in the texts of Ukrainian journalists. It is explained by the fact that the aggressor used these words to create an imaginary picture of the world and impose it on the global public. In fact, it does not coincide with the other linguistic pictures of the world, particularly Ukrainian, because Ukrainian journalists provide true information in their texts and use these words to show the aggressor's ridiculous goals.

Not all words with the prefix de- mean negation in the texts of Ukrainian media. Some of them mean decline, downward movement and partial reduction that is confirmed by the study.

The tone of text messages containing words with the prefix de- is expressed not only by the semantics of these words in the context, but also by the semantics of other words used in these sentences, as well as functions of the auxiliary words, author's subjective opinion, etc. In the studied materials, the words with the prefix de-, however, are the semantic and logical centers.

It is confirmed that the current texts published by mass media include new words formed by adding a prefix, a suffix, or a prefix and a suffix to foreign morphemes directly related with the present social processes, development of information technologies, and Ukraine' contacts with English-speaking countries. The active use of words with the prefix de- in Ukrainian materials of the 21st century is caused by the information burden of the language carriers and their attempts to take least efforts, as well as journalists' wish to provide accurate and clear information to public.

6. Conclusions

The modern Ukrainian language of mass media is characterized by the wide use of structural elements borrowed from Latin, particularly words with the prefix de- expressing negation, liquidation, decline. In the materials of Den newspaper and other media, such lexemes are more often found during the war than it was marked before the Russian invasion to Ukraine. It is related with the current social and political processes and the war itself. Journalists actively use lexemes with the prefix de- in their reports contributing to the text tone and expressing the author's attitude to specific events. The tone of each word with the prefix de- depends of the semantics of its root word, whilst the tone of the text is shaped by other words in the message, by the author's personality and the

addressee.

The computer analysis confirmed the results of the manual analysis: the semantics of the word with the prefix de- determines the tonality of the sentence. The ironic tonality of a text message occurs when the word de- acquires the opposite meaning in a sentence to its main dictionary meaning.

Abbreviations

BED: Big Explanatory Dictionary

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Conflicts of Interest

The authors declare no conflicts of interest.

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