

Morphosyntax of Animal Onomatopoeias in English and Ukrainian

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ABSTRAKT

Tato bakalářská práce se zabývá morfosyntaxí onomatopoií označující zvuky zvířat v angličtině a ukrajinštině. Cílem práce je zjistit, jak jsou onomatopoeie označující zvuky zvířat lexikalizovány, a porovnat morfosyntaktické rysy obou jazyků. Tato práce zkoumá, které onomatopoeie označující zvuky zvířat lze lexikalizovat a do jaké míry jsou lexikalizovány v obou jazycích. Pro účely analýzy byly shromážděny příklady onomatopoií označujících zvuky zvířat z korpusů, aby bylo možné analyzovat a porovnat jejich použití. Poté byly porovnány morfologické formy lexikalizovaných onomatopoií. Práce ukazuje, že onomatopoeie označující zvuky zvířat v angličtině a ukrajinštině jsou lexikalizovány jako slovesa nebo podstatná jména, a jakmile je primární onomatopoeie přiřazena k určité slovní kategorii, plní všechny morfosyntaktické funkce, které jsou spojeny se slovní kategorií, ke které byla přiřazena. Práce tak nabízí pohled na morfosyntaktickou analýzu onomatopoií označujících zvuky zvířat.

Klíčová slova: morfosyntax, primární onomatopoeie, sekundární onomatopoeie, angličtina, ukrajinština, onomatopoeie označující zvuky zvířat

ABSTRACT

This thesis studies the morphosyntax of animal onomatopoeias in English and Ukrainian. The aim of the thesis is to determine how animal onomatopoeias are lexicalized and compare morphosyntactic features of two languages. The question that this thesis explores is what animal onomatopoeias can be lexicalized and to what extent they are lexicalized in both languages. For the purpose of the analysis, I gathered the instances of animal onomatopoeias from corpora to analyse and compare the real-life usage of animal onomatopoeias. Then, the morphological forms of the lexicalized onomatopoeias were compared. This study determined that English and Ukrainian animal onomatopoeias are lexicalized as verbs or nouns, and once primary onomatopoeia is reassigned to a particular word category, it fulfils all the conventional morphosyntactic functions that are associated with the word category it was assigned to. Thus, the thesis offers an insight into morphosyntactic analysis of animal onomatopoeias.

Keywords: morphosyntax, primary onomatopoeia, secondary onomatopoeia, English, Ukrainian, animal onomatopoeias

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CONTENTS

INTRODUCTION	13
I THEORETICAL PART	14
1 ONOMATOPOEIA	15
1.1 WHAT IS ONOMATOPOEIA?	15
1.2 INTERJECTION VS ONOMATOPOEIA	16
1.2.1 Defining interjections	18
1.3 CLASSIFICATION OF ONOMATOPOEIA	19
1.3.1 Morphophonological classification	20
1.3.2 Primary and secondary onomatopoeias	20
1.3.3 Phonological classification	22
1.3.3.1 Direct onomatopoeia	22
1.3.3.2 Associative onomatopoeia	22
1.3.3.3 Exemplary onomatopoeia	23
1.3.4 Semantic classification	23
2 LEXICALIZATION OF ONOMATOPOEIA	25
2.1 ONOMATOPOEIA AND CONVERSION	25
2.2 DEGREES OF LEXICALIZATION	25
2.2.1 First degree	25
2.2.2 Second degree	26
2.2.3 Third degree	26
2.2.4 Forth degree	27
2.3 SYNTACTIC AND MORPHOLOGICAL LIMITATIONS OF PRIMARY AND SECONDARY ONOMATOPOEIAS	27
3 ONOMATOPOEIA IN UKRAINIAN LANGUAGE	29
3.1 SYNTACTIC CATEGORY OF ONOMATOPOEIA	29
3.2 VERBS WITH ONOMATOPOEIC ROOT	29
3.3 NOUNS WITH ONOMATOPOEIC ROOT	30
3.3.1 Nouns derived from verbs	30
3.3.2 Nouns derived from primary onomatopoeias	31
3.4 SYNTAX OF PRIMARY ONOMATOPOEIA	31
II PRACTICAL PART	33
4 METHODOLOGY	34
4.1 CORPUS DESCRIPTION	34
4.1.1 English corpus	34
4.1.2 Ukrainian corpus	34
4.1.3 Sketch engine	35
4.2 DATA COLLECTION	35

4.3	RESEARCH QUESTIONS	37
5	ANALYSIS OF ONOMATOPOEIAS LEXICALIZATION	38
5.1	THREE TYPES OF ANIMAL ONOMATOPOEIAS.....	38
5.2	GENERAL CONCLUSION ON LEXICALIZATION.....	41
6	MORPHOSYNTACTIC ANALYSIS OF SECONDARY ONOMATOPOEIAS	44
6.1	ENGLISH DATA ANALYSIS.....	44
6.1.1	Word categories.....	44
6.1.2	Verbal morphology.....	46
6.1.3	Noun morphology.....	50
6.1.4	General conclusion on English morphosyntax	52
6.2	UKRAINIAN DATA ANALYSIS	52
6.2.1	Word categories	52
6.2.2	Verbal morphology.....	54
6.2.3	Nominal morphology	59
6.2.3.1	Ways of forming a noun from primary onomatopoeias	60
6.2.4	General conclusion on Ukrainian morphosyntax	62
	CONCLUSION.....	63
	BIBLIOGRAPHY	65
	LIST OF TABLES	67
	LIST OF ABBREVIATIONS.....	68

INTRODUCTION

Onomatopoeia is a linguistic phenomenon that serves as a linking tool for connecting real-world sounds and language by the means of phonetic mimicking. Animal onomatopoeias are observed in various languages, serving the stylistic and expressive device in spoken and written language. In English and Ukrainian animal onomatopoeias occupy a significant place in the lexicon, being the most numerous subcategory of onomatopoeias.

Whereas there are numerous researches on phonetic and semantic dimensions of onomatopoeias, their morphosyntactic characteristics remains relatively understudied. This gap is especially noticeable in the context of bilingual studies. This research aims to contribute to the overall understanding of an animal onomatopoeias lexicalization process in English and Ukrainian. The purpose of the research is to compare the theoretical background of the topic with the real-life usage of onomatopoeias and compare morphosyntactic features of the onomatopoeias in English and Ukrainian to distinguish the universal similarities and distinctions. The research is conducted based on the corpora data to determine what animal onomatopoeias can be lexicalized and to determine the distribution frequency of various word forms of animal onomatopoeias in English and Ukrainian.

The research starts with the exploring the theoretical background of onomatopoeia, its category, classification and its lexicalization properties in both languages. This is followed by the examination of 26 English animal onomatopoeias and 27 Ukrainian animal onomatopoeias. I determine what animal onomatopoeias can be primary and secondary, or both. Then I made an analysis of the morphological features of English and Ukrainian with the detailed calculations of word categories, inflected forms frequency.

I THEORETICAL PART

1 ONOMATOPOEIA

The term “onomatopoeia” is derived from compounding two Greek words: *onoma* meaning ‘name’ and *poiein* meaning ‘make’. Onomatopoeia meaning “name-making”, becomes even more coherent when one considers the language development theories, such as “bow-wow” theory. According to Yule, a child’s ability to recognize sounds even before birth evolves into further ability to connect sounds to objects. This observation established the premise of the “bow-wow” theory proposing that first words in languages originated from imitating different sounds surrounding early humans. This imitation is called onomatopoeia. Moreover, in support of the theory, Yule claims that phonetic imitations of naturally occurring sounds exist in every contemporary language (Yule 2022, 3). For instance, *cuckoo*, *whip*, *bubble* are common examples of nouns that were named by the sound they associated with.

Despite the importance of onomatopoeia in the language system and its development, this phenomenon remains often neglected by prominent linguists. For instance, neither Huddleston and Pullum (2002) nor Biber et al. (1999) do not mention onomatopoeia.

1.1 What is onomatopoeia?

Onomatopoeia is a linguistic phenomenon that is universal in numerous languages (Bredin 1996, 556; Vigliocco et al. 2020, 16), however, onomatopoeic expressions do not sound the same in different languages. For instance, a sound made by a dog in English is *woof-woof*, however, it can sound very different in other languages.

1) Ukrainian

Hav-hav

woof-woof

‘Woof-woof’

2) Mandarin

wang wang

woof woof

‘Woof-woof’

This divergency happens, since every language system has different phonetic, cultural and social backgrounds, therefore, it can be assumed that onomatopoeia is not a mere imitation of sounds heard by humans, but part of the vocabulary developed under certain circumstances in a particular language environment throughout time, as the rest of the words.

Generally, onomatopoeia is understood as words mimicking naturally occurring sounds, namely sounds of animals, nature, objects, etc. Onomatopoeia is designed to evoke the association between phonetic structure and the real-world sound. Moreover, it plays a crucial role in acquiring the first language by a child, expressing emotions and naming sounds around us. Most people can recall several instances of onomatopoeia off top of their head, such as *woof*, *meow*, *boom*, *buzz*. However, linguists do not reach a consensus on what onomatopoeia is. For instance, Bredin in his research outlines that even though there is no general agreement on what onomatopoeia in the academic world is, everyone agrees on fundamental relationship between how the word sounds and something outside of the language system (Bredin 1996, 555). However, after examination of recent academic literature it becomes evident that the situation remains unchanged. For instance, Bauer et al. define onomatopoeia as words designed to directly mimic the sounds and noises made by the entities they represent, or to name an object by the sound it makes (Bauer et al. 2013, 25). On the contrary, Catricalà and Guidi claim that it is “mimetic elements” that depict sounds and their lexicalization (Catricalà and Guidi 2015, 175). It seems that Catricalà and Guidi do not consider onomatopoeias as words at all but instead treat them as linguistic elements.

Even though what this linguistic phenomenon remains ambiguous, it is beyond doubt that onomatopoeia is tightly connected to the sound and its meaning, whether it is direct imitation of sounds or a mere resemblance.

1.2 Interjection VS Onomatopoeia

There is no unanimity among linguists about what category onomatopoeia belongs to and whether it can be considered an independent one. Historically, in standard reference books onomatopoeia was treated as part of interjection category, however, recently many scholars tend to separate these two categories. Despite recent researches, such as Sasamoto and Jackson (2016), Meinard (2015), that show how these two categories are different, the problem whether onomatopoeia can be classified as part of interjections is still a subject for a debate for linguists.

According to Meinard many relatively contemporary linguists, namely Cuenca (2000), Swiatkowska (2006), Vassileva (2007), classify onomatopoeia as part of interjection or, vice versa, interjection as part of onomatopoeia (Meinard 2015, 158). This uncertainty stems from the similarity of the syntactical and morphological features of two categories, and lack of unanimity in how the terms should be defined and applied to the grammar. Traditionally, interjections include words such as *wow*, *oops*, *phew*, *alrighty*, *nah*, *ugh*, *geez*, etc. Onomatopoeia, on the other hand, is typically associated with words like *meow*, *woof*, *splash*, *buzz*, *bang*, *chirp*, *tweet*, *clap*, etc.

Moreover, functional similarities between the two categories can also contribute to the overall confusion about them. For instance, interjection and onomatopoeia can be used independently, outside of the rest of the sentence, they do not rely on other syntactic elements to convey meaning. For instance:

- 1) *Wow!*
- 2) *Tweet-tweet!*

In (1) interjection and in (2) onomatopoeic expression is used separately, yet it is possible to decode the meaning. Sentence (1) suggests the meaning that a person, who uttered it, is now in the state of astonishment or admiration. Onomatopoeic expression in (2) refers to a bird singing its song.

In addition, both categories are marginalized and naturally appear in spoken or colloquial language. According to Meinard, another reason why onomatopoeia and interjection are considered as one word category is because they passed substitution test in isolated positions (Meinard 2015, 166).

- 3) *Crack! Something got broken.*
- 4) *Oh! Something got broken.*

Onomatopoeia *crack* in sentence (3) is substituted with an interjection *oh* in the sentence (4) proving that onomatopoeia and interjections can occupy similar syntactic position, therefore, passing substitution test. However, this appears to be true only if they occur in the sentence separately.

- 5) *The cat meowed.*
- 6) **The cat ohed.*

Onomatopoeic expression *meow* in (5) and interjection *oh* in (6) does not pass the substitution test when integrated in the syntax of the sentence. This is due to the fact that onomatopoeia can be converted to other word categories and be lexicalized, whereas interjections show almost no signs of inflection. However, it is apparent that substitution test is not enough to classify them as one grammatical category. Furthermore, under proper examination of their semantic differences, it becomes evident that these semantic distinctions are so radical that making one part of another becomes impossible.

1.2.1 Defining interjections

To define the semantic differences of two concepts one should address standard reference books and how they describe interjection. For instance, Greenbaum defines interjection as a closed category of words that express emotions and connect to the sentence (Greenbaum 1996, 90–91). Similarly, Aarts describes interjections as a grammatical category that express emotions, reaction, etc. (Aarts 2011, 83). Huddleston and Pullum support the view that interjections is a grammatical category that mainly has an expressive meaning. Moreover, they emphasize that interjections are isolated from the rest of the sentence (Huddleston and Pullum 2002, 1361). These definitions from classic reference books highly contradict what was said previously about the definition of the onomatopoeia – whereas onomatopoeia is a reflection of sounds outside of the speaker, interjection seems to be the product of the inner emotive state of a human.

On the contrary, in the research Meinard questions the widely accepted fact that interjection is a word category and claims that onomatopoeia has more properties to be considered a word category than interjection. For instance, onomatopoeias participate in derivational processes, thus, it contributes to creation of new words for other categories, such as verbs and nouns (Meinard 2015, 157).

- | | |
|-----------------|----------------------------------|
| 1) <i>Meow</i> | <i>meowed, meowing, meows</i> |
| 2) <i>Bark</i> | <i>barked, barking, barks</i> |
| 3) <i>Boom</i> | <i>boomed, booming, booms</i> |
| 4) <i>Crack</i> | <i>cracked, cracking, cracks</i> |
| 5) <i>Whip</i> | <i>whipped, whipping, whips</i> |

On the contrary, interjections are not used to derive further word categories, such as nouns or verbs, even vice versa, some interjections are converted from other word categories,

namely nouns, verbs, adverbs, etc. For instance, a noun *silence* can be converted into the interjection *Silence!* that conveys the meaning of request to be quiet; similarly, a noun *Jesus* is converted into the interjection *Jesus!* to express anger or surprise; the adverb *absolutely* converts into an interjection *Absolutely!* meaning agreement to something. Furthermore, onomatopoeias in isolated position fulfil referential function of the language, since they refer to the outside world objects, whereas interjections fulfil expressive function of the language as they refer to the one who is uttering an interjection (Meinard 2015, 167). Stated differently, onomatopoeia refers to something in the outside world as *meow* in (6) that refers to a cat, whereas interjections reflect the inner state of the speaker and does not bring any information about the outside world as *wow* in (7).

6) *The cat said meow.*

7) *Wow! That's beautiful.*

In addition, interjections can be sentence-substituents, whereas onomatopoeic expressions clearly cannot (Meinard 2015, 167). This implies that interjections like *Silence!*, in fact, can substitute a sentence *be quiet* or *I want you to be silent*. Therefore, according to Meinard (2015) interjections does not have enough properties to be considered a word category, thus, onomatopoeia cannot be considered as part of interjection or vice versa, simply because interjections have other properties than required for a word category (Meinard 2015, 167).

Whereas interjection and onomatopoeia hold some similarities on the surface, they have more distinctions under closer examination and deeper analysis. Thus, onomatopoeia cannot be considered an interjection, however, historical perspective persists, and onomatopoeia can sometimes be associated with interjection due to their overlapping structural and functional features.

1.3 Classification of onomatopoeia

Onomatopoeia, as a linguistic phenomenon, represents a relationship between sound and meaning. However, it is not a homogenous group, but a group of numerous subgroups possessing different characteristics and features. As mentioned in the previous subchapters, onomatopoeia is surrounded by confusion and vagueness regarding its nature. Onomatopoeic expressions can stand separately, disconnected from the sentence, yet still denote some meaning. For instance, *Crack!* used separately implies a meaning that

something was broken or burst. However, according to Feist, onomatopoeia can be used as a syntactic unit as well. For instance, words that directly imitate naturally occurring sounds can be transformed to describe a process or an action as exemplified by a cat sound *meow* that can be used as a verb – *to meow* – denoting meaning of making a sound by a cat (Feist 2012, 107–8).

Different scholars pursue onomatopoeia from a different perspective, for instance, from a phonological, semantic or morphological perspective, etc.

1.3.1 Morphophonological classification

Kadooka (2005, 2) refers to Tamori (1990), to examine 4 types of onomatopoeia:

- a) reduplicated form (e.g., *woof-woof*, *baa-baa*, *quack-quack*, *moo-moo*);
- b) variant of reduplicated form such as vowel alternation, consonant alternation, and addition of phoneme (e.g., *flip-flop*, *tick-tock*, *honky-tonky*, *bow-wow*, *rat-a-tat-tat*);
- c) monosyllable (e.g., *roar*, *sniff*, *hiss*, *purr*);
- d) bisyllable (e.g., *clatter*, *cuckoo*, *whistle*, *rumble*).

This classification focuses on mostly morphological features, such as reduplication process and number of syllables, as well as phonological ones, such as vowel or consonant alternations. This classification acts as a theoretical background for Kadooka's (2005) research defining the limits of onomatopoeia's lexicalization described in the Chapter 2.

1.3.2 Primary and secondary onomatopoeias

In agreement with Feist (2012) and Kadooka (2005), Stump (2024) states that onomatopoeia can be as a mere imitation of naturally occurring sounds or as a part of the word category, such as verbs, nouns etc. Stump suggests that onomatopoeic expressions can be divided into primary and secondary onomatopoeias.

Primary onomatopoeias are expressive elements that can stand whether separately or as a complement after certain verbs denoting meaning of sound emission (Stump 2024, 403–4), frequently after a verb *go* (Meinard 2015, 151). Primary onomatopoeias in these positions show no inflection and derivation (Stump 2024, 408), thus, they cannot be implemented in the regular grammar and syntax. However, whereas Meinard (2015, 151) states that inanimate imitatives, meaning onomatopoeia that reflects sounds made by inanimate objects, can be quotative and used with the verbs of saying, namely *go*, for instance, *cork went pop*,

Stump (2024, 404) also provides examples of animate imitatives, meaning onomatopoeia that imitate sounds uttered by animate creatures, used as a complement to a verb of saying, for instance, *the cat goes meow*.

1) Primary onomatopoeias used separately

a) *Woof-woof!*

b) *Boom!*

2) Primary onomatopoeias used after a verb of saying

a) *The dog goes woof.*

b) *My heart went boom.*

c) *A cow says “moo”.*

According to Stump, secondary onomatopoeias are converted from primary onomatopoeias by a word formation process – conversion or zero derivation (Stump 2024, 408). Similarly, Bauer et al. note that onomatopoeic expressions effectively use conversion to be transformed into verbs (Bauer et al. 2013, 278). For instance, words that name sounds change their category into verbs without any derivational process: *buzz* becomes *to buzz*, *roar* – *to roar*, *rattle* – *to rattle*, etc. Stump states that secondary onomatopoeias, once they are converted from primary ones, are assigned to a specific word category, usually to a verb or a noun, thus, they need to follow the rules of inflection, derivation, and compounding specific to each word category (Stump 2024, 408).

3) Secondary onomatopoeias as verbs

a) *The cat meows to attract attention.*

b) *The bees were constantly buzzing.*

4) Secondary onomatopoeias as nouns

a) *I heard meows behind the door.*

b) *The buzz annoyed me.*

Stump’s (2024) classification exemplifies how onomatopoeia can be not only an imitation of sounds and behave similarly to an interjection but also be lexicalized and used as part of a regular word category and fulfil all its functions. These differences in primary

and secondary onomatopoeia emphasize the adaptability of onomatopoeia in English grammar.

1.3.3 Phonological classification

Bredin (1996) proposes his own classification, distinguishing 3 types of onomatopoeia – direct, associative, and exemplary onomatopoeia.

1.3.3.1 Direct onomatopoeia

The first one is direct onomatopoeia – words that directly resemble the sound they represent (Bredin 1996, 556). This is the most obvious and recognizable type of onomatopoeic words; it is non-ambiguous, since phonetically these words resemble naturally occurring sounds (Bredin 1996, 558). Common examples for this class include *hiss*, *meow*, *bark*, *crack*. Moreover, Bredin emphasizes on different degree of resemblance of the word sound and the sound it names. For instance, some words, such as *meow*, *hiss* bear more acoustic resemblance to naturally occurring sounds than others, as, for instance, *buzz*, *splash*, *zoom*, *shriek*. Conversely, Bredin claims that the least resemblance to the naturally occurring sounds within direct onomatopoeias bear animal sounds (Bredin 1996, 558). He compares how names for the same animal sounds are different in various languages, thus, he draws the conclusion that animal sounds do not directly imitate naturally occurring sounds, since they are all different in many languages. Bredin concludes that the creation of onomatopoeias from this category are driven by language conventions and not by a mere resemblance (Bredin 1996, 559).

1.3.3.2 Associative onomatopoeia

Bredin further introduces the second type of onomatopoeia – associative onomatopoeia. Associative onomatopoeia, as opposed to direct one, names objects, whereas latter names sounds. Associative onomatopoeia includes words that mimic a sound the object or action is associated with. For instance, *a whip*, *a smash*, *a bubble*, *a cuckoo* (Bredin 1996, 560). All these words do not sound the same as the sounds of actions or objects they describe, but instead they resemble sounds that are associated with these words. Bredin exemplifies that similarly to direct onomatopoeias, associative ones are determined by conventions and can be put on a degree scale. Some associations are stronger than others, for instance, the name of a bird *cuckoo* bears significantly more resemblance to the sound than, for instance, *bubble*.

1.3.3.3 Exemplary onomatopoeia

The last type introduced by Bredin is exemplary onomatopoeia, the least obvious category and the hardest to identify, since it deals with numerous associations between sounds and objects. This specific type of onomatopoeia is significantly different from the other 2 types introduced by Bredin. First, direct and associative onomatopoeias deal with denotative meaning, whereas exemplary with connotative meaning. Second, the nature of the exemplary onomatopoeia is instantiating, while the nature of direct and associative onomatopoeia is of resemblance (Bredin 1996, 563–4). Bredin provides some examples of exemplary onomatopoeia – *nimble*, *slothful*, *dart*, *strives* (Bredin 1996, 563). These words are concepts that do not have any physical form, thus they make no sound. Therefore, there cannot be any acoustic resemblance between the sound of the word and the thing it represents. Instead, there is connotation evoked by the sounds used to pronounce the word. For instance, *slothful* is pronounced slowly and even lazily. The way this word sounds has nothing to do with the concept of being slothful, but certain sounds in it are associated with it.

1.3.4 Semantic classification

Onomatopoeia focuses on imitating and evoking associations with a wide range of noises produced by different objects, phenomena or activities. Semantic classification as opposed to aforementioned classifications, delves into the relation between the meaning of the onomatopoeic expression and its referent. Ardipa et al. base their research on a semantic classification of onomatopoeia. According to them, there are 6 types of onomatopoeia – mechanical, fast motion, musical, food preparation and eating, fighting, and animals (Ardipa et al. 2023, 67).

- a) Mechanical sounds include numerous examples in English (Ardipa et al. 2023, 70), they frequently represent sounds made by a man-made object, such as machines, tools, etc. Common examples include *beep*, *buzz*, *clunk*, *click*, *clatter*, *clink*, *bang*, *tick-tock*.
- b) Onomatopoeia of fast motion sounds convey the meaning of a high speed and rapid movement. Frequent examples are *vroom*, *zip*, *zoom*, *whoosh*, *swish*, *swoosh*, *whip*.
- c) Musical sounds are associated with sounds produced by different musical instruments, namely *plunk*, *twang*, or musical sounds made by people without musical instruments, such as *clap*, *hum*, *snap*. According to Ardipa et al., some of the words from this group also imitate metallic sounds that often end with a consonant cluster *-ng*. For instance, *ting*, *ding*, *ring*, *bong*, *jingle*, *jangle*, and *ping* (Ardipa et al. 2023, 71).

- d) The following group is onomatopoeic words mimicking sounds of food preparation and eating. Representative examples are *sizzle, whisk, pop, chop, splash, crunch, slurp, gulp*.
- e) Onomatopoeic words denoting meaning of fighting seem to be a prominent group of onomatopoeia in comic books, since they frequently use onomatopoeias, such as *pow, bif, bam, whop, bang, wham*, to describe fighting scenes.
- f) Animal sounds are sounds produced by animate creatures and probably one of the most numerous semantic groups. Common examples of animal sounds are *oink, meow, tweet, neigh, woof, bark, roar, cluck, cock-a-doodle-doo, moo, baa*.

2 LEXICALIZATION OF ONOMATOPOEIA

2.1 Onomatopoeia and Conversion

Onomatopoeia is a linguistic phenomenon, primarily known for its sound imitative function, frequently undergoes conversion into other word categories, particularly, into verbs and nouns. Conversion includes changing the category of words without changing their form. According to Bauer et al., conversion is frequently used to create nouns from verbs (Bauer et al. 2013, 203). Conversion to verbs is a highly productive process in English. Verbs can be converted from nearly all grammatical categories, including nouns, adverbs, adjectives, prepositions, as well as from onomatopoeic expressions and interjections (Bauer et al. 2013, 277–8). To illustrate, *meow – to meow*, *neigh – to neigh*, *oink – to oink*, *shriek – to shriek*.

2.2 Degrees of Lexicalization

It appears that conversion of onomatopoeia is limited, since not every onomatopoeic expression is eligible for conversion. For instance, it is apparent that onomatopoeia *arf* and *bark*, although mimicking the same sound made by a dog, function differently in terms of morphology and syntax. In the British National Corpus (BNC) there are no examples of *arf* being a verb or a noun, whereas *bark* appears to be more integrated in the syntax, as *bark* typically is used as a verb and sometimes as a noun.

This problem is examined by Kadooka (2005), when he distinguished four degrees of lexicalization of onomatopoeic expressions. These degrees are distinguished based on two criteria – quotativeness and inflectiveness. These criteria provide an insight into how certain onomatopoeias are integrated in the standard English grammar.

2.2.1 First degree

Onomatopoeic expressions that belong to the first degree are the least lexicalized words. They are typically nonce words or words that contain reduplication. They are the least established in the vocabulary and frequently violate phonological rules of the language. For instance, *zzzzz*, *hjckrrh*, *pshaw*, *arf-arf*, *hee-hee*, *mamsy-pamsy*, etc (Kadooka 2005, 4). Stump shares with Kadooka the view that only onomatopoeia that conform to the phonological rules of the language can be further integrated in grammar as part of another category (Stump 2024, 409). Onomatopoeic expressions of the first degree are primary

onomatopoeias that do not convert to other word categories, thus, do not inflect and can be used only in isolated positions or after verbs of saying, namely *go*, *say*, etc.

2.2.2 Second degree

Words that belong to the second degree are more established in the vocabulary and widely recognizable by language users. Typically, second degree contains words that mimic animal sounds, namely *woof*, *moo*, *meow*, *baa*, *chirp*, *buzz*. Kadooka notes that those belonging to the second degree are often monosyllabic with rare exceptions, as for instance, *cock-a-doodle-doo*. According to Kadooka, second degree words do not inflect, however, there are some mimetic words that are converted into verbs, for instance, *to mew*, *to moo*, *to quack*, etc (Kadooka 2005, 4–5).

2.2.3 Third degree

Words denoting animal sounds of the third degree have more abstract meaning than words from the second degree. These words have evolved beyond simple sound imitation to describe actions. To illustrate, *hop*, *click*, *crack*, *flash*, *bump*. In case of syntax, there is a significant distinction between the second degree and the third degree – third degree words can be a part of noun or verb category; thus, these words can be inflected. Moreover, the same word can appear as part of different word categories, as exemplified in (1) and (2) (Kadooka 2005, 5).

1) Click

- a. *You need a few clicks to finish the application.*
- b. *I just clicked and it all disappeared.*
- c. *Click-click.*

2) Bump

- a. *I heard a loud bump.*
- b. *He bumped into his neighbor.*
- c. *Bump!*

Click and *bump* can function as a noun as in (a) and, consequently, words inflect according to category rules. One of the fundamental morphological features of nouns is inflection. In English nouns typically inflect to indicate number – singular or plural

(Huddleston and Pullum 2002, 326). In (b) *click* and *bump* are converted to verbs, thus they need to follow inflection rules for verbs. In the previous examples *click* and *bump* inflect with the suffix *-ed* to indicate tense, specifically, past tense. In (c) both words act as primary onomatopoeia, since they are used in isolated positions and cannot be inflected.

2.2.4 Forth degree

Onomatopoeias from the last group are the most lexicalized and the most integrated into English grammar. Words from this group can be divided into 4 more subgroups based on their structure: words ending with *-er*, words ending with *-el*, words that start with consonant cluster *gl-*, and every other onomatopoeia that does not have a particular structure but has an abstract meaning.

- 1) Ending *-er* has a symbolic meaning that implies meaning of the state or movement, for instance, *chatter*, *clatter*, *simmer*.
- 2) Ending *-el* symbolizes resounding – *giggle*, *rustle*, *chuckle*.
- 3) Word-initial consonant cluster *gl-* has a symbolic meaning of bright shining, as illustrated by *glitter*, *glow*, *glare*.
- 4) Remaining words neither imitate specific sounds, nor have common morphological structure. For instance, *roar*, *smile*, *beam* (Kadooka 2005, 5–6).

Fourth degree of lexicalization onomatopoeias cannot be used as primary onomatopoeias. These words are so integrated in the syntax and lexicon that they only slightly resemble sounds, thus cannot be used as direct imitation of sounds.

- 5) **Birds go chatter*.
- 6) **Chuckle!*
- 7) **Roar-roar*.

2.3 Syntactic and Morphological Limitations of Primary and Secondary Onomatopoeias

According to Stump (2024), primary onomatopoeias that violate phonological rules of English cannot be used as secondary onomatopoeias, as demonstrated in (1), (2), and (3). In English primary onomatopoeias need to conform to the phonotactics of English to convert into other word categories, namely verbs and nouns (Stump 2024, 409). Thus, considering

the degrees of lexicalization proposed by Kadooka (2005), only onomatopoeias of second, third, and fourth degree of lexicalization can be used as secondary onomatopoeias.

- 1) **He zzzzed*.
- 2) **I heard two arfs*.
- 3) **Do you hear hjckrrhing*?

According to Stump (2024), there can be distinguished 2 types of onomatopoeia based on how they are integrated in general grammar. Primary onomatopoeia rarely inflects or participates in the derivational processes. Since primary onomatopoeia seems to not belong to any particular word category their syntactic functions are limited.

On the contrary, secondary onomatopoeia, since it belongs to a particular word category, namely noun or verb, follows the rules of derivation, compounding, and inflection specific for the certain category. As for instance, nouns take the suffix *-s* to indicate plural number. Verbs take suffix *-ed* to indicate past tense (Stump 2024, 408–409).

- 4) Derivation: *crack-er, boom-er, crunch-y, creak-y*.
- 5) Compounding: *popcorn, barf dog, choo-choo train*.
- 6) Inflection:
 - a. nouns: *meows, booms, barks, clicks*.
 - b. verb: *meowed, boomed, barked, clicked*.

Stump observed that inflectional marker used for secondary onomatopoeia tend to be expressed through suffixes (Stump 2024, 409). To put into different words, whereas some nouns express plural forms through other ways than typical *-s* suffix, for instance, *teeth, geese, oxen, fish*, secondary onomatopoeias converted to nouns always indicate plural form by adding suffix *-s*, as demonstrated in (3a). Verb inflection works the same way for secondary onomatopoeia converted to verbs. Onomatopoeic verbs always indicate tense through affixation, as in (3b).

As for the syntactic properties, Stump claims that secondary onomatopoeic expressions are fully integrated in the syntax and behave in the same way as typical nouns or verbs do (Stump 2024, 409).

3 ONOMATOPOEIA IN UKRAINIAN LANGUAGE

3.1 Syntactic category of onomatopoeia

The same as in English, Ukrainian onomatopoeia used to be referred as part of the interjection category (Pliushch 2010, 317), however, contemporary researchers tend to distinguish onomatopoeia from interjection, emphasizing on their semantic differences and unique nature of onomatopoeia to derive into other word categories, namely noun and verb categories (Kuchma 2024, 233). Whereas it remains too ambiguous to what category onomatopoeia should be assigned or whether it forms its own syntactic category, according to Kuchma, it is evident that onomatopoeia includes primary onomatopoeia, as well as verbs and nouns that were derived from primary onomatopoeia (Kuchma 2024, 235).

3.2 Verbs with onomatopoeic root

According to Kuchma, onomatopoeia serves as a base for deriving verbs and nouns (Kuchma 2024, 237). It is generally accepted that in the Ukrainian language to form a verb from direct mimicking of the sound the suffixation is used. According to Pliushch, primary onomatopoeia can form a verb with the help of the word-forming suffix *-k* added to the stem of the word and followed by the suffix *-ty* that forms an infinitive form of the verb. The infinitive suffix is often preceded by additional suffixes *-a-*, *-uva-*, *-i-*, or *-y-* (Pliushch 2005, 72).

1.a <i>hav</i>	1.b <i>hav-k-a-ty</i>
woof	woof-k-a-INF
‘woof’	‘to bark’
2.a <i>me-e-e</i>	2.b <i>me-k-a-ty</i>
baa	baa-k-a-INF
‘baa’	‘to bleat’
3.a <i>kukuriku</i>	3.b <i>kukurik-a-ty</i>
cock-a-doodle-do	cock-a-doodle-do-a-INF
‘cock-a-doodle-do’	‘to crow’

The infinitive suffix can be further replaced by other suffixes to indicate tense, number, mood, voice, person and gender (Pliushch 2005, 242–43).

1) *hav-k-a-l-a*

woof-k-a-PST.-3SG.F

‘barked’

2) *me-k-a-i*

baa-k-a-IMP

‘bleat’

3) *hav-k-a-v by*

woof-k-a-PST.-3SG.M SBJV

‘it bark’

It should be noted that Ukrainian verbs that are derived from onomatopoeias are always in active voice, since these verbs do not have objects connected to them. Thus, passive voice is impossible in this case.

3.3 Nouns with onomatopoeic root

3.3.1 Nouns derived from verbs

Nouns with onomatopoeic root are frequently observed in Ukrainian. It is reasonable to assume that numerous nouns with onomatopoeic root do not derive directly from primary onomatopoeia, but rather from verbs that were previously derived from primary onomatopoeias. According to Pliushch, nouns that are derived from verbs take the following suffixes: *-ann(ia)*, *-ynn(ia)*, *-enn(ia)*, *-inn(ia)*, *-uvann(ia)* (Pliushch 2005, 44).

1) *kukurik-annia*

cuckoo-GER

‘cuckooing’

2) *kar-k-annia*

caw-k-GER

‘cawing’

3) *hav-k-annia*

woof-k-GER

‘barking’

Further instances confirm the pattern – *me-k-annia* (bleating), *niav-k-annia* (meowing), *kva-k-annia* (croaking), *tsvirin-k-annia* (chirping), *khriu-k-annia* (squealing).

As exemplified in the examples (2) and (3) the suffix *-k*, used to derive verbs from onomatopoeic expressions, is preserved. The suffix *-k* is followed by a noun suffix used for deriving noun forms from verbs.

3.3.2 Nouns derived from primary onomatopoeias

However, there can be observed examples of nouns that are considered as onomatopoeias, but without any derivational suffixes. However, it is certain that these words are nouns, since they can be pre-modified by a determiner. All the following instances in (b) column have less similarity with the real-world sound, however, they are still used to refer to the corresponding animal sounds used as primary onomatopoeias in the (a) column. It appears that these secondary onomatopoeias do not mimic the animal sounds directly, but only slightly resemble them by the way how these words sounds.

4.a <i>pi-pi-pi</i>	4.b <i>cei pysk</i>
squeak-squeak-squeak	this squeak
‘Squeak-squeak-squeak’	‘This squeak’
5.a <i>r-r-r-r</i>	5.b <i>yakyis rev</i>
soar	some roar
‘roar’	‘Some roaring’
6.a <i>khrrr</i>	6.b <i>yoho khryp</i>
wheeze	his wheeze
‘wheeze’	‘His wheeze’

3.4 Syntax of primary onomatopoeia

In Ukrainian, as opposed to English, primary onomatopoeias do not necessarily take isolated position or used after the verbs of saying, namely *go*, *say*. According to Pliushch in agreement with Hatsenko, onomatopoeias, including primary ones, can function as predicates (Pliushch 2005, 316; Hatsenko 2013, 258).

1) *A kachka kakh-kakh.*

And duck quack-quack.

‘And the duck goes quack-quack.’

2) *Horlati pivni ku-ku-ri-ku z samoho ranku.*

Loud roosters cock-a-doodle-doo from very morning.

‘Loud roosters have been cawing from the early morning.’

Both examples illustrate how primary onomatopoeias are used at the predicate position, while not taking any inflectional markers that are typical for a verb in this position. In examples (1) and (2) the primary onomatopoeias do not indicate any noun-verb agreement, tense, aspect, etc. Moreover, in these cases onomatopoeias standing in the predicate position is not considered a verb, since they lack morphological markers, thus, no further inflection is possible.

II PRACTICAL PART

4 METHODOLOGY

This section of the thesis explores the morphological and syntactic features of animal onomatopoeias in English and Ukrainian. The aim of this section is to explore the differences between the theoretical background of the topic with the actual usage of onomatopoeias across two languages and to analyse the morphosyntactic features of the English and Ukrainian onomatopoeias.

This chapter focuses on the analytical procedure of the conducted research. It should be underscored that for conducting an analysis the real-life instances were extracted from the two separate corpora for English and Ukrainian data set.

4.1 Corpus Description

4.1.1 English corpus

To investigate the real-life usage of English animal onomatopoeias the well-known British National Corpora (BNC) was used. This corpus features diversification and vast number of tokens – over 100 million across numerous genres including instances from spoken language, ensuring that the data reflects the pattern.

Furthermore, BNC is well-established in the academic world and recognized as a reliable source of data, thus, it ensures that the research aligns with the scholarly standards.

Additionally, this corpus features an automatic part-of-speech tagger that facilitates the morphosyntactic analysis of animal onomatopoeias.

4.1.2 Ukrainian corpus

To explore the actual usage of animal onomatopoeias in Ukrainian, the General Regionally Annotated Corpus of Ukrainian (GRAC) was used. This corpus comprises over 1.8 billion tokens from more than 90 thousand texts that were written from 1816 till 2024. It represents a variety of genres – children literature, diaries, monographs, letters, dissertations, textbooks, dialogs, reviews, etc.

One of the applications of this corpus is linguistic analyses of Ukrainian grammar. Furthermore, this corpus automatically distinguishes different grammatical forms and labels them accordingly that assist conducting morphosyntactic analysis.

4.1.3 Sketch engine

Both corpora were accessed through analytical tool Sketch Engine available online to facilitate analytical process. This web-based tool hosts various corpora including BNC and GRAC ensuring centralized and consistent access to the corpora. This platform facilitated the process of gathering data and identifying morphological and syntactic patterns. Moreover, the platform enables users to export frequency lists, word form lists and tags lists for further storage and analysis.

4.2 Data Collection

For this analysis I decided to narrow down the semantic field of onomatopoeia to animal onomatopoeias only. This semantic category encounters the biggest number of instances; therefore, it was possible to choose numerous instances to identify a pattern. I picked 22 types of sounds made by different animals. Then, I identified what onomatopoeic words in English and Ukrainian are used to express those types of sounds. Totally, I gathered 26 instances of expressing animal sounds for English and 27 instances for Ukrainian data set. Since some types of animal sounds can be expressed by several onomatopoeic words, I identified more examples of animal onomatopoeias than the number of chosen types of sounds.

Table 1 Analysed onomatopoeias

English onomatopoeia	Ukrainian onomatopoeia	Types of animal sounds
<i>Meow</i>	<i>Niav</i>	Sound made by a cat
<i>Woof</i> <i>Bark</i>	<i>Hav</i>	Sound made by a dog
<i>Quack</i>	<i>Kria</i>	Sound made by a duck
<i>Oink</i>	<i>Khriu</i>	Sound made by a pig
<i>Neigh</i>	<i>Iho-ho</i> <i>Irzhaty</i>	Sound made by a horse
<i>Moo</i>	<i>Mu</i>	Sound made by a cow

<i>Baa</i>	<i>Be</i>	Sound made by a goat
<i>Bleat</i>	<i>Me</i>	
<i>Roar</i>	<i>Rev</i>	Sound made by a lion
<i>Hee-haw</i>	<i>Ia-a-a</i>	Sound made by a donkey
<i>Bray</i>	<i>Irzhaty</i>	
<i>Hiss</i>	<i>Shypity</i>	Sound made by a snake
<i>Growl</i>	<i>Harchaty</i>	Sound made by a dog or other animal
<i>Caw</i>	<i>Kar</i>	Sound made by a rook or crow
<i>Chirp</i>	<i>Tsvirin</i>	Sound made by a bird
<i>Cock-a-doodle-doo</i>	<i>Kudkudakh</i>	Sound made by a rooster
<i>Cluck</i>	<i>Kukariku</i>	
<i>Buzz</i>	<i>Zhuzhzhaty</i>	Sound made by insects
<i>Croak</i>	<i>Kva</i>	Sound made by a frog
<i>Squeak</i>	<i>Pi-pi</i>	Sound made by a mouse
	<i>Pysk</i>	
<i>Coo</i>	<i>Vorkit</i>	Sound made by a dove, pigeon
<i>Purr</i>	<i>Mur</i>	Sound made by a cat
<i>Howl</i>	<i>Vyty</i>	Sound made by a wolf
<i>Snort</i>	<i>Pyrkh</i>	Sound made with a nose
<i>Gobble</i>	<i>Kuldy</i>	Sound made by a turkey

To collect data, I queried two corpora – the BNC for English animal onomatopoeias and the GRAC for Ukrainian – using Corpus Query Language (CQL) in Sketch Engine. For each identified animal onomatopoeia, I formulated the CQL pattern that retrieved all tokens with the particular lemma of onomatopoeia, for instance, lemma *hiss* for sound made by a snake in BNC, or lemma *kuldy* for sounds made by a turkey in GRAC. This procedure ensured that all inflectional variants were included in the query. Typically, queries produced approximately up to 500 samples, however, some queries demonstrated thousands of

samples. This abundance in query sample was particularly frequent for Ukrainian lemmas, since Ukrainian demonstrate wide variety of different inflectional forms. In case of big query result that comprises more than a thousand of samples, I automatically created a random sample of from 100 to 200 samples. This random sample preserves the representation of the whole concordance while reducing the number of samples to facilitate the analysis.

After the queries were completed, I extracted the list of tags for each lemma. This procedure enabled me to count the frequency distribution of word categories and various morphological forms for each word category.

All the given examples of animal onomatopoeias in the following chapters I took from corpora – BNC for English examples and GRAC for Ukrainian examples.

4.3 Research Questions

The research analyses the real-life usage of secondary onomatopoeias and primary onomatopoeias that are used as part of other word categories. Kadooka (2005) proposes that most animal onomatopoeias that imitate the animal sounds belong to the second degree of lexicalization. According to Kadooka (2005), these words do not inflect apart from several morphemes, namely *mew*, *moo*, *quack* (Kadooka 2005, 4–5). This research aims to distinguish at what extent this applies to the real-life usage, and whether this theoretical background can be applied to Ukrainian animal onomatopoeias. Additionally, the research aims to distinguish to what extent animal onomatopoeias can be lexicalized – what inflectional forms they can have and how frequent.

Based on the theoretical background it can be assumed that English onomatopoeic nouns and verbs convert directly from primary onomatopoeia. To put it in other words, to change category onomatopoeias do not need derivational morphology (See Chapter 2.1). On the contrary, in Ukrainian it is observed that frequently primary onomatopoeias need several derivational suffixes to form a verb. It is assumed that to form a noun it is required to initially form a verb, and once this has been accomplished the noun form can be derived with the specific suffixes (see Chapter 3.2). The research investigates in what cases this can be applied and whether there are deviations.

5 ANALYSIS OF ONOMATOPOEIAS LEXICALIZATION

This chapter discusses the lexicalization of chosen animal onomatopoeias (see Table 1). The analysis of lexicalization focuses on determining what animal onomatopoeias are integrated in the syntax and can function as other word categories, namely noun and verb, and what onomatopoeias are not lexicalized. To rephrase it, analysis aims to distinguish what animal onomatopoeias are secondary and what onomatopoeias are primary.

5.1 Three Types of Animal Onomatopoeias

Corpora findings suggests that there can be distinguished 3 types of animal onomatopoeias regarding their ability to be lexicalized in English and Ukrainian. First type is primary onomatopoeias. These animal onomatopoeias are only used as primary ones, corpora concordances did not have any instances of using them as lexicalized units. Primary onomatopoeias appear in the concordance with the quotative meaning – a characteristic of an onomatopoeia introduced by Kadooka (2005). Animal onomatopoeias frequently occur in isolated positions, they are reduplicated, or they follow the verbs of saying, i.e. *say* and *go*. Animal primary onomatopoeias indicate no inflectional markers, and they cannot be used as other word categories. These applies to English and Ukrainian animal primary onomatopoeias.

- 1) *Oink, oink.*
- 2) *He knocks it and he goes woof.*
- 3) *They say baa!*
- 4) *That monster made a noise like this: 'Hee-haw!'*
- 5) *The weathercock, caught by the breeze, swung sharply round and let out a loud, cross 'Cock-a-doodle-doo!' right in Carol's ear.*
- 6) *Loshadka poslushno skazala "ihoho".*

Horse obediently said neigh

‘The horse obediently said “neigh”.’

- 7) *Ta y krychaty "ia-ia" vin ne mozhe.*

And to scream hee-haw he no can

‘Nor can he even scream “hee-haw”.’

8) *Pi-pi!*

Squeak-squeak

‘Squeak-squeak!’

The second type is secondary onomatopoeias that are used exclusively as lexicalized units. According to corpora concordances, these animal onomatopoeias do not have instances of being used as primary onomatopoeias. Onomatopoeias of this type functions as part of other word categories, primarily as verbs and nouns. Therefore, they inflect and participate in the derivational processes. These onomatopoeias demonstrate zero quotative characteristics, since they are never used as primary onomatopoeias. The inflectiveness of secondary animal onomatopoeias is discussed in greater depth in the following chapter.

9) *The goat may bleat loudly and persistently and may go off her food.*10) *Dolly expelled a hiss.*11) *To his left he heard a low growl and a faint crunching noise.*12) *Wexford gave a snort.*13) *Pysk huchnishav, a oblychchia staroho vrazheni vytiahuvalos.*

Squeaking-NOM became louder and face old man surprisedly stretch out

‘Squeaking was becoming louder, and the face of the old man was stretching out in surprise.’

14) *Potim vin zmovk, i ya chuv tilky hluke harch-ann-ia.*

Then he silenced and I heard only remote growl-GER-ACC

‘Then he silenced and I only heard remote growling.’

15) *Koni irzha-l-y, vmyrav komisar u sidli.*

Horses neigh-PST-3.PL died commissioner in saddle

‘The horses were neighing; the commissioner was dying in the saddle.’

The third type of animal onomatopoeias based on their ability to be lexicalized is onomatopoeias that can function as primary and secondary. For brevity, I will refer to these type of animal onomatopoeias simply as “both” onomatopoeias. “Both” onomatopoeias occur in the sentences as primary onomatopoeias, however, they can be lexicalized as other word categories. “Both” onomatopoeias concordance results in BNC demonstrate that

primary animal onomatopoeias are lexicalized by conversion or zero derivation, since lexicalized units do not showcase any derivational affixes. Following examples illustrate how the same animal onomatopoeias are used as secondary and primary onomatopoeias.

16) *Cows in fields stare and moo approval.* (Secondary)

Moo! (Primary)

17) *Young kids used to quack at us as we went past.* (Secondary)

Quack, quack, quack, quack. (Primary)

18) *He heard ... caw of rooks and their tattered scuffling overhead.* (Secondary)

'Caw, caw,' echoed his raincoat. (Primary)

As opposed to English, Ukrainian animal onomatopoeias use derivational suffixes to derive secondary onomatopoeias from primary ones.

19) *Vony ne khriu-k-a-l-y.* (Secondary)

They not oink-k-a-PST-3PL.

'They didn't squeal.'

Khriu (Primary)

Oink

'Oink'

20) *Niav-k-it dolynav iz kluni.* (Secondary)

Meow-k-GER.NOM came from barn.

'Meowing was coming from the barn.'

Kit promovyv: — Harno, niav! (Primary)

Cat said: — Good, meow!

'The cat said, "Good, meow!"'

21) *Koly b ne mitsne sklo terasy, vin by chuv yii kar-k-ann-ia.* (Secondary)

If not strong glass terrace, he would hear her caw-k-GER-ACC.

'If the glass in the terrace was not strong, he would hear her cawing.'

Kar, kar! (Primary)

Caw, caw!

‘Caw-caw!’

“Both” type of animal onomatopoeias can demonstrate quotative or inflective characteristics depending on the onomatopoeias function. When used primarily “both” type onomatopoeias possess quotative characteristics; when used secondarily these animal onomatopoeias demonstrate inflective characteristics. Inflectiveness of “both” type onomatopoeias is further discussed in chapter 6.

5.2 General Conclusion on Lexicalization

All the chosen animal onomatopoeias from table 1 I classified into 3 types described previously.

Table 2 Onomatopoeias and lexicalization

English onomatopoeia	Primary or Secondary	Ukrainian onomatopoeia	Primary or Secondary	Semantic meaning
<i>Meow</i>	Both	<i>Niav</i>	Both	Sound made by a cat
<i>Woof</i> <i>Bark</i>	Primary Secondary	<i>Hav</i>	Both	Sound made by a dog
<i>Quack</i>	Both	<i>Kria</i>	Both	Sound made by a duck
<i>Oink</i>	Primary	<i>Khriu</i>	Both	Sound made by a pig
<i>Neigh</i>	Secondary	<i>Iho-ho</i> <i>Irzhaty</i>	Primary Secondary	Sound made by a horse
<i>Moo</i>	Both	<i>Mu</i>	Both	Sound made by a cow
<i>Baa</i> <i>Bleat</i>	Primary Secondary	<i>Be</i> <i>Me</i>	Both Both	Sound made by a goat
<i>Roar</i>	Secondary	<i>Rev</i>	Secondary	Sound made by a lion
<i>Hee-haw</i> <i>Bray</i>	Primary Secondary	<i>Ia-a-a</i> <i>Irzhaty</i>	Primary Secondary	Sound made by a donkey

<i>Hiss</i>	Secondary	<i>Shypity</i>	Secondary	Sound made by a snake
<i>Growl</i>	Secondary	<i>Harchaty</i>	Secondary	Sound made by a dog or other animal
<i>Caw</i>	Both	<i>Kar</i>	Both	Sound made by a rook or crow
<i>Chirp</i>	Secondary	<i>Tsvirin</i>	Both	Sound made by a bird
<i>Cock-a-doodle-doo</i>	Primary	<i>Kudkudakh</i>	Both	Sound made by a rooster
<i>Cluck</i>	Secondary	<i>Kukariku</i>	Both	
<i>Buzz</i>	Secondary	<i>Zhuzhzhaty</i>	Secondary	Sound made by insects
<i>Croak</i>	Secondary	<i>Kva</i>	Both	Sound made by a frog
<i>Squeak</i>	Both	<i>Pi-pi</i>	Primary	Sound made by a mouse
		<i>Pysk</i>	Secondary	
<i>Coo</i>	Secondary	<i>Vorkit</i>	Secondary	Sound made by a dove, pigeon
<i>Purr</i>	Secondary	<i>Mur</i>	Both	Sound made by a cat
<i>Howl</i>	Secondary	<i>Vyty</i>	Secondary	Sound made by a wolf
<i>Snort</i>	Secondary	<i>Pyrkh</i>	Both	Sound made with a nose
<i>Gobble</i>	Both	<i>Kuldy</i>	Both	Sound made by a turkey

Totally, I distinguished 5 instances of primary onomatopoeias, 16 instances of secondary ones, and 5 instances of “both” onomatopoeias in English data set. Regarding Ukrainian data set, 3 instances are primary, 9 instances are secondary, and 15 instances are “both” onomatopoeias. Comparing the difference in the lexicalization distribution of English and Ukrainian animal onomatopoeias proposes that Ukrainian onomatopoeias are more likely to

form lexicalized units from already existing primary onomatopoeias than English onomatopoeias, since Ukrainian data set comprises 15 instances of “both” onomatopoeias, whereas English only 5. Moreover, English data set has 16 instances of animal onomatopoeias that has only secondary usage, whereas Ukrainian data set 9 secondary onomatopoeias. Considering primary onomatopoeias, both languages comprising relatively small number of instances comprising 5 onomatopoeias in English and 3 in Ukrainian.

6 MORPHOSYNTACTIC ANALYSIS OF SECONDARY ONOMATOPOEIAS

This chapter explores the morphosyntactic properties of animal onomatopoeias in English and Ukrainian. The chapter analyses only 2 types of onomatopoeias described in the chapter 5 – secondary and “both” onomatopoeias – since only these animal onomatopoeias are lexicalized and can function as other word categories, namely verb and noun. I have decided to distinguish “both” and secondary onomatopoeias to determine whether there are any differences in lexicalization of animal onomatopoeias that were converted to secondary and those that have always been secondary and do not have primary forms. Additionally, I analysed the overall tendency in morphosyntax among all instances for each language without distinguishing onomatopoeias into the types.

I counted all the instances of using animal onomatopoeias as a specific word category. Then I determined inflectional word forms for each of that word category. All the data is exemplified in percentage to facilitate the comparison and finding lexicalization patterns. For better visualisation of data and research findings tables were used.

6.1 English Data Analysis

Among 26 analysed onomatopoeias there were found 21 onomatopoeias that are lexicalized – 16 onomatopoeias that are used exclusively as secondary onomatopoeias and remaining 6 instances of “both” onomatopoeias.

6.1.1 Word categories

Table 3 presents the frequency of onomatopoeias used as verbs and nouns. Instances of using onomatopoeias as other word categories were not found.

Table 3 Word categories of English onomatopoeias

	“Both”	Secondary	Total
Verb	87.16%	70.62%	71.94%
Noun	12.84%	29.38%	28.06%

As illustrated in the table 3 the frequency distribution of “both” type onomatopoeias – onomatopoeias that can be used as primary and secondary – is dominated by verbs, occurring almost 7 times more than nouns derived from the same animal onomatopoeias.

1) Verbs

- a. Mabel squeaked in dismay.
- b. Rooks cawed in the dark trees which ringed the house and I imagined demons nestling in the branches, mocking us.
- c. It opened its mouth and mooed at them.
- d. All the ducks quacked in loud agreement and flapped into the water in a rush.
- e. I went and meowed at him until he woke up.
- f. Schmidt hunched his shoulders and gobbled like a turkey.

2) Nouns

- g. They heard quacking on the other side of the wall.
- h. I gave a little meow to get his attention and he opened his eyes.
- i. The familiar squeaks which we associate with mice and rats are the lowest sounds these rodents make.
- j. Their caws were threatening.

The results after counting instances of secondary type onomatopoeias demonstrate similar pattern in word category distribution, however, there were found almost two times more instances of onomatopoeias used as nouns (29.38%) as opposed to nouns of “both category (12.84%). However, even though frequency distribution has slightly changed, verbs constitute the biggest part of the data set.

3) Verbs

- a. The road behind the tall wall was still quiet, but the birds were making up for it, their incessant repeated sounds rising to sudden random crescendos as they all chirped fiercely together.
- b. He went and fondled the bird, which chirped and squeaked and nibbled his finger.
- c. She stroked the chicken who clucked delightedly, as Artemis's future stepmother stared in horror at the egg.
- d. 'The Bee' starts with the sound of an irate insect which buzzes its way into an energetic European House groove.

e. *She controlled the horse with a length of twine and she had authority over the animal, which snorted then stepped proudly round to the gate.*

4) Nouns

f. *Despite appearances, its bark is definitely worse than its bite.*

g. *The only other sound to be heard was the chirping of birds.*

h. *But the fowl were irritated by this invasion of their hut and their clucking gave her away.*

i. *Or the barking of an excited dog, the purring of a cat, the bellow of an angry bull, the insistent buzzing of a hive of bees when disturbed.*

j. *Down in the valley there was a roar and a hiss.*

The overall frequency distribution of data set of all 21 onomatopoeias showcases the same pattern that was observed when analysing only secondary onomatopoeias and that can be both – the verb forms are used significantly more frequent than noun forms. Overall, verbs constitute more than twice more instances as nouns. This tendency demonstrates higher productivity of using verbs that are derived from primary onomatopoeias.

6.1.2 Verbal morphology

Verbs represent a significant part of lexicalized onomatopoeias. This subchapter is dedicated to inflectional morphology of verbs and frequency of various verb forms.

Table 4 Frequency of verbal forms in English

	“Both”	Secondary	Total
gerund/present participle	51.58%	46.90%	47.35%
Past tense	31.58%	39,01%	28.72%
Base form	8.42%	8.23%	8.25%
Present tense, 3 rd person singular	4.21%	3.72%	3.77%
Present tense, not 3 rd person singular	4.21%	2.14%	2.34%

As demonstrated in the table 4, the most productive verb form is gerund or present participle that constitutes 51.58% of all instances of the “both” type onomatopoeias. The second most frequent verb form is past tense comprising 31.58% of all instances. The remaining verb forms are relatively rare; they do not occur more than 10% of the cases; base form of the verb constitutes 8.42%, and verbs in present tense inflected for 3rd person singular occurs the same as verbs that are in present tense but do not inflect for 3rd person singular comprising 4.21% of all instances.

1) Gerund/Present Participle

- a. *Quacking and complaining, the ducks hopped back into the water and swam away.*
- b. *In no time at all the air was filled with the most appalling racket: croaking, hissing, squawking, mewling, quacking, squeaking, creaking, peeping, squealing, and hooting!*
- c. *Mandeville stared into the darkness then up at the rooks cawing around us.*
- d. *There was not a sound of running, or scratching, or squeaking.*

2) Past tense

- e. *Above him a raven cawed as it flew to hunt over the mudflats along the river.*
- f. *One of the cows mooed as she passed their field.*
- g. *'Leave her alone,' quacked a duck carelessly.*
- h. *I meowed but he ignored me.*
- i. *She gobbled.*
- j. *They scratched and squeaked and ran about, and stared at him from the holes in the walls.*

3) Base form

- k. *On the anecdotal side, males (but not females) are said to squeak when picked up.*
- l. *They gather at his feet, not wanting to quack and alert the others, but almost desperate to shout from the waiting.*
- m. *Well I always I always try quacking at ducks and they seem to quack back.*

4) Present tense, 3rd person singular

- n. *A stiff rat in the passage, over which he meows his triumph.*
- o. *'What is two feet tall, gives a gallon of milk a day and moos?'*
- p. *The pen of guinea pigs squeaks twice.*

5) Present tense, not 3rd person singular

- q. *And that when they caw so stridently, it's always a sign of impending death.*
- r. *I'm trying to flap my arms like a duck and quack at the same time.*
- s. *All the rest squeak like that.*

Secondary onomatopoeias that are never used as primary demonstrate similar pattern of verb forms frequency distribution, with 46.90% being gerund and present participle forms, 39.01% of all instances is past tense, base form constitutes 8.23%, present tense verbs that agrees with 3rd person singular subjects occur in 3.72% of all cases, and present tense verbs that do not agree with 3rd person singular subjects constitute 2.14% of all data set.

1) Gerund/Present Participle

- a. *Horses rearing and neighing, as ostlers and stable-boys tried to calm them down and lead them away.*
- b. *Guided by a mournful bleating, he came across several groups of sheep, huddled together in the vain hope of safety.*
- c. *Hissing loudly, it swivelled on its hind legs and disappeared, the tail banging like a rope on the top step as it fled.*
- d. *But the fowl were irritated by this invasion of their hut and their clucking gave her away.*
- e. *Various croaking, hissing and mewing notes.*

2) Past tense

- f. *'Good,' he purred.*
- g. *Somewhere in the distance a dog barked mournfully.*
- h. *The piping stopped abruptly and a horse neighed.*
- i. *'No more!' he roared suddenly.*
- j. *Other voices mewed, rattled, croaked, quacked and barked.*

3) Base form

- k. Generally silent, but may croak or grunt rather weakly.
- l. One that gradually took the ice from her veins and relaxed her until she felt as snug as a bug and ready to purr like a kitten.
- m. You're beginning to sound like a mother hen; I half expect you to cluck at any minute.'
- n. The goat may bleat loudly and persistently and may go off her food; she may jump other goats or be jumped by them.
- o. A mule began to bray in alarm and a Myrcan struck it at once with his staff until it fell silent, blood oozing from its nose.

4) Present tense, 3rd person singular

- p. It hisses like a snake, growls like a carnivore and snaps out at its tormenter.
- q. 'Eez very beautiful,' she purrs approvingly.
- r. 'All I'll say is that only a foolish dog barks at a flying bird.'
- s. The sound itself is the same as when a horse answers, 'Yes, I'm here!', but the sound is also the same as when the horse neighs, 'Hurry up with my dinner!'
- t. He bleats that his critics are talking the country down.

5) Present tense, not 3rd person singular

- u. And so they bark.
- v. I hiss back at him.
- w. For the two days of the show I cluck round them – soothing, calming, encouraging and reassuring.
- x. 'Frogs croak,' Church said.
- y. If all cats purr and all cats have whiskers, which of the following statements is necessarily true?

Overall, all analysed data set from both categories showcases the same pattern – almost half of all instances (47.35%) occur as gerund or past participle form, almost third of instances (28.72%) are verbs in past tense and the remaining instances distributes between

base form verbs (8.25%), present tense verbs in agreement with 3rd person singular subject (3.77%) and the lowest frequency form is present tense verbs that agrees with a subject that is not a 3rd person plural.

After a thorough examination of all instances, it was determined that onomatopoeias that function as verbs are considered as “regular verbs”, thus the inflection pattern is predictable. The past tense form in all observed cases is *-ed*, there is no deviations among all examined onomatopoeias.

6.1.3 Noun morphology

This subchapter discusses the nominal features of animal onomatopoeias in English and distribution frequency of the noun forms, namely singular and plural forms.

Table 5 Frequency of noun forms in English

	“Both”	Secondary	Total
Singular	92.86%	82.97%	83.33%
Plural	7.14%	17.03%	16.67%

Table 5 depicts the detailed calculations made for different noun forms after examining 21 animal onomatopoeias. The results presented in the table 5 suggest that noun forms of animal onomatopoeias are dominated by singular nouns. In “both” category of onomatopoeic nouns singular form constitutes over 90% of all instances whereas plural form occurs in only 7.14%.

1) Singular

- a. *And you don't hear a squeak from him for months and months.*
- b. *In spring drake has a curious crackling note, like a single match being rattled in a match box; duck has a low quack.*
- c. *So it seems likely that just as a youngster does not need to learn to be afraid or to feel secure, they also respond instinctively from birth to the underlying mood of the call – like the predatory roar of a lion, the angry bellow of an enraged bull, the contented moo of a grazing cow or the eminently social bleatings of sheep, keeping the flock together.*
- d. *I gave a little meow to get his attention and he opened his eyes.*

2) Plural

- e. *A dolphin's vocabulary is varied, with a range of whistles, squeaks, squawks, groans, rattles, clicks, and many other sounds.*
- f. *It is suggested that the bat hears echoes of its own squeaks rebounding from solid objects.*

Secondary type onomatopoeias word forms frequency distributes similarly with singular form comprising 82.97% and plural – 17.03%. As compared to “both” type the frequency distribution of plural forms is increased by 10%.

1) Singular

- a. *The voice was low more like a growl.*
- b. *His voice was hoarse as a raven's croak.*
- c. *He made a sound very like a purr in his throat.*
- d. *The objecting bray of working donkeys.*
- e. *The window frame vibrated steadily, producing a buzz like a trapped fly.*

2) Plural

- f. *Here, the grunts, purrs, croaks and drums of courting fish mingle with the snapping of shrimps and the crackling of barnacles.*
- g. *He listened to the hisses and pops of static as the number connected and the phone rang again.*
- h. *If it gives downward-swooping, wolf-whistle chirps, the sorting is neatly done by pitch.*
- i. *Judging by occasional snorts, he had a severe dose of catarrh.*

As a result of an analysis, it was determined that onomatopoeic nouns, typically, are considered as countable, thus, the inflection for number is possible. Even though the plural form is considerably less productive than singular form, plurality is indicated in almost 17% of all instances. To form a plural noun the suffix -s is used, proving that onomatopoeic nouns are “regular” nouns, and their inflectional morphology is predictable.

6.1.4 General conclusion on English morphosyntax

After thorough examination of the animal onomatopoeias chosen for the analysis, I determined that animal onomatopoeias are much more lexicalized as verbs than as nouns. Moreover, the analysed instances proved that verbs are derived from primary onomatopoeia by means of conversion, without any exceptions found. As for the nouns, they are derived similarly to verbs – through conversion.

It is reasonable to say that conversion is not the only possible way to form an onomatopoeic noun. Nominalisation through gerund is also very productive in English. There were found more than 50% of gerund/present participle form among all verbs, which is around 40% of all analysed instances as opposed to 12.84% of total nouns. However, as a result of syncretism, the automatic tagging was not able to distinguish gerund and present participle form, thus, it is hard to specify what type of nominalisation – conversion or gerund – is more productive.

6.2 Ukrainian Data Analysis

This chapter discusses the morphology of Ukrainian data set, namely the frequency distribution of word categories among animal onomatopoeias that were also divided into two types – “both” type and secondary type that comprises 15 and 9 onomatopoeias, respectively. Totally, I counted the morphological features of 24 animal onomatopoeias in Ukrainian.

6.2.1 Word categories

The total data set distributes among 2 word categories – verb and noun.

Table 6 Word categories of Ukrainian onomatopoeias

	“Both”	Secondary	Total
Verb	74.31%	63.26%	70.66%
Noun	25.69%	36.74%	29.34%

The usage of lexicalized onomatopoeias is dominated by verbs in both categories, however, “both” category demonstrate higher distribution frequency of verbs by 10%.

1) Verbs

a. *Des zhalibno niav-ch-a-l-a na pokrivli kishka.*

Somewhere pitifully meow-ch-a-PST-3SG on roof cat

‘The cat was meowing somewhere on the roof.’

b. *Sobaky vzhe hav-k-a-l-y u vahonakh.*

Dogs already woof-k-a-PST-3PL in carriage

‘The dogs were already barking in the carriage.’

c. *Tilky gavy zalitaiut u sadok i kar-k-a-iut zlovisno.*

Only crows fly into garden and caw-k-a-3SG.PRS ominously

‘Only crows fly into the garden and caw ominously.’

2) Nouns

a. *Koly b ne mitsne sklo terasy, vin by chuv yii kar-k-ann-ia.*

If not strong glass terrace he would hear her caw-k-GER-ACC

‘If the glass in the terrace was not strong, he would hear her cawing.’

b. *Niav-k-it dolynav iz kluni.*

Meow-k-GER.NOM came from barn

‘Meowing was coming from the barn.’

c. *Tse khrypke i daleke me-k-ann-ia, pryhlushene shumom vitru y doshchu.*

This hoarse and distant baa-k-GER-NOM silenced noise wind and rain

‘This hoarse and distant bleating, silenced by the noise of wind and rain.’

On the contrary, the frequency distribution of nouns of secondary type onomatopoeias is increased by slightly more than 10%.

3) Verbs

d. *Ne rev-y!*

Don’t roar-IMP

‘Don’t roar!’

e. *Koni irzha-l-y, vmyrav komisar u sidli.*

Horses neigh-PST-3PL died commissioner in saddle

‘The horses were neighing; the commissioner was dying in the saddle.’

f. Vona yorkot-i-l-a zi mnoiu, nache holubka.

She coo-i-PST-3F.SG with me as a dove

‘She was cooing with me like a dove.’

4) Nouns

g. Potim vin zmovk, i ya chuv tilky hlukhe harch-ann-ia.

Then he silenced and I heard only remote growl-GER-ACC

‘Then he silenced and I only heard remote growling.’

a. Zlovisne shyp-inn-ia prypynylos tak same raptovo, tak i rozpochalosia.

Ominous hiss-GER-NOM stopped just as suddenly as began

‘The ominous hissing has stopped just as suddenly as it has begun.’

The overall frequency distribution suggests that animal onomatopoeias in Ukrainian are lexicalized as verbs over twice as often as nouns.

6.2.2 Verbal morphology

Table 7 Frequency of verbal forms in Ukrainian

	“Both”	Secondary	Total
Imperfective	70.46%	82.85%	74.12%
Perfective	29.54%	17.15%	25.88%
Past	47.88%	50.56%	48.67%
Present	31%	30.38%	30.82%
Future	2.54%	1.57%	2.25%
Infinitive	10.54%	10.65	10.57%
Imperative	0.71%	3.03%	1.39%
Adverbial Participle	4.75%	2.58%	4.75%
Adjective Participle	1.51%	0%	1.06%

Verbal morphology of animal onomatopoeias in Ukrainian is extremely rich. Ukrainian onomatopoeic verbs indicate all 3 possible tenses in Ukrainian grammar – present, past, and future tense. Moreover, all verbs are divided into two major groups: perfective and imperfective verbs. In addition to this core features of Ukrainian verb morphology, the imperative mood, infinitive, adverbial participle, and adjective participle is used. Adverbial participle is a non-inflected form of the verb that modifies the main verb in a sentence, whereas adjective participle is an inflected form of the verb that functions as an adjective and modifies a noun.

“Both” type onomatopoeic verbs are imperfective in 70% of all cases, whereas perfective verbs appear in almost 30% of all instances.

- 1) *Leopard liuto niav-k-nu-v, ale vidstupyv nazad.*

Leopard fiercely meow-k-PRV-3M.SG.PST but stepped back

‘Leopard fiercely meowed but stepped back.’

- 2) *Niav-k-a-ie kit.*

Meow-k-IMPRV-3SG.PRS cat

‘The cat is meowing.’

“Both” type onomatopoeias also indicate all three possible tenses. Past tense occurs in almost a half of all instances. Future tense is used the least number of cases. Ukrainian future tense is often formed not inflectionally but by using verb *buty* and infinitive form of the verb, as demonstrated in (5). Onomatopoeic verbs in infinitive form comprises 10% of all instances. Infinitives can appear in many syntactic positions, mainly in constructions with future tense, as in (5) or after certain verbs, as in (6) where onomatopoeia is preceded by the verb *start*.

- 3) *Vony ne khriu-k-a-l-y.*

They not oink-k-a-PST-3PL

‘They didn’t squeal.’

- 4) *Tilky gavy zalitaiut u sadok i kar-k-a-iut zlovisno.*

Only crows fly into garden and caw-k-a-3SG.PRS ominously

‘Only crows fly into the garden and caw ominously.’

- 5) *A tsvirkuny dali budut tsvirin-k-a-ty.*

And crickets further FUT chirp-k-a-INF

‘And crickets will continue to chirp.’

- 6) *Khiba ya vzhe pochav kria-k-a-ty?*

Haven’t I already started quack-k-a-INF

‘Haven’t I started quacking already?’

Additionally, “both” type onomatopoeias indicate imperative mood, however, this mood occurs in less than 1% of all instances.

- 7) *Sydy i ne hav-k-ai.*

Sit and not woof-k-IMP

‘Sit and don’t bark.’

Moreover, Ukrainian “both” type verbs have adverbial and adjective participles that modifies a verb and a noun respectively. These forms are marginal, since adverbial participle is used less than 5% and adjective participle occurs less than 2% of all cases. Examples (8) and (9) illustrate the use of adverbial participles, whereas (10) illustrates the use of adjective participles.

- 8) *Skrehotii bih, me-k-a-iuchy vid bolii.*

Skrehotii ran baa-k-a-iuchy from pain

‘Skrehotii ran, bleating from pain.’

- 9) *Serdyto khriu-k-a-iuchy, pospishyly u vodu sotni zhab, zmii i dribnykh zviriati.*

Angrily oink-k-a-iuchy hurried into water hundreds frogs snakes and small animals

‘Angrily squeling, hundreds of frogs, snakes, and small animals hurried into water.’

- 10) *Maior chuv riznomanitni holosy: tonki, kva-k-a-iuch-i, kar-k-a-iuch-i, niav-k-a-iuch-i.*

Mayor heard various voices thin croak-k-a-iuch-PL.ACC cawing-k-a-iuch-PL.ACC meow-k-a-iuch-PL.ACC

‘The Mayor heard various thin, croaking, cawing, meowing voices.’

Secondary type of animal onomatopoeias indicates similar frequency distribution pattern; however, imperfective verbs of secondary type are used slightly more than of “both”

type. In secondary type imperfective verbs are used approximately in 80% of all instances, whereas perfective comprises 17% of all cases. Imperfective usage of onomatopoeic verbs is illustrated in the (11) example, whereas perfective usage is illustrated in the (12) example.

11) *Koni irzha-l-y, vmyrav komisar u sidli.*

Horses neigh-IMPRV.PST-3PL died commissioner in saddle

‘The horses were neighing; the commissioner was dying in the saddle.’

12) *Dobre te, shcho vy kazhete! — pysk-nu-v zaichyk.*

Good that what you saying squeak-PRV-3SG.PST rabbit

‘“What you are saying is good!” squeaked the rabbit.’

Secondary type also inflects for all 3 tenses. The majority of instances is in past tense (50.56%), present tense is used 30% of all times, and the least used tense is future tense that occurs in less than 2% of all instances. Infinitive forms appear in 10% of all instances. (13) demonstrate onomatopoeic verbs in past tense, (14) is an example of a present tense, future tense is demonstrated in the (15), and the infinitive form is exemplified in (15) as part of future form construction and in (16) after other verb *want*.

13) *Vona yorkot-i-l-a zi mnoiu, nache holubka.*

She coo-i-PST-3F.SG with me as a dove

‘She was cooing with me like a dove.’

14) *Mukha pid steliu zhuzhzh-yt.*

Fly under ceiling buzz-3SG.PRS

‘A fly is buzzing under the ceiling.’

15) *To zemlia bude shyp-i-ty.*

That soil FUT hiss-i-INF

‘The soil will hiss.’

16) *Yomu khotilosia vyt-y vovkom.*

Him wanted howl-INF wolf

‘He wanted to howl as a wolf.’

Imperative mood appears to be more productive for secondary types of onomatopoeias than for the “both” type. Imperative mood expressed by the onomatopoeic verbs of the secondary category comprises approximately 4% of all instances.

17) *Harch-y, a to, mozhe, i kydaisia.*

Growl-IMP or maybe even attack

‘Growl or maybe even attack.’

18) *Bud znovu myshkoiu i pyshch-y sobi.*

Be again mouse and squeak-IMP yourself

‘Be a mouse again and squeak to yourself.’

Secondary type of Ukrainian animal onomatopoeias has examples of adverbial participle that modifies another verb. Adverbial participle comprises 2.58% of all cases that is less than the adverbial participles of “both” type onomatopoeias. Adjective participle appears to not be used by secondary type animal onomatopoeias.

19) *Kyvaiuchy holovoiu y vork-uiuchy, pokhodzhav syzyi holub.*

Nodding head and coo-uiuchy walking rock pigeon

‘Nodding its head and cooing, the rock pigeon was walking.’

20) *Zhalibno vy-iuchy, vovchytsia sprobuvala bulo khoch popovzty.*

Plaintively howl-iuchy wolf tried at least crawl

‘Howling plaintively, the wolf tried to crawl at least.’

The analysis of “both” and secondary type of animal onomatopoeic verbs suggests that both categories are highly lexicalized, since verbs are inflected for various verb forms and can function as every other verb. Moreover, for these two categories the pattern of lexicalization is relatively the same. However, in some cases “both” type verbs demonstrate higher diversity in lexicalization, as for instance, existence of adjective participles. On the contrary, secondary type verbs demonstrate higher frequency of using imperative mood.

6.2.3 Nominal morphology

Ukrainian nouns inflect for 7 cases – nominative, genitive, dative, accusative, instrumental, locative, and vocative. The same applies to lexicalized animal onomatopoeias, except for vocative case that is not used with animal onomatopoeias for semantic reasons. Moreover, Ukrainian nouns inflect for gender – masculine, feminine, and neuter gender.

Table 8 Frequency of noun forms in Ukrainian

	“Both”	Secondary	Total
Nominative/Genitive/ Accusative	73.33%	77.99%	75.26%
Instrumental/Dative/Locative	26.67%	22.01%	24.74%

Examination of the given dataset proposes that data set of Ukrainian onomatopoeic nouns has case syncretism. Nouns depicts 2 morphologically distinctive case forms – nominative, genitive, and accusative case form or instrumental, dative, and locative case form.

Considering “both” type of animal onomatopoeias, most commonly nouns appear in nominative, genitive or accusative case comprising over 70% of all instances, as demonstrated in (1) and (2). Instrumental, dative or locative occur in approximately 25% of all instances, as illustrated in (3) and (4).

- 1) *Koly b ne mitsne sklo terasy, vin by chuv yii kar-k-ann-ia.*

If not strong glass terrace he would hear her caw-k-GER-ACC

‘If the glass in the terrace was not strong, he would hear her cawing.’

- 2) *A vukha lovyly tilky kukurik-ann-ia pivniv, be-k-ann-ia ovets, mu-k-ann-ia koriv...*

And ears catch only cock-a-doodle-doo-GER-ACC roosters baa-k-GER-ACC sheep
moo-k-GER-ACC cows

‘But the ears caught only roosters’ clucking, the sheep’s bleating, and cows’ mooing...

- 3) *Razom z tym ihrovyi protses suprovodzhuietsia niav-k-ann-iam i mur-k-otinn-iam.*

Together with it playful process accompany meow-k-GER-INS and purr-k-GER-INS

‘At the same time, playing was accompanied with meowing and purring.’

- 4) *Pidbadoriuvav yii yakyms hortannym khriu-k-ann-iam.*

Encouraged her some guttural oink-k-GER-INS

‘He was encouraging her with some guttural squealing.’

Secondary type onomatopoeias show almost same distribution frequency as “both” type onomatopoeias. The nominative, genitive or accusative case appears in almost 78%, whereas instrumental, dative or locative cases comprises 22% of all instances, as demonstrated in the (5), (6) and (7), (8) respectively.

- 5) *Zlovisne shyp-inn-ia prypynylos tak same raptovo, tak i rozpochalosia.*

Ominous hiss-GER-NOM stopped just as suddenly as began

‘The ominous hissing has stopped just as suddenly as it has begun.’

- 6) *Potim vin zmovk, i ya chuv tilky hluke harch-ann-ia.*

Then he silenced and I heard only remote growl-GER-ACC

‘Then he silenced and I only heard remote growling.’

- 7) *Ptakhy z pysk-om, chasto makhaiuchy kryltsiamy, kynulyisia vroztich.*

Birds with squeak-INS often flapping wings scattered

‘The birds, squeaking and rapidly flapping their wings, scattered.’

- 8) *Vony sverdluiut sertse svoim zhuzhzh-ann-iam.*

They drill heart by their buzz-GER-INS

‘They drill right into the heart by their buzzing.’

The overall frequency distribution remains relatively the same for both categories without any significant differences. This implies that once a Ukrainian onomatopoeia has been converted into a noun, it does not differ in morphology from those onomatopoeic nouns that do not have a non-lexicalized form. Stated differently, “both” types of onomatopoeic nouns do not have major difference in lexicalization compared to secondary type onomatopoeias.

6.2.3.1 Ways of forming a noun from primary onomatopoeias

According to theoretical background (see Chapter 3.3), nouns do not directly derive from primary onomatopoeias, but instead the nominalisation is done through the derivation from verbal forms. That is proved by the suffix *-k* that is used to form a verb from a primary

onomatopoeia. This suffix is further preserved in nouns followed by the suffixes that are typical for this type of nominalisation.

1) *Hav-k-annia*

Woof-k-GER

‘Barking’

2) *Kar-k-annia*

Caw-k-GER

‘Cawing’

3) *Khriu-k-annia*

Oink-k-GER

‘Squealing’

However, analysis of the data set of “both” type animal onomatopoeias suggests that another type of forming nouns is possible. The other way of forming nouns includes the suffix *-it* that follows the suffix *-k* mentioned before. The suffix *-it* is extremely marginal in Ukrainian morphology and is assumed to be used exclusively in nouns that have primary onomatopoeic form. Below are presented all instances of onomatopoeias where this form can be met.

4) *Niav-k-it*

Meow-k-it

‘Meowing’

5) *Hav-k-it*

Woof-k-it

‘Barking’

6) *Kria-k-it*

Quack-k-it

‘Quacking’

7) *Khriu-k-it*

Oink-k-it

‘Squeal’

8) *Mur-k-it*

Purr-k-it

‘Purring’

Since the suffix *-k* is preserved in all provided instances, it can be concluded that forming nouns in this way exhibits the same pattern as the way of forming nouns described in the theoretical part. To put it another way, nouns with the suffix *-it* are derived from verbs that were previously derived from primary onomatopoeias.

6.2.4 General conclusion on Ukrainian morphosyntax

Ukrainian animal onomatopoeias are highly lexicalized. Once primary onomatopoeias change their category and become secondary onomatopoeias, they fully function as the member of the word category they are assigned to, e.g. verbs and nouns. The evidence to this statement is the abundant word forms that I observed and calculated. Additionally, “both” type and secondary type onomatopoeias function almost in the same way, since frequency distribution of these two types is relatively the same for all word forms.

Typically, animal onomatopoeias are lexicalized as verbs; however, noun forms are also possible. The analysis of verbs proves that primary onomatopoeias use suffix *-k* to derive verbs. This suffix is observed in all “both” type verbs, whereas secondary type verbs do not have this suffix. Moreover, the result of the analysis agrees with the theoretical background that “both” type onomatopoeic nouns derive from verbs and not directly from primary onomatopoeias. This applies for both ways of deriving nouns – with the nominal suffix *-ann(ia)* and with the suffix *-it* described in the previous subchapter.

CONCLUSION

To conclude, English and Ukrainian animal onomatopoeias demonstrate a big difference in lexicalization. Whereas English encounters 5 animal onomatopoeias that can be primary and secondary, Ukrainian – 15 animal onomatopoeias. This proposes that Ukrainian animal onomatopoeias are much more adjustable to the morphosyntax and can be easily reassigned to other word categories, whereas English animal onomatopoeias do not.

Further analysis reveals that English and Ukrainian animal onomatopoeias can be lexicalized as verbs or nouns only. Moreover, the verb category dominates in both languages comprising approximately 70% of all instances in English and Ukrainian. Furthermore, the analysis of two different categories – “both” and secondary – demonstrates that noun usage is more productive for secondary category in both languages.

Considering the process of lexicalization, English and Ukrainian demonstrate two completely different approaches. Whereas English onomatopoeias convert from primary onomatopoeias to verbs and nouns, Ukrainian onomatopoeias use affixation for deriving new words. Ukrainian verbs and nouns are derived by means of suffixes. This distinction in derivational process is conditioned by the specificity of the linguistic systems, since in Ukrainian conversion is not possible. However, despite two different approaches, English animal onomatopoeias also demonstrate the nominalization process through suffixation – deriving a gerund form of the verb.

The thorough examination of the derivational processes of Ukrainian animal onomatopoeias proved the theoretical background provided by Pliushch (2010) that only after the verb is lexicalized it is possible further derive a noun from it with the help of the suffix *-ann(ia)*. However, unexpectedly, the findings revealed that there is another suffix that is used to form a noun. The suffix *-it* is not mentioned in the theoretical background; however, it is productive in the nominalization of Ukrainian “both” onomatopoeias.

Overall, after examining the morphosyntactic features of the data set, it was determined that once primary onomatopoeia is lexicalized as a particular word category, it performs all the conventional morphosyntactic functions of the word category it was reassigned to. This holds true for both languages. Little to no distinction can be observed between lexicalization of “both” and “secondary” onomatopoeias.

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LIST OF TABLES

Table 1 Analysed onomatopoeias	35
Table 2 Onomatopoeias and lexicalization.....	41
Table 3 Word categories of English onomatopoeias	44
Table 4 Frequency of verbal forms in English	46
Table 5 Frequency of noun forms in English	50
Table 6 Word categories of Ukrainian onomatopoeias.....	52
Table 7 Frequency of verbal forms in Ukrainian	54
Table 8 Frequency of noun forms in Ukrainian	59

LIST OF ABBREVIATIONS

ACC	Accusative case
BNC	British National Corpus
CQL	Corpus Query Language
F	Feminine
FUT	Future
GER	Gerund
GRAC	General Regionally Annotated Corpus
IMP	Imperative mood
IMPRV	Imperfective
INF	Infinitive
M	Masculine
NOM	Nominative case
PL	Plural
PRS	Present tense
PRV	Perfective
PST	Past tense
SG	Singular