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**ANALYSIS OF ADJECTIVES IN ONLINE NEWS ARTICLES REGARDING WAR
IN UKRAINE (2022–2023)**

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INTRODUCTION

“A man’s character may be learned from the adjectives which he habitually uses in conversation” – a quote by Mark Twain, American writer of well-known classics such as *The Adventures by Tom Sawyer* (1876). The meaning of this quote can be interpreted differently, but the main idea expresses the importance of adjectives as they can convey a particular message or draw an image, build an opinion depending from the context.

According to the study conducted in 2018 by B. Marušič and S. Katavič-Čaušič, adjectives serve as “one of the four dominant word classes” in the English language (2018, p. 101). The other remaining ones are verbs, nouns and adverbs. In the English language the class of adjectives is quite open and large (Payne, Huddleston & Pullum, 2010, p. 31–81). Even though it is quite difficult to determine the percentage of adjectives in English due to the natural constant changes in the language, it is estimated that 25% of words in Oxford English Dictionary belong to the class of adjectives (Marušič & Katavič-Čaušič, 2018). Therefore, adjectives can easily become an interesting linguistic phenomenon for analysis and interpretation.

Unfortunately, research on adjectives is not as extensive as it might seem. Soler (2002, p. 145–165) has expressed the necessity of adjectives to be analysed not only as independent words, but also as parts of a specific context, as adjectives are important in the science of languages, researches, etc. Adjectives are used for observation, description of results, manifestation, strategical communication. Soler (2002, p. 145–165) stated that “less attention has been paid to the analysis of adjectival frequency in [...] discourse [...]”. Linguists such as Ompusunggu (2016) and Kartal (2017) have also expressed the lack of research conducted on adjective frequency based on the context in their own studies of adjectives. The main topics of their studies was adjectives and their role in scientific discourse, such as social sciences, technology, medical sciences and other fields, like beauty or fashion.

As previous research of adjective frequency and its role in different contexts has been limited to several topics, this thesis is going to carry on with the analysis of adjectives in yet another context. Therefore, the **subject** of this research is adjectives found in English articles regarding the war in Ukraine, which started in 2022. The **aim** of this research is to reveal the frequency of adjectives in war-themed contexts, and their role in situation evaluation and perception building of the targeted audience. In order to achieve this, the following **objectives** have been set:

1. To review scientific literature on adjectives and their characteristics;
2. To determine, categorise and describe the most frequent adjectives based on their morphological, syntactical and semantical features;
3. To reveal, what nouns are modified by most frequent adjectives found in articles regarding the war in Ukraine;
4. To analyse and interpret the meanings of adjectives used in war-related articles.

Being aware of the objectives set for this thesis it is important to mention that multiple research methods were used in order to obtain them. The qualitative method was applied in the empirical part as it required semantic analysis of data collected from the articles. The quantitative method was used as well, to investigate the frequency of adjectives found in the chosen articles.

The overall structure of the study takes the form of five major chapters, including introduction, overview of theoretical background of the phenomena, methodology, empirical analysis of data and conclusions. The paper begins with the introduction, which gives a brief description of adjectives, reveals their relevance and states main objectives of the thesis.

The following chapter is concerned with the theoretical background of adjectives, which itself is divided into five sub-chapters. This chapter generalises the definition of adjectives by overviewing the definitions provided by other scholars and dictionaries. It will then go on to the theoretical analysis of adjectives based on their morphological, syntactical and semantical aspects, and overview of previous research.

The third chapter is related to the methodology of the thesis. This chapter describes and explains the methods used to collect the relevant data for further analysis, presents overall data which was found in the articles on Ukraine – Russia's war, and reveals the limitations of the current thesis.

Chapter Four analyses adjectives extracted from articles regarding Ukraine – Russia's war and their frequency according to their morphological, syntactical and semantical aspects. The remaining part of this chapter presents adjectives and the most frequent nouns they modify and attempts to interpret the meanings they convey to the targeted audience and overall perception of the context.

Overall analysis is completed by conclusions, which were drawn from the theoretical overview and data collected on adjectives. It is worth mentioning that after conclusions are presented, additional chapters are included: references, sources, summary in English and Lithuanian, and appendices.

I. THEORETICAL OVERVIEW OF ADJECTIVES

This part of the thesis is divided into 5 sub-chapters and each of them aim to cover the theoretical background of adjectives to build a base for the empirical part of the thesis. First sub-chapter deals with the definitions of adjectives provided in dictionaries or by scholars in their previous studies, or grammar books. It then goes on to the analysis of classification of adjectives based on their morphological, syntactical and semantical features. Sub-chapter 5 is closed off with the overview of similar studies conducted on adjectives and their frequency in different contexts.

1.1. Adjective definition

The introductory part of this research presented adjectives as being important tools for communication and message transmission. Trying to understand the role of adjectives in any type of communication, it is crucial to get a better view of what they actually are and to overview various definitions provided by different scholars of the field. Generally, adjectives could be loosely defined as additions to a noun. Dictionaries such as Cambridge Essential English Dictionary (2011, p. 6) define adjective as “a word that describes a noun or pronoun”.

Crystal (2008, p. 12) gives a more extensive definition of adjectives, by expressing that adjective is a “term used in the grammatical classification of words to refer to the main set of items which specify the attributes of nouns.” In the entry, he briefly introduces, that adjectives can take an attributive or predicative position. McNally and Kennedy (2008, p. 1–11) also investigated the flexibility of adjectives, by offering an idea of adjectives being quite flexible compared to other parts of speech as they can stand in different parts of a sentence, both in predicative position and as a noun modifier. This could be seen in the following examples based on McNally and Kennedy’s research (2008): a) *the milk is expired* (predicate); b) *the expired milk* (modifier).

Depraetere & Langford writes that an adjective is “a word which describes or limits a substantive. An adjective is said to belong to the substantive which it describes or limits” (2019, p. 75–76). To clarify this definition, substantive is a synonym for a noun. Quite similar definition was provided by Huddleston (1984, p. 90–123), as he described adjectives as words that modify a noun and are used to “point out the living being or lifeless thing designated by the noun [...]”. He also explained, that adjectives can be distinguished by four properties: a) used as predicates (ex. *They found it rather tiresome*); b) used as attributes (ex. *that rather*

tiresome politician); c) used as postpositive (ex. *something rather tiresome*); d) used by modification and inflection (gradable adjectives, used with modifiers of degree) (Huddleton, 1984, p. 299–311). Huddleton’s proposed adjective properties, according to himself, can also belong to nouns, except property **d**), as it seems to only belong to the class of adjectives. Baker (2003) has also analysed adjectives and their properties and how they differ from other parts of speech, for example, from verbs and nouns, and he came up with three different environments “in which only an adjective can appear” (**Table 1**).

Table 1. *The environment of adjectives (Baker, 2003, p. 191)*

Environment	Example
a) Adj. as direct attributive modifier	<p>a. <i>a smart woman</i></p> <p>b. <i>a genius woman</i></p> <p>c. <i>a shine coin</i></p>
b) Adj. as complements of degree heads like <i>so, as, too, and how</i>	<p>a. <i>Mary is too smart for her own good.</i></p> <p>b. <i>Mary is too a genius/a too genius for her own good.</i></p> <p>c. <i>If you polish it, the coin will too shine in the dark to miss</i></p>
c) Adj, as resultative secondary predicates	<p>a. <i>They beat the metal flat.</i></p> <p>b. <i>They beat the metal a sword.</i></p> <p>c. <i>They polished the coin shine.</i></p>

Environment **a**) means that adjectives differ from verbs and nouns as only adjectives can be “direct attributive modifiers” of a noun (Baker, 2003, p. 191). Going further to **b**) Baker (2003, p. 191) continues to highlight the difference shared by nominal, verbal projections and adjectives, and finally, **c**) he gives examples of the situations when nouns and verbs are not possible to stand as resultative secondary predicates, meanwhile adjectives can.

After further analysis of adjectives and their descriptions in researches mentioned above, a conclusion can be drawn that adjectives indeed are mainly the modifiers of a noun, that are flexible enough in order to stand in a sentence as predicates or attributives.

1.2. Adjective morphology

This sub-chapter of theoretical overview marks out main aspects of adjective formation. Topics covered in the chapter include compounding, suffixation, comparative and superlative forms of an adjective, and a review of adjectives of degree.

1.2.1. Word formation. Adjectives

Word formation analyses and describes different ways of transforming words. Two major fields are being analysed by a number of scholars in morphology, and these fields are called inflection and word-formation. According to Crystal (2008, p. 523), word-formation explains how words are being reconstructed to move back and forth from different word classes. Inflectional morphology deals with morphemes “in identifying word classes or their features” (Šeškauskienė, 2013, p. 6–5). This type of inflection uses morphemes to build different word-forms.

There are different ways of word formation: 1) alphabetism (*Attention-deficit/hyperactivity disorder* → **ADHD**); 2) Acronyms (NATO); 3) Affixation (*appear* → **disappear**; *ill* → **illness**); 4) Blending (*Britain* + *exit* → **Brexit**); 5) Clipping (*Internet* → **net**); 6) Compounding (*foot* + *ball* → **football**); 7) Conversion (*regular (Adj.)* → *a regular (n.)*); 8) Stress shift.

Adjectives are usually formed by prefixation and suffixation, from either nouns, verbs, or fellow adjectives, or compounding, therefore further investigation of this sub-chapter will be dedicated to a more extensive analysis of such word-formation.

Prefixation, according to Crystal (2008, p. 16) is when affixes take the position in the beginning of word’s root/stem (ex. *un-* + *selfish* → **unselfish**). Šeškauskienė (2013, p. 79) has also explained that prefixation deals with derivational morphemes which build new words.

Suffixation is involved in multiple word formation processes, “such as derivation of verbs, nouns and adjectives” (Hamawand, 2007, p. 6). According to Hamawand (2007, p. 6), adjectives are derived from nouns and verbs. This means that adjectives are being formed from one word class to another. Hamawand (2007) provides a full list of suffixes that are used to form adjectives (**Table 2**).

Table 2. *Adjective suffixes (Hamawand, 2007, p. 49–86/253–254)*

Suffixes of Adjectives
-al, -able, -ant, -ary, -ious, -ed, -en, -free, -full, -ible, -ic, -ical, -ing, -ish, -ive, -less, -like, -some, -stricken, -style, -type, -ward, -y

Another way to form adjectives is by compounding. According to Plag (2003, p. 133), compounding can be simply explained as a “combination of two words to form a new word”, of which one is considered to be the head of the compound. Additionally, adjectival compounds can be interpreted semantically and they are usually formed by having other adjectives or nouns as non-heads (Plag, 2003, p. 152) (*see Table 3*).

Table 3. *Compound adjectives with nouns as non-heads (Plag, 2003, p. 152)*

Compound adjectives	
capital-intensive	sugar-free
knee-deep	structure-dependent
dog-lean	girl-crazy
blood-red	class-conscious

Plag (2003) further discusses the semantical relation between the combinations of these compound words. He states, that some of the compounds provided in the examples above could have a semantical meaning, for example, *dog-lean* automatically transmits an idea of something being ‘very lean’ (Plag, 2003, p. 152). *Sugar-free* would instantly send a message to the receiver that something is ‘without sugar’. Therefore, it could be stated that compound adjectives provide more information to the context, as they are formed from multiple independent words that can stand alone (Šeškauskienė, 2013, p. 161) and have their own meanings.

Compound adjectives can be formed in multiple ways. Vossoughi (2004, p. 23–34) has analysed compound adjectives and concluded that there are 10 patterns of adjective compounding:

- 1) Noun + Adjective (*ex.: accident-prone; dirt cheap; egocentric*)
- 2) Adjective + Adjective (*ex.: bare-faced; easy-going; absent-minded*)
- 3) Adjective + Noun (*ex.: back-door; deep-sea; old-style*)
- 4) Noun + Noun (*ex.: arm-chair; Queen-size; part-time*)
- 5) Adverb + Adjective (*ex.: outgoing; outspoken; fully-fledged*)
- 6) Adjective + Preposition (*ex.: built-in; far-off; buttoned-up*)
- 7) Determiner (All) + Adjective/Noun (*ex.: all-forgiven; all-accomplished; all-good*)
- 8) Three / four – Word Adjectives (*ex.: black and blue; hit-and-miss; heart-to-heart*)
- 9) Adverb / Preposition + Noun (*ex.: downstream; counter-terrorist; indoor*)
- 10) Miscellaneous Compound Adjectives (*ex.: Verb + Adv/Prep take-away*)

The most frequent combination of adjective compounding, according to Vossoughi (2004) is *Noun + Adjective*. Overall, the compound patterns provided by Vossoughi (2004, p. 23–34) reveal that nouns are important in adjective compounding as they make the majority of those patterns.

1.2.2. Adjectives of degree

In the English language, adjectives can express a different intensity by changing their form. These forms are divided into three categories: comparative, superlative and positive (Bauer, Lieber & Plag, 2013, p. 103–120). These forms of adjectives “refer to the formation of adjectives” and “mark higher and highest degree <...> on a given scale” (Watanabe & Iyeiri, 2020, p. 71–97). Based on the Laurie, Lieber and Plag’s investigation (2015, p. 104), adjectives of degree are also named as ‘comparison’. These types of adjectives can be formed in two ways, by adding comparative suffix *-er*, or superlative *-est*, or by adding a particular syntactic construction in front of the adjective, which is comparative *more*, or superlative *most* (Bauer, Lieber & Plag, 2013, p. 103–120). It is worth mentioning that some of the adjectives, that have suffix *-er* might look like comparatives, but it is important to note that they do not carry the meaning ‘more’ in them, for example, *earlier* and *later* (Bauer, Lieber & Plag, 2013, p. 103–120). To explain, “only those adjectives and adverbs that are gradable, or at least allow a gradable reading, can have comparative and superlative forms” (Bauer, Lieber & Plag, 2013, p. 103–120). That being the case, in order to properly categorise adjectives into comparatives and superlatives, semantical context becomes important.

Watanabe & Iyeiri (2020, p. 71–97) also explained that adjectives “take both inflectional and periphrastic forms”. To explain simply, inflectional forms are formed by adding affixes *-er* or *-est*, and periphrastic forms are formed by adding *more* and *most* in front of an adjective (*see Table 4*).

Table 4. *Examples of inflectional and periphrastic adjective forms (Watanabe & Iyeiri, 2020, p. 71–97)*

Inflectional type, or the <i>-er</i> or <i>-est</i> form
(1) We were taunted by images of a <u>simpler</u> way of living (IND 2001).
(2) Clearly, Mr. Portillo sees anything beyond Notting Hill as an alien land, which has about as much to do with his lifestyle as the <u>remotest</u> part of Siberia (DM 2001).
Periphrastic type, or the <i>more</i> or <i>most</i> form

(3) “It is important that we meet in a much <u>more simple</u> and sober way,” Mr. Prodi told journalists (IND 2001).
(4) Even in one of the <u>most remote</u> parts of the South Pacific, I could be recognized (DM 2001).

Generally, all of the monosyllabic adjectives choose the inflectional type and all of the adjectives with more than two syllables take the periphrastic type, however, some of the disyllabic adjectives have a tendency to switch between both types (Watanabe & Iyeiri, 2020, p. 71–97). Watanabe & Iyeiri (2020) investigated such adjectives further. By analysing multiple news articles like *The Independent* and *Daily Mail*, it was figured out that periphrastic form is used more in less formal texts, although it cannot be stated as a rule, as “not all adjectives react to this stylistic factor” (Watanabe & Iyeri, 2020, p. 81).

1.3. Adjective syntax

Based on Crystal (2008, p. 471) syntax governs “the way words are combined to form sentences in a language”. Principally, this field of linguistic studies explains how sentences are formed in a certain way and why the order of words in a sentence sometimes cannot be changed. Adjectives, equally to other parts of speech have their own rules of where they should stand in a sentence. Napiorkowska (2015, p. 317) elucidates, that the most frequent part where adjectives can be found is in a noun phrase, as their main function is to modify the head noun. Hofherr and Matushansky (2010, p. 10) explains that adjectives can be found in two syntactic contexts, as attributives or predicates. According to Matthews (2009, p. 358–375) these two functions are the only functions an adjective can have. Attributive adjectives are direct noun modifiers, meanwhile predicates break into two more categories as the complements “of a copula” and as “secondary predicates” (Hofherr & Matushansky, 2010, p. 10). Examples of predicate and attributive adjectives provided by Hofherr and Matushansky (2010, p. 10) are in the **Table 5** below:

Table 5. *Predicate and attributive adjectives. Examples. (Hofherr & Matushansky, 2010, p. 10)*

Attributive adjectives	E.g., <i>The blue car came down the avenue.</i>
Predicate adjectives	
a) Copula	E.g., <i>The car is blue.</i>
b) Secondary prediction	E.g., <i>John painted the house blue.</i>

Matthews (2009, p. 358–375) continues to explain that even though adjectives have such a tiny number of syntactic functions, not all of those adjectives can have the range to fulfil all of them. He carries on by analysing Huddleston & Pullum’s (2002, p. 553) previous research on such adjectives. Example word ‘*main*’ is given to explain the theory proposed by Huddleston & Pullum (2002). The word ‘*main*’ is classified as adjective belonging to the attributives group, as it is possible to form such phrase: *the main difficulty*, but it does not work the other way around: *such difficulties are main* (Matthews, 2009, p. 358–375). Consequently, not all of the adjectives can be attributives, as their only function is to be predicative, for example, it is possible to say: *The people were asleep*, but it does not work as *the asleep people* (Matthews, 2009, p. 358–375). To clarify, it means that not all of the adjectives are flexible enough to stand as both predicates and attributives; some of them might have a strict position of where they should stand in a phrase.

1.4. Adjective semantics

Semantics is a study of meanings in a language (Crystal, 2008, p. 428). This field of studies deals and explains how receivers perceive semantic meanings in real life. Semantics is generally divided into 3 categories: formal, conceptual and lexical.

According to Winter (2016, p. 3) formal semantics studies “how linguistic structure helps speakers to manipulate meaning”. Another distinct feature of formal semantics is that it uses mathematical methods to account for language meanings; therefore, formal semantics is quite popular in logic and computer science (Winter, 2016, p. 3). Therefore, in formal semantics grammar and word structures become important.

Conceptual semantics puts more focus on the meanings of words themselves rather than the whole context. One of the main linguists that studied conceptual semantics is Jackendoff (1988, 1996, 2006). He stated that linguistic theory of conceptual semantics is concerned with “characterization of “world knowledge””, consequently it could be stated that conceptual linguistics deals with perceptual context and its relation with reality (Jackendoff, 2006, p. 353–354).

Moving forward to lexical semantics, it can also be defined as analysis of word meanings; however, its focus goes not only to the word itself, but also to its relations in a full sentence. It is studied between “two dimensions” (Geeraerts, 2017), meaning that there is a difference depending on the perspective that words are analysed. This difference comes from the analysis

of word itself and the analysis of the word within the structures it builds with other words (Geeraerts, 2017).

Progressing to the semantic categorisation and analysis of adjectives, Heyvaert (2016) explained, that adjectives are typically divided into two separate groups: descriptive and relational adjectives. He carries on by explaining, that adjectives can be divided into more sections or groups: privative, conjectural, evaluative, and descriptive. However, this division is not as extent as the ones proposed by other linguists. According to another research conducted by Marušič & Katavič-Čaušič (2018), adjectives can be separated into 11 different types, based on their functions. Their research is based on the Khamyng's (2007) classification (*see Table 6*).

Table 6. Eleven Types of Adjectives in English (Khamyng, 2007, p. 174–179)

No.	Types	Functions	Examples
1.	Descriptive Adjective	To attribute or qualify people, animals, things, or places in order to describe its features;	<i>The rich man lives in the big house.</i>
2.	Proper Adjective	To modify noun in terms of the nationality, this type is originated from proper noun	<i>He employs a Chinese book.</i>
3.	Quantitative Adjective	To modify noun for particular details in quantifying	<i>He ate much rice at school yesterday</i>
4.	Numeral Adjective	To modify noun for particular details in exact quantifying which is divided into three perspectives: cardinal number (exact quantity), ordinal number (hierarchical number), and multiplicative number (double number)	1) Cardinal Numeral adj. Ex. <i>My hand has five fingers.</i> 2) Ordinal Numeral adj. Ex. <i>I am the seventh son of my family.</i> 3) Multiplicative adj. Ex. <i>Some roses are double.</i>
5.	Demonstrative Adjective	To show the noun it modifies is singular or plural and whether the position of the noun is near or far	<i>I invited that man to come in.</i>

		from the person who is speaking or writing	
6.	Interrogative Adjective	To modify noun as a questioning form	<i>What book is he reading in the room?</i>
7.	Possessive Adjective	To express possession of a noun by someone or something	<i>This is my table.</i>
8.	Distributive Adjective	To modify noun by dividing or separating into different parts	<i>Every soldier is punctually in his place.</i>
9.	Emphasizing Adjective	To modify noun by highlighting or emphasizing the texts	<i>Supansa is my own girl-friend.</i>
10.	Exclamatory Adjective	To modify noun by using interjection words	<i>What a man he is!</i>
11.	Relative Adjective	To modify noun and combine sentence which are related between the first and second sentences	<i>Give me what money you have.</i>

Khamying's categorisation confirms that adjectives are rich in their meanings as they add a context to a single standing noun. For instance, an example provided by Khamying (2007) on adjective type no. 3 (quantitative adjective), would not have the same meaning without the word *much*. This adjective exaggerates the amount of *rice* eaten and without it, the sentence could be understood as a straightforward statement, that someone simply ate *rice*. However, the word *much* adds another layer to the entire context of a sentence, and allows reader to understand, that the amount of *rice* eaten was beyond the normal amount. This example also shows the importance of adjective in the study of semantics as it can change or shift the context of a sentence in a completely different direction.

1.5. Other related research on adjectives and usage in context

Previous chapters of this thesis have covered a part of the theoretical background behind the term *adjectives*; therefore, this section carries on with a deeper analysis of other similar works done on adjective analysis in different contexts.

Ompusunggu (2016) has conducted descriptive research on adjectives and their functions in the articles of *Seventeen Magazine*. The targeted audience of this online magazine is mostly teenagers and the topics explored are beauty, fashion and gossips about worldwide celebrities. In this research, Ompusunggu (2016) has analysed adjectives according to Dixon's (1982) classification, which determines adjective phrase functions:

1. Adjective phrase head (ex. *afraid* to try new foods → The word *afraid* functions as adjective phrase head "*afraid* to try new foods");
2. Noun phrase modifier (ex. My mother planted *purple* flowers in her garden. → The word *purple* functions as noun phrase "*purple* flowers");
3. Subject complement (ex. Under the bed is *filthy* → The word *filthy* function as subject complement "under the bed is *filthy*");
4. Object complement (ex. The farmer painted the barn *red*);
5. Appositive (ex. The man, *hungry and exhausted*, fainted).

The purpose of this research was to find what is the most popular function of adjectives in the *Seventeen Magazine*. Linguist has found that adjectives in this magazine function mostly as object complement.

Another investigation carried out by Jitpranee (2017) focused on popular science articles and adjectives found according to their types and functions. He analysed adjectives based on Khamying's (2007) classification of adjective types in English, as mentioned in chapter 1.4. of this thesis. During this research linguist found 10 out of 11 types of adjectives in those articles. His investigation showed, that the majority of adjectives found in science articles are descriptive adjectives, with 66.51%, and the least common are adjectives belonging to exclamatory category. Interrogative articles were not found, however, author sates that it is expected due to the nature of scientific articles, which is to give narratives or report information (Jitpranee, 2017, p. 66). The themes of the articles included "[...] the sciences, mind, health, teach, sustainability, education, video, podcasts, blogs, and store" (Jitpranee, 2017, p. 62–63). In terms of context, Jitpranee (2017, p. 66) interpreted that these types of adjectives found in science articles help scientists share their knowledge with broader audience by making their text less difficult to grasp and more expressive. Usage of adjectives in scientific articles decorates the information and makes it more "[...] direct, persuasive, accessible, and imaginable" (Jitpranee, 2017, p. 66).

Similar research was conducted by Kartal (2017, p. 3–18), but in this case a huge corpus was collected from The Corpus of Contemporary American English (COCA), and the field that

was analysed was academic texts. The main objective of this investigation was to determine whether adjectives differ in frequency in academic texts depending from the context. Topics of the texts analysed relate to the previous research as they include social sciences, technology and medical sciences. This research revealed, that almost 40% of adjectives are most frequently used in the academic field (Kartal, 2017, p. 8). Comparing social sciences and technology/medical sciences, it was revealed, that adjectives are more frequent in social sciences, such as history, geography/social science, education, law/politics, humanities, religion/philosophy. It was also found, that out of 839 adjectives from COCA, 334 adjectives were evaluative (that is about 39.80% of adjectives found) (Kartal, 2017, p. 10).

Kwary, Artha & Amalia (2018, p. 108–118) have conducted another research on scientific articles, but this time the main focus was not only on adjectives, but on entire lexical word-class, including nouns, verbs, adjectives and adverbs. Themes that were analysed once again were scientific articles on social, health, physical and life sciences. This research revealed, that adjectives are frequently used in health and physical sciences, and it was even explained, that “[...] frequent adjective use can be considered a characteristic of an academic text” (Kwary, Artha & Amalia, 2018, p. 112).

Investigation of previous research on adjectives in the different contexts suggests, that the majority of studies have been conducted on scientific language and sciences. This might lead to conclusions that there is a lack of studies carried out on adjectives in various contexts. Therefore, this thesis will contribute to the overall analysis of adjectives and add variation to already existing data of adjective use in various fields.

To sum up this section, it has been demonstrated that adjectives first of all by definition are noun modifiers. Further overview has disclosed that adjectives can be formed in multiple ways: by suffixation, affrication, compounding and through superlative and comparative forms. It was also discussed that adjectives are quite flexible, as they can be used both, as predicates and attributives. Even though some adjectives can only be found standing in one particular position, the majority of them can stand in both. Brief overview of adjective semantics has revealed, that adjectives can be categorised into 11 different categories based on their functions and that the meanings of adjectives add additional information to the entire context. In the end, it was revealed that the majority of previous research done on adjectives has analysed adjectives in scientific and academic context, therefore, more analyses could be done, to see how adjectives function in different contexts and how frequently they are used.

II. METHODOLOGY

This chapter of the thesis describes the methods that were used in order to conduct research and draw conclusions on the topic of adjectives found in news articles during the year 2022-2023 on the war in Ukraine. The data was collected by following a particular order and criteria, which is discussed in the following section.

2.1. Methodology

Data for the empirical part of the thesis was collected from two British online news portals: *The Guardian* (<https://www.theguardian.com/world/ukraine>) and *BBC* (<https://www.bbc.com/news/topics/cx1m7zg0gzdt>). According to the history of *The Guardian*, described in their own website, the mission of *The Guardian* since 1821 has always been “to use clarity and imagination to build hope” (Viner, 2021). This online news portal is proudly declaring its freedom, independence and ability to give “a voice to the powerless” (The Guardian, 2023). *BBC* also declares itself as an independent and impartial news broadcaster, which provides global news in more than 40 languages. *BBC* is a worldwide broadcaster that is seen not only by the population of United Kingdom, but also by the entire world. Consequently, the reasoning behind the choice of *BBC* and *The Guardian* has been closely related to the fact that these two portals are the most popular news broadcasters in the UK.

The data has been derived out of 30 articles: 15 from *The Guardian* and 15 from the *BBC*. Articles were selected in a random order and the only limitation set for the choice of articles was the timeframe. Articles had to cover topics of the Ukraine-Russia war since February 2022 up until May 2023. Choosing articles for the analysis was made easier as each website had a separate category for articles regarding the war in Ukraine. The genre of the articles was news reports.

All of the articles were carefully analysed and adjectives collected manually. One online software was used in order to check and detect all of the adjectives in lengthy texts: <https://parts-of-speech.info>. Once all of the adjectives were detected, a word list was compiled together with nouns that they modify or complement. Adjectives were then categorised based on the linguistic field: grammatically, syntactically and semantically. Data was categorised according to Hamawand (2007), Vossoughi (2004), Watanabe & Iyeiri (2020), Hofherr & Matushansky (2010) and Khamyng’s (2007) proposed categorisations, which were discussed in the previous chapters.

A combination of methods was used in order to collect all of the related data for proper adjective analysis in news articles regarding the war in Ukraine. Quantitative method was used in order to collect and investigate the frequency of adjectives found in the chosen articles. Qualitative approach was also applied in the research in order to analyse and interpret the data collected.

2.2. Data Description

In total, 34,591 words were analysed and 1727 adjectives were found. *BBC* total percentage of adjectives found was 7.15%, meanwhile *The Guardian* only had the percentage of 4.2%. Total distribution of adjectives can be seen in the **Figure 1** below.

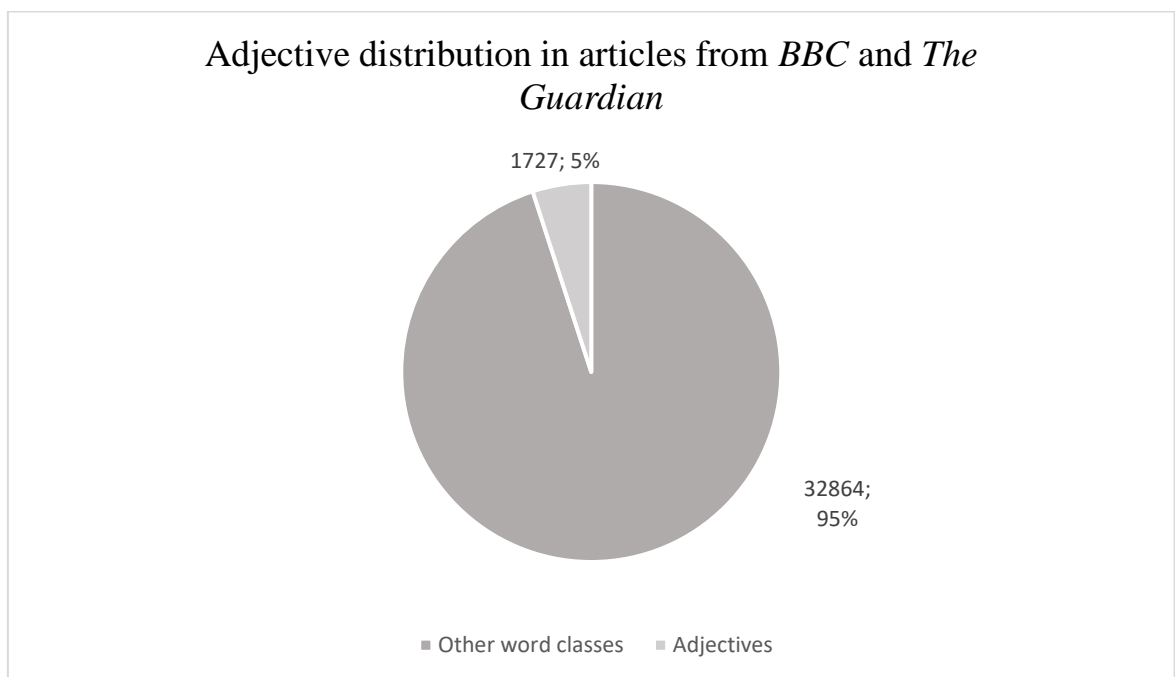


Figure 1. Adjective distribution in articles from *BBC* and *The Guardian*

Moving forward, all of the adjectives were divided into two major categories: attributives and predicates. Their distribution within the full list of adjectives can be seen in the **Figure 2** below:

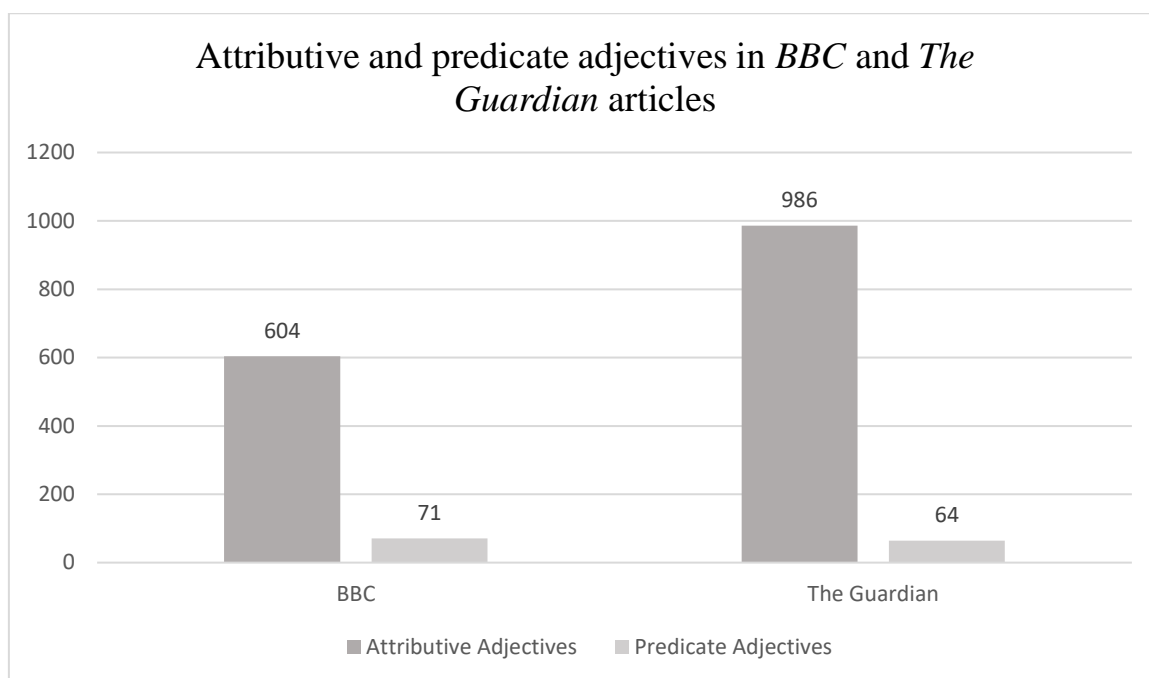


Figure 2. *Attributive and predicate adjectives in BBC and The Guardian articles.*

Further analysis required to categorise adjectives according their formation. It was found that 3.87% out of the total number of adjectives were formed by compounding (ex. *Russian-occupied, full-on, large-scale, long-expected, etc.*), 2.2% were formed by prefixation (ex. *anti-war, multi-sourced, pro-western, etc.*) and 10.53% of adjectives were formed by suffixation (ex. *predictable, professional, Crimean, peaceful, etc.*). Adjectives of degree were also found in articles of both news portals. Comparatives were more frequent as 1.27% of adjectives were comparatives, and 0.93% of adjectives were superlatives. The remaining ones did not fit into any of these categories as they were not formed by suffixation, prefixation or compounding (ex. *large, modern, main, massive, high, etc.*).

Since adjectives were extracted together with the nouns they modify, lists of adjectives were compiled together with nouns. This was helpful in the second part of the empirical part as the research required to determine the most frequent nouns and adjectives they modify, as well as meanings behind them.

2.3. Limitations

This research has a few limitations, first of them being the selection of articles for adjective analysis. This research claims that articles were chosen from the period of February 2022; however, *BBC* news portal had some issues. Articles written 1 year ago were archived;

therefore, it was impossible to get the access to some of those articles written in the month of February.

Another problem that was found during the research was that adjectives often mix up with adverbs, therefore they are often analysed together. However, due to the limited frame of this research, adverbs were left out of the research; therefore, an additional study could be carried out in order to find how adverbs modify adjectives in the context of war.

Third limitation is in the accuracy of data collected. As the collection of data was corpus-driven, it is worth mentioning that even though this approach is becoming more and more popular amongst linguists it still lacks some progress. Corpus research “provides a solid empirical basis to test and shape theoretical models” (Adamou, 2019, p. 9), however it takes a lot of time to analyse the material precisely. Additionally, most of the analysis is conducted manually, therefore there is a possibility that some of the adjectives might have been missed due to the number of texts analysed, therefore data provided in the previous sub-chapters as well as the **Appendix** might slightly differ.

Final limitation includes the lack of previous research of adjectives on the context of war, however this research could be used as a base for further in-depth analysis of particular aspects of adjectives in contexts of war.

III. EMPIRICAL ANALYSIS OF ADJECTIVES IN NEWS ARTICLES REGARDING THE WAR IN UKRAINE

This chapter provides the combination and analysis of results conducted from the research in attempt to achieve goals that have been set and described in the introductory part of the thesis. First part of this chapter is going to deal with the morphological, semantical and syntactical aspects of adjectives as represented in the theoretical part of this paper. Most frequent cases of adjectives found will be set out and explained. Second part will mostly deal with the interpretation of adjectives found in news articles regarding the war in Ukraine with the attempt to identify main topics and views of the context.

3.1. Adjective frequency in news articles regarding the war in Ukraine

As mentioned in the methodology part of this research, 30 articles were analysed carefully from two different news websites: *The Guardian* and *BBC*. 675 adjectives were found in the articles written by *BBC* journalists and 1052 adjectives were found in articles written by *The Guardian* journalists. **Table 7** and **Table 8** below shows the overall list of most common adjectives found in those articles (Top 30):

Table 7. *Top 30 adjectives in BBC articles regarding the war in Ukraine.*

Adjective	Frequency	Adjective	Frequency
Russian	63	Several	5
Ukrainian	42	Such	5
Military	29	Afraid	4
Nuclear	17	British	4
Civilian	15	Few	4
Other	10	First	4
Social	9	Former	4
International	7	Large	4
Dead	6	Latest	4
Recent	6	Legitimate	4
Regional	6	Local	4
Small	6	Many	4
Western	6	New	4

Dangerous	5	Partial	4
medical	5	Rare	4

Table 8. Top 30 adjectives in *The Guardian* articles regarding the war in Ukraine.

Adjectives	Frequency	Adjectives	Frequency
Russian	104	Latest	8
Ukrainian	64	National	8
Nuclear	45	Private	8
Military	43	Armed	7
New	23	Central	7
Last	17	Political	7
Foreign	14	Senior	7
Western	13	Several	7
First	11	Early	6
Former	11	More	6
Other	9	Belarusian	5
Public	9	British	5
Eastern	8	Civilian	5
Financial	8	Cold	5
International	8	European	5

The column ‘**Frequency**’ shows the exact number of each adjective found. First 4 adjectives: *Russian*, *Ukrainian*, *Nuclear* and *Military*, listed in both tables match up as being the top most frequent adjectives in the theme of the war in Ukraine. Another interesting statistic that can be noted from the tables provided above is that adjective *Russian* appears more often compared to the adjective *Ukrainian*: adjective *Russian* is used almost twice as much as *Ukrainian*.

Going further through the list of most frequent adjectives found in both websites it becomes quite clear that some of the adjectives are not present in one or the other list. For example, adjective *dead* has been used 6 times in *BBC* articles, however it has not been used as frequently in *The Guardian* articles. Other adjectives that can be found amongst the most frequent in *BBC* articles but not *The Guardian* are: *Afraid* (4), *Dangerous* (5), *Few* (4), *Large* (4), *Legitimate* (4), *Local* (4), *Many* (4), *Medical* (5), *Partial* (4), *Rare* (4), *Recent* (6), *Regional* (6), *Small* (6),

Social (9), *Such* (5). Adjectives, that can only be found amongst the most frequent in *The Guardian* are: *Central* (7), *Cold* (5), *Early* (6), *Eastern* (8), *European* (5), *Financial* (8), *Foreign* (14), *Last* (17), *More* (6), *National* (8), *Political* (7), *Private* (8), *Public* (9), *Senior* (7), *Western* (13).

In order to find out what are the most frequent adjectives used in the context of the war in Ukraine, both of the top lists had to be combined. The results can be found in the **Table 9** below:

Table 9. *Most frequent adjectives used to describe the war in Ukraine.*

Adjective	Frequency	Adjective	Frequency
Russian	167	Eastern	11
Ukrainian	106	Social	11
Military	72	Private	10
Nuclear	62	Public	10
New	27	Small	10
Civilian	20	British	9
Last	20	Financial	9
Other	19	Local	9
Western	19	Many	9
First	15	National	9
Foreign	15	Recent	9
Former	15	Regional	9
International	15	Senior	9
Latest	12	Armed	8
Several	12	Large	8

After the analysis of adjective frequency in both news websites, it can be stated that the most frequent adjectives used to describe the war in Ukraine are *Russian*, *Ukrainian*, *Military*, *Nuclear*, *New* and *Civilian*.

Further analysis of examples found is going to reveal the most frequent adjectives based on their morphological, syntactical and semantical aspects.

3.1.1. Compound adjectives

In theoretical part of the thesis it was established, that adjectives can be formed by compounding multiple words from other world classes. During the research of collected adjective data it was found, that 67 out of 1727 adjectives were formed by compounding. These adjectives have been analysed and classified based on the categories provided by Vossoughi (2004, p. 23–34). Not all of his proposed categories were found amongst all of the compound adjectives. The ones that were found are the following: *Adjective + Adjective*; *Adjective + Noun*; *Noun + Adjective*; *Three / four – Word Adjectives*; *Adverb / Preposition + Noun*; *Adjective + Preposition*; *Noun + Noun*; *Noun + Preposition*; *Miscellaneous Compound Adjectives*. Further part of this section shows the most frequent examples of adjective compounding in detail.

Adjective + Adjective

This pattern was the most frequent pattern amongst all of the compound adjectives found in the articles regarding the war in Ukraine. Majority of them were formed with the previously mentioned, most frequently used adjective *Russian*. Examples of such cases can be found in the **Table 10** below:

Table 10. *Compound adjectives with ‘Russian’*

Adjectives	Compound pattern
Russian-held	Adjective + Adjective
Russian-installed	Adjective + Adjective
Russian-backed	Adjective + Adjective
Russian-controlled	Adjective + Adjective
Russian-occupied	Adjective + Adjective

Other, similar examples were: *British-designed*, *Ukrainian-controlled*, *long-expected*, *much-expected*, *remote-controlled*, *secessionist-minded*, *triple-fortified*, *Western-supplied*. It is worth mentioning that some of these examples provided could be argued to have a different pattern, for example, *secessionist-minded*. The word ‘*secessionist*’ could also be used as a noun and in that case, the compound adjective phrase would turn into *Noun + Adjective*. However, very little studies have been done on how should the words be treated in such cases, therefore this topic has been left out from this thesis and left for future investigation. For that reason, all such cases were treated based on the sentence, for example, ‘*secessionist-minded*’ was used in a sentence “[...] Russia permanently detached two secessionist-minded Georgian regions [...]”

(Carpenter, 2022). If the compound adjective is divided and the word ‘*minded*’ removed, ‘*secessionist*’ would still modify the noun ‘*regions*’, therefore it would be considered as an adjective. Same approach was applied to other similar cases.

Another interesting aspect to be noted from the examples found on compound adjectives in the *Adjective + Adjective* pattern is that the second word of each adjective has been formed to be an adjective from suffixation by adding *-ed* to a verb. For example, *controlled* (adj.) has been formed from *control* (v.) + *-ed*.

Adjective + Noun

Second most frequent pattern of compound adjectives. 11 examples were found, of which one pair of them had the same adjective + different noun combination. Such examples can be found in the **Table 11** below:

Table 11. *Compound adjectives with ‘High’*

Adjectives	Compound pattern
high-profile	Adjective + Noun
high-rise	Adjective + Noun
high-level	Adjective + Noun

Other examples were: *first-time, full-scale, hardline, large-scale, long-range, military-age, short-range, widespread*.

Noun + Adjective

Third category by compound adjective frequency found in articles regarding the war in Ukraine. Unlike in previous patterns, this pattern had no repeating nouns or adjectives that were combined into a compound adjective. All of the examples found were these: *bow-mounted, ivy-covered, radioactive, self-styled, south-eastern (southeastern, example without a hyphen found as well), state-owned, tax-free, tone-deaf*.

Three / four – Word Adjectives

All of the adjectives found in this category were related to age, and they were formed from 3 different word categories: Numeral + Noun + Adjective. These are the examples: *10-year-old, 12-year-old, 21-year-old, 25-year-old, four-year-old, three-year-old*.

Another interesting example was found on this category formed Noun + Conjunction + Noun was *shock and awe*. This compound adjective was used in the following sentence: “But

this “shock and awe” attack [...] comes from a position of Russian weakness [....].” (Rainsford, 2022).

Adverb / Preposition + Noun; Adjective + Preposition; Noun + Noun; Noun + Preposition; Miscellaneous Compound Adjectives

Other examples found were of following categories provided in the **Table 12** below:

Table 12. *Least common compound adjectives found in articles regarding the war in Ukraine.*

Adjectives	Compound pattern
Offshore	Adverb / Preposition + Noun
underway	Adverb / Preposition + Noun
full-on	Adjective + Preposition
Nuremberg-style	Noun + Noun
Periscope-like	Noun + Preposition
Move-on	Verb + Preposition (Miscellaneous Compound Adjectives)

To conclude this sub-chapter, it can be stated that the most frequent compound adjectives found in the articles regarding the war of Ukraine were *Adjective + Adjective*, *Adjective + Noun* and *Noun + Adjective*. These three patterns were also described as the most frequent by Vossoughi (2004), therefore no abnormalities were found in the analysis of compound adjectives in the context of war.

3.1.2. Adjective prefixes and suffixes

In the theoretical part it has been mentioned, that adjectives can also be formed by adding prefixes or suffixes to the root of the word. This sub-chapter is going to focus on the examples found in the articles on the war of Ukraine.

37 adjectives were found which had a prefix attached to their stem. **Table 13** includes a full list of prefixed adjectives in articles regarding the war in Ukraine:

Table 13. *Adjectives and their prefixes in articles regarding the war in Ukraine.*

Prefix	Adjective
Un-	Unlikely, unknown, uncaring, unclear, unfiltered, unfounded, unfriendly, unheeded, unjust, unmarked, unprecedented, unprovoked, unreliable, unusual;
Pro-	Pro-democracy, pro-Kremlin, pro-war, pro-Russia, pro-western;

Anti-	Anti-war, anti-drone, anti-tank;
In-	Inexperienced, informal, informational;
Non-	Non-lethal, non-nuclear, non-weapon;
Extra-	Extrajudicial, extraordinary;
Multi-	Multi-sourced, multi-story;
Pre-	Pre-dawn, pre-existing;

Table 13 shows that the majority of adjectives found had the prefix *un-*, meanwhile the least popular prefixes were *extra-*, *multi-* and *pre-*.

Suffixes were also spotted in *BBC* and *The Guardian* articles. 182 adjectives were found which had different suffixes attached to their stem. At first, adjectives were collected based on Hamawands (2007) provided table, which had all of the suffixes that build adjectives. However, during this research it was found, that there are more suffixes that can form adjectives, therefore his proposed table was adapted to include all of the suffixes found (**Table 14**).

Table 14. *Adjectives and their suffixes in articles regarding the war in Ukraine.*

Adj.	Suffix	Adj.	Suffix
-ed	Advanced, armoured, battered...	-less	Needless, restless, ruthless;
-al	Central, controversial, criminal...	-en	Frozen, wooden;
-ic	Apocalyptic, ballistic, barbaric...	-ern	Southern, western;
-ive	Aggressive, authoritative, collective...	-ian	Belarusian, Romanian;
-ing	Amazing, challenging, convincing...	-ical	Electrical;
-an	American, Armenian, Bulgarian...	-ist	Nationalist, terrorist;
-ful	Grateful, meaningful, peaceful...	-ous	Dangerous, numerous;
-y	Friendly, lengthy, marshy...	-ese	Chinese;
-ish	British, foolish, Irish...	-ible	Responsible;
-able	Acceptable, flammable, predictable...	-ious	Mysterious;
-ial	Influential, presidential, racial...	-ory	Obligatory;
-ly	Deadly, elderly, monthly...	-some	Worrisome.

Suffixes that have been mentioned by Hamawands (2007) and found in articles were these: *-able*, *-al*, *-ed*, *-en*, *-ful*, *-ible*, *-ic*, *-ical*, *-ing*, *-ish*, *-ive*, *-less*, *-some*, *-y*. Suffixes that have not

been mentioned in his research as suffixes for adjectives, however still found in articles regarding the war in Ukraine: *-an, -ern, -ese, -ial, -ian, -ous, -ist, -ly, -ory*.

The most frequent suffixes used for adjective formation in articles regarding the war in Ukraine were *-ed* (27 adj.), *-al* (26 adj.) and *-ic* (14 adj.). The least frequent suffixes were *-ory* (1 adj.) and *-some* (1 adj.).

3.1.3. Adjectives of degree

As previously covered in the theoretical chapter of the thesis, adjectives can change their form based on the degree they express. During the analysis of adjectives found in the articles regarding the war in Ukraine, 38 adjectives were distinguished that express some kind of degree. Adjectives have been classified based on the characteristics described by scholars Bauer, Lieber & Plag (2013) and Watanabe & Iyeiri (2020). **Table 15** and **Table 16** reveals the distribution of adjectives of degree in *BBC* and *The Guardian* news portals.

Table 15. *Adjectives of degree in BBC articles regarding the war in Ukraine.*

Comparative		Superlative	
Inflectional	Periphrastic	Inflectional	Periphrastic
<i>-er</i>	<i>more</i>	<i>-est</i>	<i>most</i>
Better	Alarming	Latest	Ambitious
Higher	Plausible	Biggest	
Older	Political	Largest	
Smaller	Potent	Fastest	
Tougher	Relevant	Furthest	
		Heaviest	
		Laudest	

Table 16. *Adjectives of degree in The Guardian articles regarding the war in Ukraine.*

Comparative		Superlative	
Inflectional	Periphrastic	Inflectional	Periphrastic
<i>-er</i>	<i>more</i>	<i>-est</i>	<i>most</i>
Further	Ambitious	Latest	Modest
Closer		Largest	
Harder		Biggest	

Better		Cruellest	
Younger		Highest	
Larger		Staunchest	
Lower		Wealthiest	
Smaller			
Thinner			
Tighter			
Weaker			

The majority of adjectives have fallen into the category of inflectional adjectives of degree (26 adj.), while remaining ones were formed as periphrastic adjectives of degree (8 adj.). Also, based on the tables above it can be concluded, that inflectional form is more frequent in both superlative and comparative categories of adjectives of degree in articles regarding the war in Ukraine.

Superlative periphrastic form of adjectives is less frequent than comparative periphrastic form, as there were only two examples found of superlatives meanwhile six examples were found of comparatives.

It can be concluded that the use of comparatives is more frequent in articles, who cover war topics, such as, for example, the war in Ukraine. Therefore, it means that these types of articles tend to evaluate and compare information.

3.1.4. Attributive and predicate adjectives

Hofherr & Matushansky (2010) has explained that adjectives can be divided into two categories based on the position of an adjective in a sentence and whether it goes before a noun, or after a noun. Based on the characteristics provided by Hofherr & Matushansky (2010), which were described in the theoretical part of this thesis, adjectives collected from the articles regarding the war in Ukraine have been divided into predicates and attributives. The total number of adjectives collected was 1727. The total number of adjectives that were found in the attributive position in a sentence was 1590. The remaining 135 adjectives were found in a predicate position of a sentence. The total distribution of adjectives by percentage can be overviewed in the **Table 17**.

Table 17. *Distribution of attributive and predicate adjectives in articles regarding the war in Ukraine.*

Category	Attributive Adjectives	Predicate adjectives
Total no. of words	1590	135
Percentage	92.07%	7.93%

According to the data provided in the **Table 18** it can be stated that adjectives are more likely to stand in an attributive position rather than in predicate position. This means that adjectives are indeed used more as noun modifiers that go before a noun. Some adjectives collected from articles in the theme of the war in Ukraine, have appeared in both positions, meanwhile some of them only appeared in predicate or attributive position. Few adjectives that were found in both positions are the following: *critical, cruellest, dead, definite, difficult, disabled, hot, humiliating, independent, Ukrainian*, etc. Further analysis of this chapter is going to include some examples of adjectives, that were found in both syntactical positions of a sentence.

Critical

- 1) **Attributive:** *“Unfortunately Russia continues to carry out missile strikes on Ukraine's civilian and **critical** infrastructure”*
- 2) **Predicate:** *“Describing the situation as **critical**, Mr Tymoshenko accused Russia of carrying out “another planned attack on energy infrastructure facilities [...]”.*

Cruellest

- 1) **Attributive:** *“Russia said on Thursday it had received an apology from the Vatican over Pope Francis’s comments last month that Russian soldiers from some ethnic minority groups were the “**cruellest**” fighters in the Ukraine conflict.”*
- 2) **Predicate:** *“He said soldiers from Buryatia, where Buddhism is a major religion, and the Muslim-majority Chechnya republic, were “the **cruellest**” while fighting in Ukraine.”*

Humiliating

- 1) **Attributive:** *“Last year brought a string of **humiliating** military defeats for the invading army, but Russia still occupies nearly a fifth of Ukrainian territory, which Zelenskiy has vowed to retake.”*
- 2) **Predicate:** *“The truth is more **humiliating**”.*

Hot

- 1) **Attributive:** “*Events during the past few months constituted the last chance to avoid a hot war in eastern Europe.*”
- 2) **Predicate:** “*The west’s new cold war with Russia has turned hot.*”

These examples show how flexible a noun can be by changing its position in a sentence and going before or after a noun. However, not all of the adjectives have the same ability to change positions. A few cases of such adjectives were found in the articles of war in Ukraine.

Chief

This adjective can stand as a direct noun modifier in an attributive position, however it cannot stand as a predicate: *Chief police investigator* – **Police investigator is chief.*

Few

This adjective is another great example of how an adjective can stand as an attribute, but never as a predicate: *few days have passed* – **days are few.*

Therefore, the result corresponds to the distinction and observations of Matthews (2009), as reviewed in the theoretical part of this thesis, which states that not all adjectives can be flexible, even though they only have these two syntactical functions.

3.1.5. Types of adjectives based on their semantical functions

It was previously mentioned in the chapter 1.4., that Khamying (2007) has offered to categorise adjectives based on their semantical features into 11 different categories: descriptive, proper, quantitative, numeral, demonstrative, interrogative, possessive, distributive, emphasizing, exclamatory and relative. Since his categorisation seemed the most sufficient and clearly distributed, it was used in multiple researches before (*see more 1.6.*). Therefore, this categorisation was also applied in this research, in the analysis of most frequent adjectives established in the previous subchapter 3.1. 30 most frequent adjectives found in the articles regarding the war in Ukraine were taken and categorised accordingly. This categorisation can be seen in the **Table 19** below:

Table 19. *Types of most frequent adjectives found in the articles on the Ukraine war according to Khamying (2007).*

Adjective	Frequency	Type	Adjective	Frequency	Type
Russian	167	Proper	Eastern	11	Proper
Ukrainian	106	Proper	Social	11	Descriptive
Military	72	Descriptive	Private	10	Descriptive
Nuclear	62	Descriptive	Public	10	Descriptive
New	27	Descriptive	Small	10	Descriptive
Civilian	20	Descriptive	British	9	Proper
Last	20	Numeral	Financial	9	Descriptive
Other	19	Demonstrative	Local	9	Descriptive
Western	19	Proper	Many	9	Numeral
First	15	Numeral	National	9	Descriptive
Foreign	15	Descriptive	Recent	9	Descriptive
Former	15	Descriptive	Regional	9	Descriptive
International	15	Descriptive	Senior	9	Descriptive
Latest	12	Descriptive	Armed	8	Descriptive
Several	12	Numeral	Large	8	Descriptive

Results in the **Table 19** reveal that the majority of adjectives belong to the group of descriptive adjectives, meaning that their purpose in a text is to modify a noun by describing the situation, features of things, animals. Adjectives as *new*, *private*, *large*, gives an insight on the topic by elaborating what is being conveyed through the message. The larger number of descriptive adjectives shows, that articles regarding to war, such as articles about Ukrainian war, are very descriptive, as their main purpose is to describe and evaluate the events that are happening at the time. Therefore, the usage of descriptive adjectives is quite understandable. Another type of adjectives that stands out as one of the most frequent types of adjectives used is proper adjectives. War-themed articles usually describe conflicts happening between multiple countries or nationalities. This explains why proper adjectives are also amongst the most frequent types of adjectives found in the articles about Russian-Ukrainian war. The tendency of common descriptive adjectives was also highlighted by previous researchers mentioned in the theoretical part of this research. For example, Jitpranee (2017) has found that descriptive adjectives take over 60% of the total number of adjectives found in the scientific articles,

regarding themes of health, mind, etc. The same dominance of descriptive adjectives can be seen in articles regarding the war as well.

3.2. Interpretation of adjective meanings in articles regarding war in Ukraine

The following chapter introduces the most frequent adjectives and nouns they modify. Second part of this chapter interprets and reveals the meanings of adjectives found in the articles regarding war in Ukraine.

3.2.1. Most frequent adjectives and nouns they modify

As it was stated in previous chapters, the most common adjectives found in the articles of the Ukraine – Russia’s war were the following: *Russian, Ukrainian, military, nuclear, new*. Since the main function of adjective is to modify a noun, nouns have to be taken into the account while analysing and interpreting the meanings of adjectives. Prior to the interpretation and the analysis of adjective meanings it is worth establishing what nouns were modified by the most frequent adjectives.

Russian

Adjective *Russian* has been used with nouns *accusations, airbase, army, authorities, belt, bombarding, circles, city, citizens, dismay, forces, hawks, human, language, law, leadership, losses, media, men, minister, missile, news, officials, pyjamas, policy, president, property, rights, service, setbacks, soldiers, tactic, threat, tone, troops, users, victory, war, weakness, word, etc.*

Ukrainian

Adjective *Ukrainian* has been used with nouns *agency, army, attack, authorities, captivity, case, cities, colleague, engineer, forces, guests, infrastructure, land, leaders, mayor, media, men, morale, official, people, port, President, question, refugees, regime, side, soldiers, staff, troops, win, world, etc.*

Military

Adjective *Military* has been used with nouns *action, advantage, alliance, analysts, belt, blogger, code, contractors, effort, engineer, experience, facilities, head, objective, objects, operation, purpose, reservists, setbacks, system, support, target, etc.*

Nuclear

Adjective *Nuclear* has been used with nouns *accident, agency, announcement, arrangement, arsenal, bombs, company, energy, experts, hit, material, plant, safety, station, threat, watchdog, weapons, etc.*

New

Adjective *New* has been used with nouns *assault, attack, bombs, brigades, development, generation, year, package, positions, rounds, steps, strikes, Ukraine, turn, wave, world, narrative, war, etc.*

Majority of nouns were modified by multiple adjectives, for example, nouns *forces, troops, president* was used with adjectives *Ukrainian, Russian*. Noun *weapons* was modified by *nuclear, Russian, new*. *Blogger* was modified by *military* and *Russian*. It is worth to note that some of the nouns were only modified by one particular adjective, for example, *advantage* and *operation* were both modified by adjective *military*, *plant* was modified by *nuclear*, and *missile* was only modified by *Russian*.

3.2.2. Interpretation of adjective meanings in war-related articles

As it was mentioned before, the most frequent adjectives found in the articles regarding the war in Ukraine were *Ukrainian* and *Russian*. This finding is not surprising as the two countries that are in the war at the moment are Ukraine and Russia. Ever since Russia has invaded Ukraine, hundreds of articles were released which describe, present or evaluate the situation happening there. Therefore, as this thesis deals with adjectives it becomes important to analyse and interpret what main ideas are being transmitted through them. To get a better view of how adjectives describe the escalation and development of this still ongoing war, adjectives were analysed according to different themes. The themes were extracted by establishing the most frequent nouns, that were modified by adjectives. **Figure 3** below reveals the most frequent nouns found in the articles of *The Guardian* and *BBC*, which were modified by adjectives.

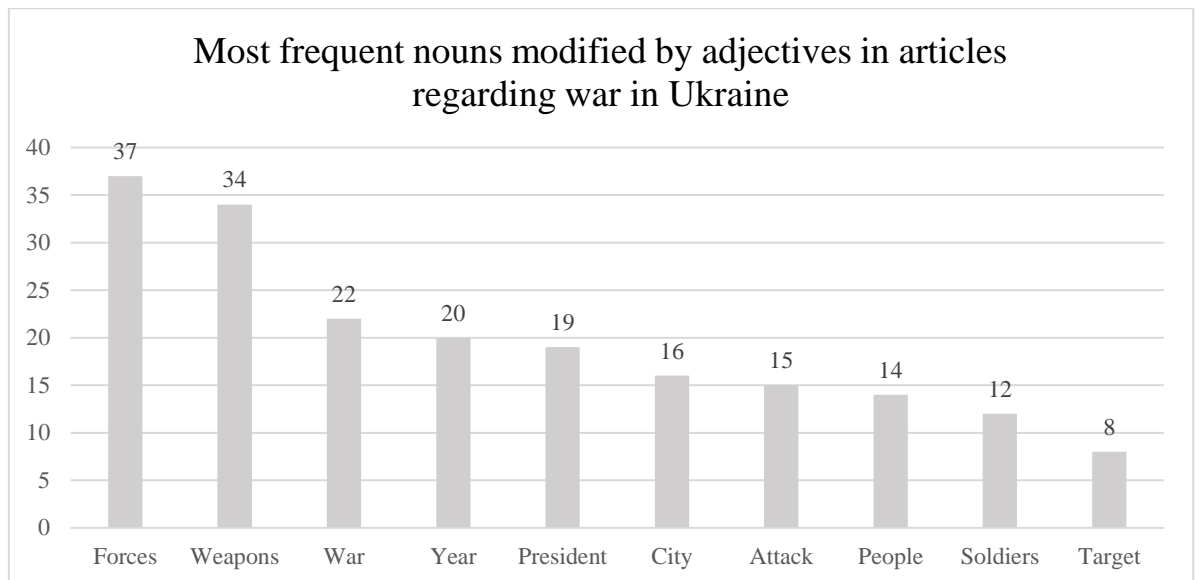


Figure 3. Most frequent nouns modified by adjectives in the BBC and The Guardian articles regarding the war in Ukraine.

According to **Figure 3** the most frequent nouns modified by adjectives were *forces*, *weapons*, *war*, *year*, *president*, *city*, *attack*, *people*, *soldiers*, *target*. They all could be divided into separate themes; therefore, further analysis will reveal the imagery transmitted through the use of adjectives in the themes of *Ukraine and Russia*, *War*, *Weapons* and *People*.

Ukraine and Russia imagery

Ukraine and Russia have been portrayed by multiple adjectives, which build different perception of each countries' actions and overall image during the conflict.

The status of Ukraine was clearly stated by adjectives such as *occupied Ukraine*, or *Russia-occupied Ukraine*. Such adjectives leave no room for doubt as they inform readers that Ukraine was indeed occupied by Russia. The contrast was built of Ukraine and Russia's position in this war by other adjectives, such as *unprovoked* (ex. "*the **unprovoked** invasion of Ukraine*" (The Guardian, 2022 – 2023)). Russia has also been drawn in a negative light by adjectives such as *ineffective*, *lazy*, *uncaring* (ex. "*At the same time, they have also been some of the most virulent critics of Russia's military effort, condemning the army's top brass as **ineffective** and **lazy**, and **uncaring** for the lives of Russian troops sent into battle*" (The Guardian, 2022-2023)). Russia's attempts to fight of Ukrainians was also called as *humiliating*: "[...] **humiliating** military defeats for the invading army [...]" (The Guardian, 2022-2023).

Russian president has also been described in a mocking way. Adjective *afraid* was mostly used to describe his actions: “*They are afraid*”, “*Everything Putin is afraid of [...]*”, “*[...] he is afraid of his community [...]*”, “*He's afraid of his people*” (BBC, 2022 – 2023). Such descriptive adjectives influence the reader to think that Putin is weak and uncertain, which consequently builds doubt in his statements and actions. Interestingly, adjective *afraid* has not been detected in the descriptions of Ukrainian president, or Ukrainians in general.

Ukraine, on the other hand, was described in a positive manner. Their position in this war has been declared as *strong*: “*[...] putting Ukraine in a strong position*” (The Guardian, 2022 – 2023), “*But Ukraine's military kept advancing, its morale still strong [...]*”.

These examples show, that general view of Russia and Ukraine is completely different. Russia is seen as frightened and worried aggressor, meanwhile Ukraine is seen as victim in this war. Such views are established by the use of adjectives in articles regarding the Ukraine's war and they do build an overall perception of the situation of the targeted audience.

War imagery

According to the **Figure 3** noun *war* is amongst the most frequent nouns modified by adjectives. This noun has been widely described by multiple adjectives in both, *BBC* and *The Guardian* articles. War is seen as *brutal*, *destructive*, *terrible*. War has also been modified by adjective *Russian*, and never by adjective *Ukrainian*, which could imply that the war is happening due to Russia's actions. Adjective *virtual* war, suggests that Ukraine-Russia's war is not only happening physically, but there is a lot of going in the virtual world as well. The severity of war has also been expressed through adjectives such as *full-on war*, *hot war*. There were no adjectives found that would describe war in a positive way, therefore it can be concluded, that war can never be a positive thing, as it leads to terrible consequences. That is why it was described by adjectives, that express negative position and perception of war. Russia in these articles was also declared as guilty of all of the *terrible war-crimes*.

Weapons

Noun *weapons* was also found amongst the most frequent nouns in the articles regarding the war in Ukraine. This theme has also showed a significant difference on the perception of Russia and Ukraine's ammunition. Ukraine has been shown to have better weapons than Russia, as their weapons were mostly described as *new*, *sophisticated*, *Western-supplied*, *modern*: “*Empowered by sophisticated Western-supplied weapons, the Ukrainian army has made significant advances in the east and the south [...]*” (BBC, 2022 – 2023), “*Ukraine was “to a high percentage ready”, he said, with new modern weapons [...]*” (The Guardian, 2022 –

2023). These adjectives transmit an idea that Ukraine is supplied with best weapons in order to defend themselves. Additionally, adjective *Western-supplied* reveals that western countries support Ukraine and are against Russia. Russia's weapons, on the other hand are described as deadly and threatening not only to Ukraine, but to the entire world. Analysed articles reveal, that noun *weapons* from Russia's side was modified by adjectives *tactical, nuclear, kinetic*. Nuclear weapons are one of the biggest threats to humanity, and these articles transmit the idea of Russians threatening the entire Europe by their *nuclear* weapons, which automatically puts Russia in a position of public dislike.

Russia's aggression is also portrayed in the articles through adjectives, which modify nouns *bombs, bombing, bombardments, etc.* These nouns usually are found with adjectives such as *Russian, intense, heaviest*. Adjective *bombed-out* with the noun *apartment building* also reveals Russia's intentions to attack and target civilians, which is a war crime: "*Dozens of **bombed-out** apartment buildings in Izium's city centre lie derelict along roads covered with the debris of what has been one of this war's most fierce battles, resulting in the deaths of at least 1,000 people, according to Ukrainian officials*" (The Guardian, 2022 – 2023).

Russia's belligerence is also expressed through adjectives which modify noun *attacks*. Russia's attacks against Ukraine were described as *frequent, multiple, widespread, constant, terrorist, Russian, random, devastating, etc.* (ex. "[...] as Ukraine grieves for its dead and picks through the wreckage of **multiple** attacks", "Such talk could suggest a dark, new turn in the war, with increasingly **random** and **devastating** attacks", "*Russia's **frequent** and **widespread** attacks on Ukraine's power infrastructure*", "*The **constant** attacks have made it impossible for residents to return to normal life months after Ukrainian troops liberated the city from occupation.*", "*We're facing the routinisation of **terrorist** attacks which, without doubt, will become one of the factors leading to an internal political destabilisation*"). These adjectives reveal that Russia's attacks are perceived negatively and there is no support for their actions.

People

One of the most interesting findings of the research, which expressed the different perception of Russia and Ukraine in the articles regarding war during the period of 2022 - 2023, was the way people were described. For example, during the research it was noted, that noun *people* was only found used with adjectives *Ukrainian*, meanwhile *people* were never used with adjective *Russian*. Instead, noun *citizen* was used which could be considered more neutral and distant than *people*.

To conclude, the role of adjectives in these articles was to evaluate a situation and build a perception of the situation to the readers. Articles in *BBC* and *The Guardian* regarding the war show the clear choice of sides, reveals who is at fault and what caused the war. Adjectives also help to describe a situation and give a better understanding of what is happening by modifying a noun and providing additional semantical information.

In regards of keeping the clarity and structure of this chapter it is worth to conclude what has been analysed already. Empirical part has been opened up with the analysis of all of the adjectives found in the articles regarding the war in Ukraine. A list of most frequent adjectives was presented, which determined that the most frequent adjectives overall in the topic of Ukrainian war are: *Russian, Ukrainian, Military, Nuclear, New* and *Civilian*.

The topic of most frequent adjectives in general were followed up by most frequent adjectives based on their formation. The subchapter dedicated to compounds revealed, that the most common adjective compounding patterns in the topic of war based on the articles analysed of Ukrainian war are the following: *Adjective + Adjective; Adjective + Noun; Noun + Adjective; Three / four – Word Adjectives; Adverb / Preposition + Noun; Adjective + Preposition; Noun + Noun; Noun + Preposition; Miscellaneous Compound Adjectives*. Additionally, adjectives of each category were presented to prove the theory of adjective patterns.

The following chapter continued on the topic of adjective formation by providing most frequent suffixes and prefixes used in the formation of adjectives. It was found that there were more suffixes found in the articles regarding the war in Ukraine than it was presented by previous scholars.

Similarly, another chapter has revealed the most common adjectives found based on their degree. It was found that comparative adjectives were more frequent in the context of Ukrainian war 2022 – 2023.

Another subchapter has showed the distribution of attributive and predicate adjectives in the context of Ukrainian war. The conclusion was made that adjectives most frequently and naturally take over the attributive position in a sentence, compared to the predicate position. It was also concluded that adjectives are flexible, as they can often stand in both positions, however there are a number of adjectives that are not able to stand in both positions.

Chapter was finished with the establishment of most frequent adjectives and the analysis of the meanings that adjectives transmit in war themed articles.

CONCLUSIONS

The aim of the current study was to determine what role adjectives take in war-themed contexts, situation evaluation and perception building of the targeted audience. In accordance with the literature review of the adjectives and the empirical analysis of most frequent adjectives found in *BBC* and *The Guardian* online articles, the following conclusions can be drawn:

1. The main function of adjectives is to modify a noun. That being the case, they become quite important as they add additional information to the noun. As far as structural aspects are concerned, adjectives can be formed in multiple ways through suffixation, affixation and compounding. In contrast to other word classes, adjectives can express the intensity based on how they are formed. Such adjectives are called adjectives of degree. From a syntactic point of view adjectives can be found in two syntactic contexts, which makes them flexible - as attributives or predicates. However, not all of them can stand in both positions. Moving forward to the semantical characteristics of adjectives, they can be categorised based on the functions they perform semantically. There are 11 types of adjectives: descriptive, proper, quantitative, numeral, demonstrative, interrogative, possessive, distributive, emphasizing, exclamatory, relative.
2. The analysis of adjectives found in the *BBC* and *The Guardian* articles written during the period of February 2022 to May 2023 regarding the war in Ukraine has resulted in following conclusions:
 - 2.1. The most frequent adjectives found were *Russian, Ukrainian, Military, Nuclear, New* and *Civilian*. Total number of adjectives found in both *BBC* and *The Guardian* articles was 1052.
 - 2.2. The analysis based on the criteria of word formation showed that in total, 8 different types of compound adjectives were found in the articles regarding the war in Ukraine: *Adjective + Adjective; Adjective + Noun; Noun + Adjective; Three / four – Word Adjectives; Adverb / Preposition + Noun; Adjective + Preposition; Noun + Noun; Noun + Preposition; Miscellaneous Compound Adjectives*. The most frequent type of compound adjectives was *Adjective + Adjective* (ex. *Russian – held*). Moving further to suffixation and prefixation, the most frequent suffixes found were *-ed* (27 cases), *-al* (26 cases) and *-ic* (14 cases) and the most frequent prefixes were *un-* (18 cases) and *pro-* (9 cases). There were also some cases of adjectives of degree found. The majority of them inflectional adjectives of degree (26 cases), meaning they were formed by adding suffix *-er* or *-est*.

- 2.3. The most frequent position that adjectives partake in war-themed articles is attributive (~92% of adjectives found).
3. Most frequent adjectives found in articles regarding the war in Ukraine modify a variety of nouns. There are nouns that were found in combinations with multiple different adjectives. For example, noun *weapons* was modified by *nuclear*, *Russian*, *new*. This means that the dependency of adjective + noun is not very strict, as different adjectives can modify same nouns.
 4. Findings of the research have revealed, that Russia and its actions are perceived negatively, and this was established through the comparison of adjectives found on the descriptions of Russia and Ukraine. It could be stated, that adjectives in war-themed articles tend to evaluate and describe the situation in order to transmit particular information to the reader. Adjectives in such contexts help readers to form a clear and unified approach to certain topics. Therefore, adjectives are important in the role of context elaboration and explanation, as well as opinion formation as they send a particular message to the receiver.

REFERENCES

- Adamou, E. (2019). Corpus linguistic methods. In J. Darquenes, J. Salmons & W. Vandebussche (Eds.), *Language contact: An International Handbook*, De Gruyter (pp. 638–653). Mouton de Gruyter.
- Baker, M. (2003). *Lexical Categories: Verbs, Nouns and Adjectives*. Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511615047>
- Bauer, L., Lieber, L., & Plag, I. (2013). *The Oxford Reference Guide to English Morphology*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198747062.001.0001>
- Cambridge Essential English Dictionary*. (2011). Cambridge University Press. <https://doi.org/10.1017/CBO9781139151511>
- Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed.). Blackwell Publishing.
- Depraetere, I., & Langford, C. (2019). *Advanced English Grammar: A Linguistic Approach*. Bloomsbury Academic.
- Dixon, R. (1982). I–XIV. In *Where have All the Adjectives Gone?: And Other Essays in Semantics and Syntax* (pp. I–XIV). De Gruyter Mouton. <https://doi.org/10.1515/9783110822939.fm>
- Geeraerts, D. (2017). Lexical Semantics. Oxford Research Encyclopedia of Linguistics. Retrieved May 15, 2023, from <https://oxfordre.com/linguistics/view/10.1093/acrefore/9780199384655.001.0001/acrefore-9780199384655-e-29>.
- Hamawand, Z. (2007). *Suffixal rivalry in adjective formation: a cognitive-corpus analysis*. Equinox Publishing Ltd.
- Heyvaert, F. (2016). An outline for a semantic categorization of adjectives. *Proceedings of the 14th EURALEX International Congress*, 1309–1318. <https://euralex.org/publications/an-outline-for-a-semantic-categorization-of-adjectives/>
- Hofherr, P. C., & Matushansky, O. (Eds.). (2010). *Adjectives : Formal analyses in syntax and semantics*. John Benjamins Publishing Company. <https://doi.org/10.1075/la.153>

- Huddleston, R. (1984). The parts of speech. In *Introduction to the Grammar of English. Cambridge Textbooks in Linguistics*, 90–123. Cambridge University Press. <https://doi.org/10.1017/CBO9781139165785.004>
- Huddleston, R., & Pullum, G. (2002). *The Cambridge Grammar of the English Language*. Cambridge University Press. <https://doi.org/10.1017/9781316423530>
- Jackendoff, R. (2006). On conceptual semantics. *Intercultural Pragmatics*, 3(3), 353–358. <https://doi.org/10.1515/IP.2006.020>
- Jitpranee, J. (2017). A Study of Adjective Types and Functions in Popular Science Articles. *International Journal of Linguistics*, 9(2), 57–69. <https://doi.org/10.5296/ijl.v9i2.10811>
- Kartal, G. (2017). A Corpus-Based Analysis of the Most Frequent Adjectives in Academic Texts. *Teaching English with Technology*, 17(3), 3-18. Retrieved May 15, 2023, from <https://eric.ed.gov/?id=EJ1149420>
- Khamying, S. (2007). *Advanced English Grammar for high learner*. V.J. Printing.
- Kwary, D. A., Artha, A., & Amalia, Y. (2018). Lexical Word-Class Distributions in Research Articles of Four Subject Areas. *Studies about Languages*, 33, 108–118. <https://doi.org/10.5755/j01.sal.0.33.19945>
- Marušič, B., & Katavić-Čaušić, S. (2018). The Word Class Adjective in English Business Magazines Online. *Journal of Language and Cultural Education*, 6(2), 99–115. <https://doi.org/10.2478/jolace-2018-0018>
- Matthews, P. H. (2009). On the microsyntax of attributive adjectives. *Transactions of the Philological Society*, 107(3), 358–375. <https://doi.org/10.1111/j.1467-968X.2009.01228.x>
- McNally, L., & Kennedy, C. (Eds.). (2008). *Adjectives and adverbs : Syntax, semantics, and discourse*. Oxford University Press. Retrieved May 15, 2023, from <https://www.proquest.com/docview/2131219060?pq-origsite=primo&parentSessionId=fJM6XUR1zSSwP6GmxHkYYPnEX349rOErP7zFuBsYAFw%3D>
- Napiorkowska, L. (2015). *A grammar of the christian neo-aramaic dialect of diyana-zariwaw*. BRILL. Retrieved May 15, 2023, from <https://www.proquest.com/docview/2134299730?pq-origsite=primo>

- Ompusunggu, R. (2016). *The Study Of Adjective Phrase In The Seventeen Magazines' Articles*. Retrieved May 15, 2023, from https://uhn.ac.id/files/akademik_files/1712070830_2016_The%20Episteme%20Journal%20of%20Linguistics%20and%20Literature%20Vol%203%20No%201_3.The%20Study%20Of%20Adjective%20Phrase%20In%20The%20Seventeen%20Magazines%20Articles.pdf
- Payne, J., Huddleston, R., & Pullum, G. K. (2010). The distribution and category status of adjectives and adverbs. *Word Structure*, 3(1), 31–81. <https://doi.org/10.3366/E1750124510000486>
- Plag, I. (2003). *Word-Formation in English*. Cambridge University Press. Retrieved May 15, 2023, from <https://books.google.lt/books?id=78KFCIHtJS4C&printsec=frontcover&hl=lt#v=onepage&q&f=false>
- Soler, V. (2002). Analysing adjectives in scientific discourse: an exploratory study with educational applications for Spanish speakers at advanced university level. *English for Specific Purposes*, 21(1), 145–165. [https://doi.org/10.1016/S0889-4906\(00\)00034-X](https://doi.org/10.1016/S0889-4906(00)00034-X)
- Šeškauskienė, I. (2013). *Ways with words: insights into the English lexicon and some cross-linguistic aspects of study*. Vilnius University Publishing House.
- Vossoughi, H. (2004). Compound Adjectives in English. *Foreign Language Teaching Journal*, 18(70), 23-34. Retrieved May 15, 2023, from <https://www.hosseinvossoughi.ir/English/Publications>
- Watanabe, A., & Iyeiri, Y. (2020). Explaining the variability of adjective comparatives and superlatives: entering the twenty-first century. *WORD*, 66, 71–97. <https://doi.org/10.1080/00437956.2020.1751961>
- Wiedenroth, A., & Leising, D. (2020). What's in an adjective? An exploratory study of meaning systems. *Journal of Individual Differences*, 41(3), 152–159. <https://doi.org/10.1027/1614-0001/a000316>
- Winter, Y. (2016). *Elements of Formal Semantics: An Introduction to the Mathematical Theory of Meaning in Natural Language*. Retrieved May 15, 2023, from <https://dokumen.pub/elements-of-formal-semantics-an-introduction-to-the->

[mathematical-theory-of-meaning-in-natural-language-0748640444-9780748640447.html](https://doi.org/10.1017/9780748640447)

SOURCES

- Adams, P. (2022, October 9). *Crimean bridge: Who - or what - caused the explosion?* BBC. <https://www.bbc.com/news/world-europe-63192757>
- Bachega, H., & Simpson, J. (2022, October 7). *Ukraine war: World must act now to stop Russia nuclear threat – Zelensky.* BBC. <https://www.bbc.com/news/world-europe-63173443>
- Beale, J. (2022, November 18). *Ukraine war: The men who bring back the dead.* BBC. <https://www.bbc.com/news/world-europe-63627345>
- Bendern, S. (2023, May 2). *Putin claims he's cancelling public celebrations over safety fears. The truth is more humiliating.* The Guardian. <https://www.theguardian.com/commentisfree/2023/may/02/putin-cancelling-public-celebrations-safety-fears-ukraine-war>
- Borger, J. (2023, March 26). *Putin's timeline for storing tactical nuclear weapons in Belarus is hard to believe.* The Guardian. <https://www.theguardian.com/world/2023/mar/26/vladimir-putin-timeline-storing-tactical-nuclear-weapons-in-belarus-is-hard-to-believe>
- Borger, J. (2023, May 5). *We knew in 2011 Putin would attack Ukraine, says Bill Clinton.* The Guardian. <https://www.theguardian.com/world/2023/may/05/we-knew-putin-would-attack-ukraine-back-in-2011-says-bill-clinton>
- Carpenter, T. G. (2022, February 28). *Many predicted Nato expansion would lead to war. Those warnings were ignored.* The Guardian. <https://www.theguardian.com/commentisfree/2022/feb/28/nato-expansion-war-russia-ukraine>
- Chao-Fong, L., Belam, M., Ambrose, T., & Sullivan, H. (2022, November 29). *Russia-Ukraine war: Ukraine first lady urges UK to support special tribunal for Russian war crimes – as it happened.* The Guardian. <https://www.theguardian.com/world/live/2022/nov/29/russia-ukraine-war-live-nato-foreign-ministers-meet-in-romania-us-to-announce-substantial-aid>
- Coleman, A. (2022, February 28). *Ukraine crisis: Russian news agency deletes victory editorial.* BBC. <https://www.bbc.com/news/technology-60562240>

- Davies, H. (2023, April 12). *UK imposes sanctions on 'enablers' accused of helping Russian oligarchs*. The Guardian. <https://www.theguardian.com/world/2023/apr/12/uk-imposes-sanctions-on-enablers-accused-of-helping-oligarchs-hide-assets>
- Extra £150 a month for Ukrainian refugee hosts in Plymouth*. (2022, November 17). BBC. <https://www.bbc.com/news/uk-england-devon-63668157>
- Gillet, F. (2022, September 26). *Ukraine war round-up: Russia admits call-up mistakes after clashes*. BBC. <https://www.bbc.com/news/world-europe-63035427>
- Girvin, S. (2022, November 15). *Ukraine: Girl with rare disorder now living in NI 'would have died'*. BBC. <https://www.bbc.com/news/uk-northern-ireland-63636497>
- Graham-Harrison, E. (2023, April 23). *New Ukraine positions near Kherson could signal spring offensive – report*. The Guardian. <https://www.theguardian.com/world/2023/apr/23/new-ukraine-positions-near-kherson-could-signal-spring-offensive-report>
- Graham-Harrison, E. (2023, April 28). *Russia launches deadly wave of missile attacks on Ukraine cities*. The Guardian. <https://www.theguardian.com/world/2023/apr/28/russia-launches-deadly-wave-of-missile-attacks-on-ukraine-cities>
- Greenall, R., & Plummer, R. (2022, October 12). *Crimea bridge attack arrests as market in Donetsk region attacked*. BBC. <https://www.bbc.com/news/world-europe-63225947>
- Hancock, S. (2022, November 15). *Ukraine war: Russian missiles pound major cities days after Kherson pull-out*. BBC. <https://www.bbc.com/news/world-europe-63638859>
- Harding, L. (2022, September 16). *Ukraine says victims from Iziun mass grave show signs of torture*. The Guardian. <https://www.theguardian.com/world/2022/sep/16/ukraine-mass-grave-with-440-bodies-discovered-in-recaptured-izium-says-police-chief>
- Ho, V., Middleton, J., & Fulton, A. (2022, August 28). *Reports EU set to suspend visa travel agreement with Russia – as it happened*. The Guardian. <https://www.theguardian.com/world/live/2022/aug/28/russia-ukraine-war-russia-strikes-towns-near-zaporizhzhia-nuclear-plant-mayor-says-ukraine-targets-bridges-to-kherson-live>

- Maishman, E. (2022, September 25). *Ukraine war: Ukraine will treat Russian deserters fairly, Zelensky vows*. BBC. <https://www.bbc.com/news/world-europe-63025039>
- Middleton, J. (2023, April 28). *Russia-Ukraine war live: death toll rises in Uman and Dnipro after intense Russian strikes – as it happened*. The Guardian. <https://www.theguardian.com/world/live/2023/apr/28/russia-ukraine-war-live-air-raid-sirens-sound-in-kyiv-and-across-ukraine>
- Raisnford, S. (2022, October 10). *Ukraine war: Russian hawks celebrate deadly response to Crimea setback*. BBC. <https://www.bbc.com/news/world-europe-63205446>
- Roth, A. (2023, April 3). *Killed Russian blogger Vladlen Tatarsky was a soft target for his many enemies*. The Guardian. <https://www.theguardian.com/world/2023/apr/03/killed-russian-blogger-vladlen-tatarsky-soft-target-many-enemies>
- Russell, G., & Chao-Fong, L. (2022, February 28). *Ukraine: what we know on day five of Russia's invasion*. The Guardian. <https://www.theguardian.com/world/2022/feb/28/ukraine-what-we-know-on-day-five-of-russias-invasion>
- Taylor, H., Ambrose, T., & Lock, S. (2022, December 15). *Ukraine army chief warns Moscow preparing for new Kyiv attack as Putin seeks new economic ties – as it happened*. The Guardian. <https://www.theguardian.com/world/live/2022/dec/15/russia-ukraine-war-live-kursk-airbase-in-russia-hit-ukraine-official-claims-canada-resumes-nord-stream-sanctions>
- What happened in the Russia-Ukraine war this week? Catch up with the must-read news and analysis*. (2023, March 31). The Guardian. <https://www.theguardian.com/world/2023/apr/01/what-happened-in-the-russia-ukraine-war-this-week-catch-up-with-the-must-read-news-and-analysis>
- Tobias, B. (2022, December 1). *Is attacking Ukraine's power grid a war crime?* BBC. <https://www.bbc.com/news/world-europe-63754808>
- Ukraine conflict: appeal for warm clothing as winter sets in*. (2022, November 3). BBC. <https://www.bbc.com/news/uk-england-somerset-63506278>
- Ukraine war: 'Mad panic' as Russia evacuates town near Zaporizhzhia plant*. (2023, May 7). BBC. <https://www.bbc.com/news/world-europe-65515443>

Wright, G. (2022, November 19). *Ukraine war: Almost half Ukraine's energy system disabled, PM says*. BBC. <https://www.bbc.com/news/world-europe-63681401>

SUMMARY

This thesis deals with adjectives and their frequency in the context of war. The **aim** of this thesis is to reveal the frequency of adjectives in war-themed contexts, and their role in situation evaluation and perception building of the targeted audience. The following **objectives** were set out for the research:

1. To review scientific literature on adjectives and their characteristics;
2. To determine, categorise and describe the most frequent adjectives based on their morphological, syntactical and semantical features;
3. To reveal, what nouns are modified by most frequent adjectives found in articles regarding the war in Ukraine;
4. To analyse and interpret the meanings of adjectives used in war-related articles.

The overall structure of the study takes the form of five major chapters, including introduction, overview of theoretical background of the phenomena, methodology, empirical analysis of data and conclusions. Data for the research was collected using a combination of methods. Quantitative method was used in order to collect and investigate adjectives found in the chosen articles. Qualitative approach was applied in the research in order to analyse and interpret the data.

Following the objectives set for the thesis, theoretical and empirical parts of this thesis has led to these **conclusions**:

1. The main function of adjective is to modify a noun and they can do that by standing in attributive or predicate position in a sentence. Adjectives can be formed through suffixation, affixation and compounding and they can also express the intensity through their form. Adjectives can also be categorised into 11 different categories based on their semantical functions.
2. The most frequent adjectives found in the articles on Ukraine's war are *Russian, Ukrainian, Military, Nuclear, New* and *Civilian*. The most frequent compound adjective type is *Adjective + Adjective*, suffixes and affixes *-ed, -al, -ic, un-*. Adjectives tend to express their intensity through comparative form. Finally, the most frequent type of adjectives found in articles during the period of 2022 -2023 is descriptive.
3. Most common adjectives found in the articles regarding the war in Ukraine tend to modify different nouns, however, some of those nouns can be found modified by multiple adjectives.

4. It was established that adjectives in war-related articles tend to evaluate and describe the situation. They give additional information to the context and elaborate nouns, in order to build the correct perception of the targeted audience.

SANTRAUKA

Šis darbas skirtas būdvardžių ir jų pasikartojimo analizei kariniame kontekste. Darbo **tikslas** atskleisti būdvardžių dažnumą tekstuose apie karą ir aptari jų funkcijas situacijos vertinime ir suvokime. Norint pasiekti tikslą, buvo iškelti keli **uždaviniai**:

1. Apžvelgti literatūrą susijusią su būdvardžiais ir jų ypatybėmis;
2. Nustatyti, paskirstyti ir aprašyti dažniausiai pasikartojančius būdvardžius pagal jų morfologinius, sintaksinius ir semantinius bruožus;
3. Atskleisti, kokius daiktavardžius modifikuoja būdvardžiai, dažniausiai vartojami straipsniuose apie karą Ukrainoje;
4. Išanalizuoti ir interpretuoti būdvardžių, naudotų straipsniuose apie karą, reikšmes.

Rašto darbas sudarytas iš 5 pagrindinių skyrių: įžangos, teorinės dalies, metodologijos, empirinės analizės ir išvadų. Duomenys buvo surinkti ir analizuojami naudojant mišrų tyrimo būdą. Kiekybinis tyrimo metodas buvo naudojamas siekiant surinkti visus būdvardžius rastus pasirinktuose naujienų straipsniuose. Kokybinis metodas buvo pasitelktas duomenų analizei ir interpretacijai.

Siekiant įvykdyti išsikeltus uždavinius, teorinės ir empirinės dalies analizė gautus duomenis leido **apibendrinti** taip:

1. Pagrindinė būdvardžio funkcija yra modifikuoti daiktavardį, atitinkamai jam esant tarinio arba atributinio pozicijoje sakinyje. Būdvardžiai, anglų kalboje gali būti sudaromi pridedant priesagas, afiksus ar sudarant dūrinius. Būdvardžiai, taip pat gali būti laipsniuojami. Atsižvelgiant į būdvardžių semantines funkcijas, jie gali būti skirstomi pagal 11 skirtingų tipų.
2. Būdvardžiai, kurie dažniausiai pasikartojo straipsniuose apie Ukrainos karą buvo šie: *rusiškas, ukrainietiškas, karinis, branduolinis, naujas* ir *civilių*. Dažniausiai pasitaikantis būdvardžių dūrinys *Būdvardis + Būdvardis*, priesaga *un-* ir galūnės *-ed, -al, -ic*. Būdvardžių laipsniavime populiariausi aukštesnieji būdvardžiai. Galiausiai, straipsniuose apie karą Ukrainoje dažniausiai pasikartojantys būdvardžiai yra priskiriami apibūdinančių (descriptive) būdvardžių tipui.
3. Dažniausiai pasikartojantys būdvardžiai modifikuoja skirtingus daiktavardžius, tačiau pasitaiko ir tokių, kurie gali būti modifikuoti kelių skirtingų būdvardžių.
4. Būdvardžių reikšmių analizė kariniuose straipsniuose atskleidė, kad tokiame kontekste atsiradę būdvardžiai dažniausiai aprašo bei vertina situaciją. Jie suteikia daiktavardžiui

papildomos informacijos ir padeda skaitytojui susidaryti konkretesnes išvadas, vertinti situaciją ar susidaryti tam tikrą požiūrį.

APPENDIX

Appendix 1. Adjective frequency in *BBC* articles.

Adjective frequency					
Adjective	Frequency	Adjective	Frequency	Adjective	Frequency
Russian	63	Anti-war	1	next	1
Ukrainian	42	apocalyptic	1	Nightly	1
Military	29	Armed	1	Numerous	1
Nuclear	17	Armenian	1	Occupied	1
Civilian	15	Audacious	1	Old	1
Other	10	Aware	1	Older	1
Social	9	back	1	only	1
International	7	Ballistic	1	Online	1
Dead	6	barbaric	1	Operational	1
Recent	6	battered	1	outgoing	1
Regional	6	big	1	Periscope-like	1
Small	6	Black	1	personal	1
Western	6	Bow-mounted	1	physical	1
Dangerous	5	Busy	1	planned	1
medical	5	callous	1	Plausible	1
Several	5	Capable	1	Polish	1
Such	5	Central	1	Political	1
Afraid	4	ceramic	1	Potent	1
British	4	challenging	1	potential	1
Few	4	Civilised	1	Preferable	1
First	4	Close	1	presidential	1
Former	4	cold	1	Preventive	1
Large	4	collapsed	1	Previous	1
Latest	4	Collective	1	Pro-democracy	1
Legitimate	4	Common	1	Progressive	1
Local	4	community	1	prohibitive	1
Many	4	Concerened	1	pro-Kremlin	1
New	4	Covered	1	Pro-war	1
Partial	4	Credible	1	public	1
Rare	4	Dark	1	Quick	1
Special	4	Deadly	1	Random	1
Better	3	deafening	1	Rapid	1
Biggest	3	Dejected	1	Raw	1
Certain	3	Depressed	1	Reent	1
Concrete	3	destructive	1	regular	1
Crimean	3	Devastating	1	Related	1
Critical	3	Diplomatic	1	Relevant	1
Disabled	3	Domestic	1	Reliable	1
Eastern	3	Dramatic	1	Remote-controlled	1
General	3	Editorial	1	Residential	1
Good	3	Eight	1	Responsible	1

Huge	3	elderly	1	Restless	1
Last	3	Electric	1	retired	1
Legal	3	Electrical	1	Right	1
Major	3	Elevated	1	Roundabout	1
past	3	emotional	1	Russian-backed	1
Ready	3	Entire	1	Russian-controlled	1
Southern	3	Estonian	1	Russian-held	1
Virtual	3	Eventual	1	Russian-installed	1
warm	3	Explosive	1	Ruthless	1
White	3	External	1	Sad	1
Brutal	2	Extra	1	Security	1
Civil	2	Fake	1	Self-styled	1
Clandestine	2	Fascist	1	Separate	1
Clear	2	Fast	1	serious	1
Complete	2	fastest	1	Seven	1
Constant	2	Fatal	1	Sheer	1
deep	2	Fewer	1	Shock and awe	1
Definite	2	fierce	1	Short-range	1
Different	2	Financial	1	Siberian	1
Difficult	2	First-time	1	sickly	1
Exact	2	Flammable	1	Significant	1
Fresh	2	Flat	1	Symbolic	1
Future	2	Foreign	1	Six-year-old	1
Global	2	four-year-old	1	Smaller	1
Happy	2	Frequent	1	Sophisticated	1
Hard	2	front	1	spiritual	1
Heavy	2	Frozen	1	Stable	1
Historical	2	Full	1	Strategic	1
Human	2	Full-scale	1	stressful	1
Humanitarian	2	furthest	1	Strong	1
Illegal	2	genetic	1	Sufficient	1
Important	2	Grateful	1	Suspicious	1
Indiscriminate	2	grim	1	Tactical	1
Internal	2	Harsh	1	tax-free	1
young	2	Heaviest	1	temporary	1
Largest	2	higher	1	tense	1
Less	2	Historic	1	terrible	1
Little	2	incoming	1	thermal	1
long	2	incredible	1	Tired	1
Mysterious	2	independent	1	Top	1
monthly	2	Initial	1	Tougher	1
more	2	intense	1	tremendous	1
Multiple	2	Irish	1	Undemocratic	1
Own	2	Key	1	Unlikely	1
Possible	2	Kinetic	1	Unpredictable	1
Powerful	2	likely	1	Unsanctioned	1
Private	2	Limited	1	Unusual	1
red	2	Long-range	1	Upward	1

Safe	2	Loud	1	Urgent	1
Second	2	Loudest	1	Useful	1
Senior	2	lovely	1	Valuable	1
Severe	2	mad	1	Vehicle-borne	1
Successful	2	Main	1	veteran	1
Swift	2	maritime	1	viable	1
True	2	Massively	1	Visible	1
Ukrainian-controlled	2	Massive	1	vital	1
Unmanned	2	Military-age	1	voluntary	1
12-year-old	1	moral	1	weak	1
21-year-old	1	Most	1	Well-founded	1
25-year-old	1	Move-on	1	Western-supplied	1
Acceptable	1	Muslim	1	Whole	1
Additional	1	National	1	Widespread	1
Alarming	1	natural	1	Worried	1
Alone	1	nautical	1	Worrying	1
amazing	1	Naval	1	Worse	1
Ambitious	1	nearby	1	Wrong	1

Appendix 2. *Adjective frequency in The Guardian articles.*

Adjective Frequency					
Adjective	Frequency	Adjective	Frequency	Adjective	Frequency
Russian	104	violent	2	minimum	1
Ukrainian	64	10-year-old	1	missing	1
Nuclear	45	25-year	1	modest	1
military	43	90-minute	1	much-expected	1
new	23	active	1	multiple	1
last	17	Advanced	1	multi-sourced	1
foreign	14	aerial	1	multi-story	1
western	13	Afghan	1		
First	11	aggressive	1	mutual	1
former	11	American	1	natural	1
other	9	anti-drone	1	nearby	1
public	9	anti-tank	1	ninth	1
eastern	8	armoured	1	non-lethal	1
financial	8	authoritative	1	non-nuclear	1
international	8	basic	1	non-weapon	1
latest	8	battered	1	normal	1
national	8	Better	1	northern	1
private	8	big	1	nuclear-sharing	1
armed	7	black	1	Nuremberg-style	1
central	7	brazen	1	obligatory	1
political	7	British-designed	1	obvious	1
senior	7	Bulgarian	1	occasional	1
several	7	chief	1	occupied	1
early	6	Chinese	1	OK	1
more	6	Cypriot	1	ongoing	1
Belarusian	5	classic	1	open	1
British	5	clean	1	opposite	1
civilian	5	Closed	1	outside	1
cold	5	cohesive	1	paramilitary	1
European	5	collective	1	paranoid	1
local	5	community	1	pathological	1
major	5	complete	1	patriotic	1
Many	5	complex	1	perceptible	1
offshore	5	Concerned	1	Perceptive	1
tactical	5	Confident	1	powerful	1
Clear	4	conservative	1	pre-dawn	1
close	4	constant	1	predictable	1
economic	4	continued	1	pre-existing	1
fierce	4	controversial	1	Present	1
further	4	Convinced	1	presidential	1
joint	4	convincing	1	primary	1
large	4	corporate	1	prime	1
next	4	criminal	1	pro-Russia	1
past	4	Crippling	1	pro-western	1

popular	4	current	1	pro-Kremlin	1
pro-war	4	Dangerous	1	prominent	1
Ready	4	dark	1	provocative	1
second	4	deadly	1	psychological	1
small	4	definitive	1	Racial	1
Spanish	4	deputy	1	radioactive	1
special	4	devastated	1	rambling	1
ambitious	3	Difficult	1	regular	1
anti-war	3	diplomatic	1	reliable	1
different	3	effective	1	Responsible	1
east	3	eloquent	1	Right	1
few	3	environmental	1	Romanian	1
high	3	epic	1	rural	1
internal	3	Eurasian	1	Russia-backed	1
key	3	Evasive	1	Russian-held	1
largest	3	exact	1	Russian-installed	1
main	3	excellent	1	sandy	1
massive	3	Expensive	1	secessionist- minded	1
nationalist	3	explosive	1	secret	1
north-eastern	3	extensive	1	secretive	1
official	3	external	1	separatist	1
online	3	extrajudicial	1	serious	1
ordinary	3	extraordinary	1	Symbolic	1
own	3	famous	1	simultaneous	1
potential	3	fateful	1	single	1
previous	3	female	1	six-storey	1
red	3	following	1	sixth	1
regional	3	foolish	1	slight	1
safe	3	forensic	1	smaller	1
same	3	formal	1	sole	1
significant	3	French	1	south-eastern	1
southern	3	fresh	1	southeastern	1
Soviet	3	friendly	1	spare	1
territorial	3	full	1	sporadic	1
total	3	full-on	1	stable	1
traditional	3	full-scale	1	state-owned	1
Unlikely	3	fundamental	1	staunchest	1
widespread	3	Georgian	1		
annual	2	good	1	strategic	1
arrogant	2	grave	1	stunning	1
biggest	2	green	1	substantive	1
burial	2	Grey	1	successful	1
catastrophic	2	grim	1	such	1
cynical	2	handwritten	1	Supportive	1
civil	2	hardline	1	sweeping	1
closer	2	heroic	1	tentative	1
Crimean	2	Hesitant	1	Tepid	1
cruellest	2	hidden	1	terrible	1

cultural	2	highest	1	Thin	1
Decisive	2	High-level	1	Thinner	1
defensive	2	high-profile	1	third	1
ethnic	2	historical	1	tighter	1
extreme	2	huge	1	tone-deaf	1
global	2	implicit	1	top	1
Harder	2	Important	1	transatlantic	1
heavy	2	Impossible	1	triple-fortified	1
high-rise	2	inconspicuous	1	Turkish	1
Hot	2	Independent	1	uncaring	1
human	2	inexperienced	1	Unclear	1
Humiliating	2	informal	1	Underway	1
immediate	2	informational	1	unfiltered	1
ineffective	2	Initial	1	Unfounded	1
Influential	2	inner	1	Unfriendly	1
intense	2	innocent	1	Unheeded	1
legal	2	intellectual	1	Unjust	1
long	2	intensive	1	unmarked	1
mass	2	intrusive	1	unprecedented	1
modern	2	young	1	unprovoked	1
Most	2	younger	1	Unreliable	1
needless	2	Iranian-made	1	unusual	1
Notorious	2	iron	1	usual	1
nuclear-weapon	2	ivy-covered	1	vehement	1
old	2	Jewish	1	veiled	1
peaceful	2	journalistic	1	verbal	1
Polish	2	labyrinthine	1	virtual	1
professional	2	Larger	1	virulent	1
real	2	large-scale	1	visible	1
recent	2	late	1	visual	1
residential	2	lazy	1	vital	1
Russian-backed	2	legitimate	1	Vulkan	1
Russian-controlled	2	lengthy	1	Vulnerable	1
Russian-occupied	2	liberated	1	weaker	1
Sceptical	2	likely	1	wealthiest	1
six	2	little	1	Welcome	1
social	2	logistical	1	white	1
soft	2	long-expected	1	whole	1
strong	2	longstanding	1	Wooden	1
terrorist	2	Loud	1	Worried	1
three-year-old	2	lower	1	worrisome	1
tragic	2	maritime	1	worst	1
unknown	2	marshy	1	Wrong	1
urgent	2	meaningful	1	murky	1
vast	2	mighty	1	stiff	1