

A Comparative Morphological Approach to Class Maintaining Derivational Affixes in English and Kurdish

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Abstract—This paper is a comparative morphological study of some class maintaining derivational affixes that do not alter the grammatical categories lexemes in Standard English and Central Kurdish from the standpoints of Generative Morphology. For the comparative analysis of the two languages, some of the derivational affixes that form new meanings from the existing lexemes and retain the grammatical categories of the newly derived lexemes have been classified. The main aim of the study is to identify the points of similarity and difference of class maintaining derivational affixes in both languages. The findings indicate that in the addition of nominal affixes, English and Kurdish are similar in that ‘concrete nouns’ could remain concrete nouns, as well as could convert into abstract nouns by adding certain affixes. In English, a prefix can also be added to a concrete noun to derive a new concrete noun, whereas in Kurdish, only a prefix can be added to an abstract noun to form a concrete noun. In the addition of adjectival affixes, both languages are similar in that adjectives can derive new adjectives by attaching some prefixes and some suffixes to the existing lexemes. In English, the cardinal numbers remain cardinals when the suffixes *-teen* and *-ty* are attached to them, whereas in Kurdish the only rare case can be seen when the suffix *-a* is attached to the two cardinal numerals *hawt/ haft* ‘seven’ and *hašt* ‘eight’. The suffixes *-th* in English and *-(h)am* and *-(h)amin* in Kurdish can be attached to the cardinal numbers to form the ordinal numbers.

Key words— Affixation, Class maintaining affixes, Derivation, Derived lexemes, Lexemes.

I. INTRODUCTION

In this paper, those classes of affixes that do not change the grammatical categories but the meaning of the newly derived lexemes have been examined in Standard English and Central Kurdish. A comparative approach is used to analyze class maintaining derivational affixes in the two selected languages to identify the points of similarity and difference of those affixes that maintain classes of the lexemes. This paper consists of five sections. Section one is an introduction. Section two

involves the methodology which includes the qualitative method of research, research questions and procedures. Sections three and four present a theoretical framework of class maintaining affixes in English and Kurdish where the derivational morphology in relation to the classification of class maintaining derivational affixes was identified followed by analysis and discussion. Section five aims at identifying the points of similarity and difference of class maintaining derivational affixes in both selected languages whereby the original contribution of this work was presented followed by the main findings.

II. METHODOLOGY

The selected method of this paper is a morphological comparative approach of class maintaining derivational affixes in English and Kurdish. The research questions of this paper are as follows:

1. *What are the points of similarity and difference between Standard English and Central Kurdish as far as class maintaining derivational affixes are concerned?*
2. *Can class maintaining derivational affixes be attached to the classes of nouns, adjectives, verbs and numerals to derive new lexemes in Standard English and Central Kurdish?*

To answer the above research questions, the below steps have been followed:

- reviewing previous studies related to derivational morphology in English and Kurdish specifically the internal structure of morphemes, affixes, roots, etc.
- discussing affixation and its types in relation to class maintaining category in both languages.
- grouping the most common usable class maintaining derivational affixes in accordance with their types in both languages for the purpose of analyzing them.

- classifying the class maintaining derivational affixes into nominal, adjectival, verbal and numeral.
- examining those affixes that retain the grammatical categories in each separate section.
- analyzing the internal structure of the word classes into their component parts.
- comparing class maintaining derivational affixes in the two languages by identifying points of similarity and difference according to the created groups in sections three and four of this paper.

The meanings of the affixes, the existing lexemes, as well as the newly derived lexemes were taken for the English section from *Oxford Advanced Learner's Dictionary* (2015) and for the Kurdish section from *The Sharezoor Kurdish English Dictionary* (2000). These references have not been cited with each given affix and given lexeme due to the word limit of the paper.

III. CLASS MAINTAINING DERIVATIONAL AFFIXES IN STANDARD ENGLISH

A. Theoretical Framework

Derivational morphology is a branch of morphology which studies roots, stems, bases, morphemes, types of morphemes, prefixes, suffixes, morphological rules and word formation in English (Bauer, 1983, p. 20). Morphemes can be divided into free that can stand alone and bound that must be attached to another morpheme. For example, the noun *tenant* 'a person who occupies land' is a free morpheme; when the suffix *-cy* 'state of being' is added to it, it derives another noun *tenancy* 'position of land'. Thus, the suffix *-cy* is a bound morpheme.

In morphology, class maintaining derivational affixes attribute in the creation of new lexemes (Clark et al., 1986, p. 27) by adding a new lexical meaning to a free base. New words can be derived by attaching derivational affixes to a base. For instance, the bound morpheme *-hood* 'state of being' can be added to a noun *adult* 'grown person', a 'complex noun' *adulthood* 'the state of being an adult' will be formed. This bound suffix could be attached to nouns like *brotherhood*, *motherhood*, *boyhood*, *parenthood*, etc. Derivation is the word formation process in which a derivational affix is attached to the base of a word to create a new word. Deriving new words in a language can rely on a process called affixation. Affixes are morphemes that are "attached to some other morpheme or morphemes such as a root or stem or base" (Katamba, 1993, p.44). Affixes can be divided into prefixes and suffixes.

In English, prefixes are derivational affixes that would rarely alter the grammatical category of the word, but provide various lexical meanings. For example, *agree* 'have the same opinion' is a 'verb'; and *disagree* (meaning, the opposite of agree'), is also a 'verb'. Hence, prefix such as *dis-* 'the opposite of', is called *class maintaining derivational prefix* (Somathasan, 2018, p. 2).

According to Dupanovic (2019, p.78), the prefixes *de-*, *dis-*, *in-*, *non-*, *un-*, etc. can be classified both as "negative and reversative". The opposite prefixes *in-*, *im-* and *ir-* can be

attached to adjectives like *correct*, *possible*, and *regular* to derive opposite adjectives *incorrect*, *impossible* and *irregular*. Other instances can be shown with the prefix *il-* which means 'not'. This prefix can be attached to the adjective *logical* 'well-reasoned' to derive *illogical* which means the opposite meaning of *logical*. Moreover, the noun *slave* 'bondservant' becomes *slavery* 'the state of being a slave' when the nominal suffix is attached to it. The vast majority of prefixes do not change the syntactic category of their base words and most of the prefixes are class maintaining (Bauer, 1983, pp.124, 216). According to Katamba, derivational affixes create new words by "changing the meaning of the base to which they are attached" with no changes in "its grammatical categories" (1993, pp. 47-50). In order to specify "which morpheme a particular affix belongs to, it is crucial to realize "the base to which it attaches because the same phonological form may represent different morphemes depending on the base with which it co-occurs" (Katamba, 1993, p.49). For instance, the prefix *un-* 'not' when it is attached to an adjective *healthy* 'in good physical condition', it forms another adjective *unhealthy* 'in poor health'. Both lexemes belong to the lexical category of 'adjectives'.

Katamba (1993, pp.47-50) also indicates that the change "caused by a derivational suffix" can be minor that may "shift a base to a different sub-class within the same boarder word-class" as it can be seen with the suffix *-dom* 'the condition or state of' when it is attached to a noun like *king* 'supreme ruler' to form the noun *kingdom* 'a country or territory ruled by a king'. According to Somathasan class maintaining derivational suffixes are those "affixes which are added to an existing lexeme. As a result, a new lexeme is formed, but the grammatical category of both lexemes remains the same" (2018, p.3). Thus, class maintaining derivational affixes can generate nouns from nouns, adjectives from adjectives, verbs from verbs that retain their syntactic categories and change the meaning of the derived lexemes. For instance, the word *child* is a 'noun', when the suffix *-hood* 'state of being' is attached to it, it becomes *childhood* 'the state or period of being a child'. Both words, the root *child* and the derived one *childhood* are two different words having the same word class but different meanings. Some derivational affixes have a major role in maintaining the class category of the existing lexemes. For instance, the lexeme *write* is a 'verb'; *rewrite* (meaning, 'writing again') is also a 'verb'. Here, the prefix *re-* changes only the meaning of the word, not the grammatical category (Somathasan, 2018, p. 2).

The following derivational affixes include the most common affixes in English that maintain the category of the word classes and change the lexical meanings of the new lexeme. Some of the examples given below are taken from (Umera-Okeke, 2007, pp. 9-35 and Leningrad, 1986, p. 99) in the formation of the given lexical categories:

1) Noun Forming Affixes

Certain nouns remain nouns by adding the following affixes (Stageberg, 1981, p.157; Katamba, 1993, p.49; Umera-Okeke, 2007, p.9). The following Table (1) includes class maintaining affixes that create nouns and allow morphologists to have a clear understanding of the following prefixes and suffixes that contribute in deriving new words:

Table (1)
Examples of Noun Forming Affixes

Suffix	Meaning	Examples	Suffix	Meaning	Examples
-hood	'express state'	childhood	-ist	'someone concerned with something'	novelist
-ship	'state or condition'	scholarship	-ster	'a person associated with'	youngster
-let	'small'	booklet	-ism	'indicating behavior'	heroism
-ling	'small'	duckling	-eer	'a person who is concerned with'	auctioneer
-age	'state, act, or result of'	parentage	-ess	'indicating a female'	lioness
-dom	'the condition or state of'	kingdom	-ade	'a drink made of a particular fruit'	lemonade
-ful	'as much as will fill'	spoonful	-ite	'a person associated with'	laborite
-ette	'smaller'	novette	-(e)ry	'denoting occupation'	pottery
-y	characterized by	monarchy	-cy	'rank or office of'	magistracy
Prefix	Meaning	Examples	Prefix	Meaning	Examples
dis-	'not'	dis-order	ex-	'former'	ex-wife

The suffixes mentioned in the above table, **-dom** 'the condition or state of', **-ship** 'state of being', **-hood** 'express state', **-age** 'state, act or result of', and **-ism** 'indicating behavior' can be attached to the 'concrete nouns' *king*, *scholar*, *child*, *parent* and *critic*, respectively to derive the 'abstract nouns' *kingdom*, *scholarship*, *childhood*; *parentage*; and *criticism*.

Some affixes including **ex-** 'former', **-ful** 'as much as will fill', and **-(e)ry** 'denoting occupation', convert 'concrete nouns' into new 'concrete nouns' when they are attached to 'the nouns' *wife*, *spoon*, and *pot*, to derive 'concrete nouns' *ex-wife*, *spoonful*, and *pottery*.

2) Adjective Forming Affixes

The followings are the most common affixes **im-** 'not', **in-** 'not', **ir-** 'not', **un-** 'not', **pre-** 'before', **anti-** 'against', **-ish** 'resembling', **-ster** 'denoting a person having a particular quality'. These affixes are attached to a base or a root of the adjectives, *polite*, *regular*, *happy*, *cautious*, *social*, *green*, and *young*, to derive newly formed adjectives, *impolite*, *irregular*, *unhappy*, *precautious*, *antisocial*, *greenish* and *youngster*.

3) Verb Forming Affixes

Prefixes including **ad-** 'towards', **re-** 'again', **dis-** 'not', **col-** 'with, together', **pre-** 'before', **un-** 'not', **pro-** 'back', **mis-** 'the opposite of', **be-** 'about' are attached to verbs such as *join*, *gain*, *educate*, *please*, *locate*, *judge*, *cover*, *claim*, *apply* and *speak* to drive verbs like *adjoin*, *regain*, *reeducate*, *displease*, *collocate*, *prejudge*, *uncover*, *proclaim*, *misapply* and *bespeak*. According to Bauer (1983, p. 223), no apparent suffixes will attach to verbs to derive new verbs.

4) Numeral Forming Affixes

In English, the suffixes **-teen** and **-ty** can be attached to cardinal numerals *four* and *seven* to create newly derived cardinal numbers *fourteen* and *seventy*. The cardinal number *eight* can also be converted into ordinals when the suffix **-th** is attached to it to derive the ordinal number *eighth*.

B. Analysis and Discussion

Affixes are classified as nominal, adjectival, verbal and numeral. The following affixes create nouns from nouns, verbs from verbs, adjectives from adjectives, and numerals from numerals. These groups of affixes do not change the class membership of the newly derived words but rather change the lexical meaning of the derived lexemes as summarized below:

1) Nominal Affixes

In English, the existing nouns retain the grammatical categories of the new nouns when the following affixes are added to them as summarized in the groups below:

Group 1: concrete nouns remain concrete nouns by adding the following suffixes to them:

Concrete Noun	Suffix	Meaning	Concrete Noun
<i>murder</i>	-ess	'used to form a feminine'	<i>murderess</i>
president	-ency	'equivalent to'	presidency
<i>hero</i>	-ism	'indicating behavior'	<i>heroism</i>

Prefix	Meaning	Concrete Noun	Concrete Noun
<i>ex-</i>	'former'	<i>wife</i>	<i>ex-wife</i>
<i>dis-</i>	'the opposite of'	<i>mayor</i>	<i>dis-mayor</i>

The emboldened item *president* is a 'noun', when the suffix **-ency** 'state of being' is attached to it, it becomes *presidency* which is also a 'noun'. The changes occur when the suffix is added to the existing lexeme. The noun *president* means "a person in charge of organization (Oxford Advanced Learner's Dictionary, 2015). The newly derived lexeme refers to the period of time somebody holds as a president.

Group 2: concrete nouns can be changed into abstract nouns by adding the below suffixes to them:

Concrete Noun	Suffix	Meaning	Abstract Noun
<i>adult</i>	-hood	'express state'	<i>adulthood</i>
<i>king</i>	-dom	'the condition or state of'	<i>kingdom</i>
<i>leader</i>	-ship	'state or condition'	<i>leadership</i>

As shown in the above-mentioned group, the emboldened item *adult* is a 'noun', when the suffix **-hood** 'express state' is attached to it, it becomes *adulthood* which is also a 'noun'. The changes occur only in the meaning of the two lexemes. The existing lexeme means "a fully grown person who is legally responsible for their action" and the new derived lexeme refers to "the state of being adult" (Oxford Advanced Learner's Dictionary, 2015). Moreover, in the nominal affix category, the word *leader* is a 'noun', when the suffix **-ship** is attached to it, it becomes *leadership*. Both words, the root *leader* and the derived one *leadership* are two different words having the same word class but different meanings. The noun *leader* refers to a person who leads a group of people in an institution or in a government, whereas the newly derived noun *leadership* refers to the state or position of being a leader (Oxford Advanced Learner's Dictionary, 2015).

2) Adjectival Affixes

Prefixes such as **dis-**, **in-**, **im-**, **il-** and **ir-** can be added to adjectives such as *honest*, *credible*, *polite*, *logical* and *resistible*, to derive the opposite meanings of those adjectives *dishonest*, *incredible*, *impolite*, *illogical*, and *irresistible*.

The word *honest* is an 'adjective', when the prefix **dis-** 'not' is attached to it, it becomes *dishonest*. Both words, the root *honest* and the new derived one *dishonest* are two different words belonging to the word class of adjectives. They both convey opposite meanings. The adjective *honest* gives the meaning of 'telling the truth without cheating the other parties', whereas the new derived adjective *dishonest* means 'the state of being not honest with the intention of tricking other individuals'. Although newly derived adjective *dishonest* indicates the opposite meaning of the original adjective *honest* but they still belong to the same syntactic category.

<u>Adjective</u>	<u>Suffix</u>	<u>Meaning</u>	<u>Adjective</u>
green	-ish	'somewhat, rather'	greenish
dead	-ly	'like'	deadly

The emboldened word *green* is an 'adjective' when the suffix **-ish** 'somewhat, rather' is attached to it, it becomes *greenish*. Both words, the root *green* and the new derived one *greenish* are two different words belonging to the category of adjectives but they convey to somehow extent different meanings. The adjective *green* is a color that is similar to a grass or the leaves of most plants and trees, whereas the new derived adjective *greenish* refers to fairly green color (Oxford Advanced Learner's Dictionary, 2015).

3) Verbal Affixes

The category of verbs remains verbs by adding the following prefixes to the verbs followed:

<u>Prefix</u>	<u>Meaning</u>	<u>Verb</u>	<u>Verb</u>
re-	'again'	organize	reorganize
un-	'the opposite of'	cover	uncover
mis-	'the opposite of'	apply	misapply
dis-	'not, the opposite of'	please	displease

The emboldened word *organize* is a 'verb', when the prefix **re-** 'again' is attached to it, it becomes *reorganize* 'change the way in which something is organized'. Both words, the root *organize* and the derived one *reorganize* are two different words having the same word class but different meanings. The verb *organize* means to arrange something or a part of something into a particular order or structure, whereas the new derived verb *reorganize* means to change the way in which something is organized.

Another example of verbal prefixes is shown when the prefix **un-** 'not' is attached to the verb *cover*, it becomes *uncover* which is also a 'verb'. Both words, the root *cover* and the derived one *uncover*, are two different words having the same word class but different meanings. The verb *cover* means "hide or protect" and "include", whereas the new derived verb *uncover* means "to remove something that covering something else" or "discover something that was previously hidden or secret" (Oxford Advanced Learner's Dictionary, 2015).

4) Numeral Affixes

The cardinal numerals remain cardinals when the suffixes **-teen** and **-ty** are attached to them as shown below:

<u>Cardinal Numeral</u>	<u>Suffix</u>	<u>Cardinal Numeral</u>
four	-teen	fourteen
four	-ty	forty

The cardinal numbers can also be converted into ordinals when the suffix **-th** is added to them, as shown below:

<u>Cardinal Numeral</u>	<u>Suffix</u>	<u>Ordinal Numeral</u>
seven	-th	seventh
seventy	-th	seventieth

In English, the class of numerals retains its grammatical categories when the suffixes **-teen**, **-ty**, and **-th** are attached to them.

C. Conclusion

As far as English Class maintaining derivational affixes are concerned, the following findings can be concluded:

- Class maintaining derivational affixes can be added to the lexical categories of a noun, an adjective, a verb, and a numeral to form the same word classes with differences in meaning.
- Class maintaining derivational affixes change the lexical meanings of the original words and retain their grammatical categories as summarized below:
 - Nominal affixes can be formed by attaching a prefix to a 'concrete noun' to form a new 'concrete noun', as well as by attaching a suffix to a 'concrete noun' to form an 'abstract noun'.
 - Adjectival affixes can be formed by attaching a suffix to an 'adjective to form new 'adjectives', as well as by

adding a prefix to derive a new ‘adjective’. In this category, prefixes contribute more than suffixes in the formation of adjectives within the class maintaining category.

- c. Verbal affixes can be formed by adding a prefix only to a ‘verb’ to derive new verbs rather than by adding suffixes to derive other new verbs.
- d. Numeral affixes can be formed by attaching the suffixes *-teen* and *-ty* to the ‘cardinal numerals’ to form new cardinals, as well as by adding the suffix *-th* to ‘cardinal numerals’ to derive ‘ordinal numerals’.

IV. CLASS MAINTAINING DERIVATIONAL AFFIXES IN CENTRAL KURDISH

A. Theoretical Framework

Derivational morphology is concerned with the internal structure of words. It deals with deriving new lexemes by attaching certain affixes that may change or maintain the class category of the newly derived words. In this section, class maintaining derivational affixes are introduced in the derivational words of the Kurdish language. Words are derived through various processes of word formation. One of these processes is derivation that is realized by affixation. According to Ali and Awl (2012, pp. 874-875) derivational morphology deal with forming new lexemes from the existing ones by affixation. Thus, derived words are those nouns that are the outcome of combining (root or base + derivational affixes) as summarized below:

<u>Derivational Prefixes</u>	<u>Root/Base</u>	<u>Derivational Nounss</u>
<i>haw</i>	<i>re</i>	<i>hawre</i> ‘friend’

Morphemes are defined as the words or parts of words that carry meaning and cannot be divided into smaller parts (Awl, 2010, p.312; Shwani, 2011, p.70). Morphemes can be free or bound, for instance, the diminutive suffix *-ča* ‘smallness’ can be added to the noun *bax* ‘garden’ to derive the noun *baxča* ‘small garden’. From the derivational morphological perspective, in Kurdish, morphemes can be classified into roots and affixes. Roots are indivisible smallest parts of the words that carry the original meaning of the words after removing all the affixes (Dizayee, 2010, p.30; Marif, 1977, p.30; Amin, 1982, p.87). For instance, the word *kič* ‘girl’ is the root in all the following lexemes *kič* ‘girl’, *kiča:na* ‘girlish’, *kičeni* ‘girlhood’, *kičoła* ‘little girl’. These lexical items are new nouns that are derived from the root *kič* ‘girl’ to convey different meanings while having the same syntactic category. In Kurdish, class maintaining category can be realized by affixation which can be subdivided into prefixes and suffixes. According to Awl (2010, p.316), prefixes are bound morphemes attached to the beginning of a root. Suffixes can be referred to as bound morphemes that are attached to the end of the word. Class-maintaining derivational affixes are described as deriving new lexical meanings from the existing lexemes without changing

their grammatical categories. In Kurdish, words can be classified into simple and complex (Muhammad, 2011, p. 27). A complex word can be formed by a root verb such as *da:n* and an affix *hal* ‘upward’ to create a verb *halda:n* ‘to throw upward’ when the suffix *-ewe* ‘the process of’ is attached to it, it becomes *halda:ne* ‘uncover by raising- listing up’ (The Sharezoor Kurdish-English Dictionary, 2000, p. 585). The verb *halda:ne* is a complex word containing three morphemes, *hal-*, *da:n*, *-ewe*. Thus, the prefix *hal-* and the suffix *-ewe* are bound morphemes that cannot function as free-standing words (Muhammad, 2011, p. 26) and should be attached to other lexical items.

The following affixes contribute in the formation of ‘nouns’ from ‘nouns’, ‘adjectives’ from ‘adjectives’, ‘verbs’ from ‘verbs’, and ‘numerals’ from ‘numerals’:

1) Noun Forming Affixes

McCarus (1958, p.87) defines nominal suffixes as “those which convert to the form class of nouns”. According to Marif (2014, p.131), some suffixes can change the subclasses of nouns, for instance, the suffix *-sta:n* ‘the place of’ changes the noun *kurd* ‘the Kurds’ into another noun *Kurdistan* ‘the Kurdish homeland’. The suffix *-či* ‘maker’ changes the noun *boyax* ‘paint’ into *boyaxči* ‘painter’, the suffix *-en* is attached to a noun *halma:t* ‘marbel’ to form the noun *halma:ten* ‘game of marbles’. The following suffixes *-dar*, *-ena*, *-ger*, *-emani*, *-saz*, *-mand*, *-ba:z* and *-kar* can be attached to the nouns *dukan* ‘shop’, *nisk* ‘lentil’, *asin* ‘iron’, *ši:r* ‘milk’, *da:n* ‘teeth’, *hunar* ‘art’, *sar* ‘head’, *raw* ‘hunt’ to derive the following new nouns *dukandar* ‘owner of a shop’, *niskena* ‘lentil soup’, *asinger* ‘blacksmith’, *širemani* ‘diary’, *da:nsa:z* ‘dentist’, *hunarmand* ‘artist’, *sarba:z* ‘soldier’ and *ra:wkar* ‘hunter’ (Marif, 2014, pp. 118, 133).

Similarly, Ali and Awl state that the suffix *-ewa:n* ‘one related to’ can be attached to the nouns *ba:x* ‘garden’, *ša:x* ‘mountain’, *mala* ‘swimming’ to form new nouns such as *baxewa:n* ‘gardener’, *šaxewan* ‘mountainer’, *melewa:n* ‘swimmer’ (2012).

According to McCarus (1958, pp. 87-88), the following suffixes *-ayati*, *-ba:z*, *-či*, *-da:n*, *-ewari*, *-ga*, *-xan*, and *-za*, can be attached to the nouns *xizim* ‘relative’, *sag* ‘dog’, *boyax* ‘shoe shine’, *šekir* ‘sugar’, *kurd* ‘nation’, *dad* ‘court’, *žer* ‘under part’, *bra*, ‘brother’ to derive the following new nouns, *xizmayati* ‘relationship’, *sagba:z* ‘dog fancier’, *boyaxči* ‘bootblack’, *šekirda:n* ‘sugar bowl’, *kurdewari* ‘the Kurdish people’, *dadga*, ‘court’, *žerxan* ‘basement’ *bra:za*, ‘brother’s child’.

In addition to that, McCarus (1958, p.88) and Marif (2014, pp. 21-22) mention that the diminutive suffixes such as *-ula*, *-očka* and *-ola* ‘the smallness of something’ can be attached to the nouns *meš* ‘fly’, *ma:l* ‘home’, *kiž* ‘girl’ to derive the new nouns *mešula* ‘mosquito’, *maločka* ‘little home’ and *kižola* ‘little girl’. The suffix *-yila* when it is attached to the noun *angust* ‘finger’, the noun *angusti:la* ‘ring’ will be formed (Marif, 2014).

On the other hand, nominal suffixes are often employed to derive “abstract nouns” (Bauer, 1983, p.109). In Kurdish, some affixes when they are attached to certain words, they can only change the subclasses of the given lexemes meaning that the changes occur within the same word classes. For instance, when the suffixes, *-eni*, *-i*, and *-ati* are added to the concrete nouns

kič ‘girl’, *mina:l* ‘child’, *pya:w* ‘man’, they become abstract nouns *kičêni* ‘girlhood’ *mina:lî* ‘childhood’, and *pya:wati* ‘manhood’ (Marif, 2014, pp. 124-125; Awl, 2010, p.318).

2) Adjective Forming Affixes

McCarus (1958, pp. 90-91) introduces certain affixes that create adjectives from adjectives. The suffix *-baw* ‘of the shade of’ and the negative prefixes *ne-*, *na-* ‘not’ when they are attached to adjectives *sur* ‘red’ and *xoš* ‘pleasant’, the adjective *surbaw* ‘reddish’, *nexoš* ‘ill’ and *na:xoš* ‘unpleasant’ are formed. These negative prefixes have also been discussed by Marif (2014, p.114); Fattah and Hamawand (2014, pp. 47-49) and Hamawandy (2012, p.12). Moreover, Fattah (2012) lists four positive suffixes attached to certain adjectives including “*ru:n* + **a,k** = *ru:nak* ‘luminous’; *kolê*+**war** = *kolêwar* ‘severely handicapped’; *der*+**îna**= *derîna* ‘a quality related to ancient time’; *sipî*+**kele**= *sipîkele* ‘whitish’” (pp.176-179).

3) Verb Forming Affixes

Related to verb forming affixes, Marif (2014, p.114) mentions some of the Kurdish prefixes such as *da-* ‘down’, *fa-*, *re-* ‘used as first element of some derived forms’, *hal-* ‘up’, *fo-* ‘under’, *war-* ‘cause to do the action’, *pe-* ‘reach the goal’, and *tê-*, *lê-* ‘the act of’ can be attached to the verbs *girtin* ‘catch’, *xistin* ‘drop’, *çu:n* ‘go’, *gaştin* ‘grow or reach’, *kirdin* ‘to do’, *da:n* ‘give’ to derive new verbs *dagirtin* ‘get down’, *ragirtin* ‘hold back’, *rexistin* ‘organization’, *halçu:n* ‘to boil up’, *roçu:n* ‘sinking’, *wargirtin* ‘receiving’, *pegai:ştin* ‘grow to maturity; reach (one’s goal)’, *têkirdin* ‘putting into’, *lêda:n* ‘hitting’. The suffixes *-ewa* and *-din* can be attached to the verbs *ge’ra:n* ‘search’ and *suta:n* ‘burn’ to derive new verbs *ge’ranewa* ‘return’ and *sutandin* ‘burning’ (The Sharezoor Kurdish-English Dictionary, 2000, pp. 68-90).

Most of the above-mentioned affixes were introduced by Dizayee (2012, p.101) and Fattah and Hamawand (2014, p.37-49); Fattah (2012, pp.176-179) who examined the uses and the meanings of some affixes. The meaning of the root or the base changes when the prefixes *fa-* ‘controller’, *hel-* ‘up’ *-ewa* ‘repetition’ are attached to *girtin* ‘catch’, *gara:n* ‘search’ and *xwardin* ‘food’ to form *ra:grtin* ‘holding’, *helgara:n* ‘to climb up’ and *xwardnewa* ‘drinking’. When these prefixes are attached to the existing lexemes, they do not change the grammatical categories of the new words (Fattah and Hamawand, 2014, p.37-49; Awl, 2010, p.317).

4) Numeral Forming Affixes

In Kurdish, only suffixes can be added to a cardinal number to form new numerals. Marif outlines that derived numerals contain a simple word and a suffix such as *-a* in the cardinal numbers *hafta* ‘seventy’ and *hašta* ‘eighty’ (1998, pp.86-95). According to Marif (2014 [1977], p.114), Fakhry (2005, p.207) and Shwani (2011, p. 61) the suffixes **(h)am**, *yak* ‘one’+**(h)am**= *yak(h)am* ‘first’; and **(ha)amin** *yak* ‘one’+ **(h)amin** =*yak(h)amin* ‘the first’ can be attached to the cardinal numerals to form the ordinals. According to McCarus, these suffixes indicate a “position in a series of items” without change in meaning” (1958, p. 91).

B. Analysis and Discussion

In Kurdish, class maintaining derivational affixes do not alter the grammatical categories of the lexical items but only the meanings of the new lexemes. For instance, the lexical item *froke* ‘airplane’ is a ‘concrete noun’ when the suffix *-wa:n* is attached to it, the concrete noun *frokewa:n* ‘pilot’ will be formed and by affixing *-î* to it, the ‘abstract noun’ *frokewa:nî* ‘pilot aviation career’ will be formed. In this case, the suffixes *-wa:n* and *-î* are attached to a noun such as *froke*. Hence, the affixes *-wa:n* and *-î*, are *class maintaining suffixes*.

The affixes summarized below retain the grammatical categories of the existing lexemes but change the meanings of the newly derived forms:

1) Nominal Affixes

The following affixes are attached to concrete nouns to form either concrete or abstract nouns:

Group 1: concrete nouns retaining **concrete nouns** by adding the following suffixes:

<u>Concrete</u>	<u>Meaning</u>	<u>Suffix</u>	<u>Meaning</u>	<u>Concrete</u>
goza	<i>vase</i>	-lê	<i>samlness</i>	gozale ‘small vase’
bax	‘garden’	-çe	‘smallness’	baxçe ‘small garden’
bax	‘garden’	-awa,n	‘one related to’	baxawa:n ‘gardener’

As shown in the above group (1), the emboldened item *goza* ‘vase’ is a ‘concrete noun’, when the suffix *-lê* ‘smallness’ is attached to it, it becomes *gozale* ‘small vase’ which is also a ‘concrete noun’. The changes occur in the meaning of the two lexemes, the former gives the meaning of a *vase* while the latter refers to a *small vase*. The emboldened noun *bax* ‘garden’ refers to an “area of grass” to grow “flowers, fruits, vegetables” while the derived noun *baxewa,n* means ‘gardener’.

Group 2: concrete nouns changing into abstract nouns by adding the following suffixes:

<u>Concrete</u>	<u>Meaning</u>	<u>Suffix</u>	<u>Meaning</u>	<u>Abstract</u>
pyaw	‘man’	-ati	‘state or condition’	pya,wati ‘manhood’
dost	‘friend’	-ayati	‘state or condition’	dosta:yati ‘friendship’
mina:l	‘child’	-i	‘quality or state’	min:ali ‘childhood’
bra	‘brother’	-yati	‘state or condition’	bra,yati ‘brotherhood’

<u>Prefix</u>	<u>Abstract</u>	<u>Meaning</u>	<u>Concrete</u>	<u>Meaning</u>
haw-	ka:r	‘work’	hawka:r	‘co-worker’

2) Adjectival Affixes

Adjectives can be converted into other adjectives by adding a prefix and a suffix as indicated below:

Group 1: Adjectives remain adjectives by adding the following prefixes:

<u>Prefix</u>	<u>Meaning</u>	<u>Adjective</u>	<u>Meaning</u>	<u>Adjective</u>	<u>Meaning</u>
<i>na-</i>	'not'	<i>ya:sa:i</i>	'legal'	<i>na:ya:sa:i</i>	'illegal'
<i>ne-</i>	'not'	<i>gunjaw</i>	'suitable'	<i>negunjaw</i>	'unsuitable'

The above emboldened lexical item *ya:sa:i* 'legal' is an 'adjective' when the prefix *na-* is added to it, the negative adjective *na:ya:sa:i* 'illegal' is formed which conveys the opposite meaning of *ya:sa:i*. Hence, the changes occur in the meaning of the lexical items that convey a positive meaning in *ya:sa:i*, 'legal' and a negative one in *na:ya:sa:i*: 'illegal' rather than the grammatical categories of the two derived words.

Group 2: Adjectives remain adjectives by adding the following suffixes:

<u>Adjective</u>	<u>Meaning</u>	<u>Suffix</u>	<u>Meaning</u>	<u>Adjective</u>	<u>Meaning</u>
<i>raš</i>	'black'	<i>-baw</i>	'of the shade of'	<i>rašbaw</i>	'blackish'
<i>ru:n</i>	'clear'	<i>-a:k</i>	'having the quality'	<i>ru:na:k</i>	'luminous'
<i>su:r</i>	'red'	<i>-kele</i>	'reducing the degree of'	<i>su:rkele</i>	'reddish'

The emboldened lexeme *su:r* 'red' is an 'adjective' when the suffix *-kele* is added to it, the adjective *su:rkele* 'reddish' is formed which conveys 'reducing the degree of the colour'. Hence, the change occurs in the meaning of the lexical items *su:r* 'red' and *su:rkele* 'reddish', both referring to the colour red, but with a slight difference in meaning.

3) Verbal Affixes

Group 1: Verbs remain verbs by adding the following prefixes:

<u>Prefix</u>	<u>Verb</u>	<u>Meaning</u>	<u>Verb</u>	<u>Meaning</u>
<i>da-</i>	<i>krožîn</i>	'crunch'	<i>dakrožîn</i>	'crunching'
<i>da:n</i>	'give'	<i>hel-da:n</i>	'throwing'	
<i>tê-</i>	<i>ra:ma:n</i>	'pondering'	<i>têra:ma:n</i>	'staring deeply'
<i>wer-</i>	<i>gara:n</i>	'search'	<i>wergara:n</i>	'flipping'

Group 2: Verbs remain verbs by adding the following suffixes:

<u>Verb</u>	<u>Meaning</u>	<u>Suffix</u>	<u>Verb</u>	<u>Meaning</u>
<i>sut</i>	'burn'	<i>a:ndin</i>	<i>suta:ndin</i>	'burning'
<i>birdn</i>	'take'	<i>-ewe</i>	<i>birdinewe</i>	'winning'
<i>hal-da:n</i>	'throwing'	<i>-ewe</i>	<i>halda:ne</i>	'turning'

As shown in the classification of verbal affixes, the lexeme *ra:man* 'pondering' is a verb when the prefix *tê-* 'move in the direction of' is attached to it, it becomes *têra:man* 'staring deeply' which is a 'verb'. The change occurs only in the meaning of the two verbs while the grammatical category remains the same. When the prefix *hel-* 'up' is attached to a verb *da:n* 'give', a new verb *hel-da:n* 'throwing' can be formed. When the suffix *-ewe* emboldened in group (2) above is attached to this newly derived verb *hel-da:n* 'throwing', it derives another new verb *hel-danewe* that can be used in different contexts and can have different meanings. However, it means 'to turn the page over' here used in the context of books. The original meaning of the verb *hel-da:n* totally disappears, and a new meaning is formed. In the above list, the prefixes *da-*, *hel-*, *te-* and *wer-* are class-maintaining derivational affixes.

4) Numeral Affixes

Cardinal numerals remain cardinals by adding the suffix *-a:* when this suffix is attached to the cardinal numerals *hewt/ heft* 'seven' and *hešt* 'eight', the cardinal numbers *hefta:* 'seventy' and *hešta:* 'eighty' are formed as shown below:

<u>Cardinals</u>	<u>Meaning</u>	<u>Suffix</u>	<u>Cardinals</u>	<u>Meaning</u>
<i>hewt/ heft</i>	'seven'	<i>-a:</i>	<i>hefta:</i>	'seventy'
<i>hešt</i>	'eight'	<i>-a:</i>	<i>hešta:</i>	'eighty'

The cardinal numerals can be converted into ordinals by adding the suffixes, *(h)am* and *(h)amin*.

<u>Cardinals</u>	<u>Meaning</u>	<u>Suffix</u>	<u>Ordinals</u>	<u>Meaning</u>
<i>yak</i>	'one'	<i>-(h)am</i>	<i>yak(h)am</i>	'first'
<i>yak</i>	'one'	<i>-(h)amin</i>	<i>yak(h)amin</i>	'first'
<i>pazda</i>	'fifteen'	<i>-(h)am</i>	<i>pazda(h)am</i>	'fifteenth'
<i>pazda</i>	'fifteen'	<i>(h)amin</i>	<i>pazda(h)amin</i>	'fifteenth'

As shown in the above-mentioned types of numerals, when the suffix *-(h)am* is attached to the cardinal number *yak* 'one', the ordinal number *yak(h)am* 'the first' is formed. Similarly, when the suffix *-(h)amin* is added to the cardinal number *yak* 'one', the ordinal number *yak(h)amin* 'the first' is formed. The grammatical category of the existing numeral *yak* 'one' and the newly derived numerals *yak(h)am* and *yak(h)amin* 'the first' remain in the same class. The difference between these items lies in that the cardinal number *yak* 'one' is associated with 'quantity of something' while the ordinal numbers *yak(h)am* and *yak(h)amin* 'the first' show the order of something in a sequence.

C. Conclusion

As far as Kurdish class maintaining derivational affixes are concerned, the concluding findings are summed up below:

- Class maintaining derivational affixes can be added to the lexical categories of a noun, an adjective, a verb, and a numeral.
- Class maintaining derivational affixes change the lexical meanings of the original words and retain their grammatical categories:
 - Nominal affixes can be formed by attaching a prefix to a 'concrete noun' to form a new 'concrete noun' and also by attaching a suffix to a 'concrete noun' to form an 'abstract noun'.
 - Adjectival affixes can be formed by adding a suffix to an 'adjective' to form new 'adjectives' and also by adding a prefix to derive another adjective. In this category, suffixes contribute more than prefixes in the formation of adjectives within the class maintaining category.
 - Verbal affixes can be formed by adding a prefix to a 'verb' to derive new verbs, as well as by adding a suffix to derive other new verbs.
 - Numeral affixes can be formed by adding a suffix *-a:* to the 'cardinal numbers' *heft* 'seven' and *hešt* 'eight'

to form the cardinal numbers *hefta*: ‘seventy’ and *hešta*: ‘eighty’, as well as by attaching the suffixes – **(h)am** and **(h)amin** to cardinal numerals to derive ordinal numerals.

V. A COMPARATIVE APPROACH TO CLASS MAINTAINING IN STANDARD ENGLISH AND CENTRAL KURDISH

In this section, the points of similarity and difference of class maintaining derivational affixes in English and Kurdish are examined. Those affixes that retain the grammatical category of the given lexemes can contribute to the changes of the meanings of the new lexemes.

A. Points of Similarity and Difference

In Standard English and Central Kurdish, class maintaining derivational affixes include those affixes that are attached to the existing lexemes to change the meanings rather than the grammatical categories of the newly derived lexemes. English and Kurdish can create various meanings within the same class category. They are similar in the formation of deriving new meanings of the newly added lexemes in a process called derivation. In both languages, more than one affix could be attached to derive new lexical items and the grammatical categories of the new lexemes are retained in a process called *multiple affixations*. In English, it is possible to add more than one suffix to the cardinal numerals. For instance, when the suffixes **-teen** and **-ty** are attached to the cardinal numbers *seven* and *nine*, the cardinals *seventeen* and *seventy* will be formed. The suffix **-th** can also be attached to the cardinal numbers *seventeen* and *seventy* to derive the ordinals *seventeenth* and *seventieth*.

In Central Kurdish, the concrete noun *froke* ‘airplane’ can be converted into another ‘concrete noun’ by attaching the suffix **wa:n** to form *frokewa:n* ‘pilot’ and by affixing **-i**, ‘state or quality’, the ‘abstract noun’ *frokewani*, ‘pilot aviation career’ will be formed.

In both languages, class maintaining derivational affixes can be added to the lexical categories of a ‘noun’, an ‘adjective’ and a ‘verb’. Only in Kurdish language, new words can be formed by a ‘numeral’ as explained below:

In the classification of **nominal affixes**, English and Kurdish are similar in that a ‘concrete noun’ remains a ‘concrete noun’ by adding certain suffixes. For instance, the suffixes **-ist** in English and **-îe** ‘smallness’ in Kurdish can be added to the ‘concrete nouns’ *cartoon* and *goze* ‘vase’ to derive *cartoonist* and *gozeîe* ‘small vase’. Simultaneously, the suffixes **-hood** ‘state’ in English and **-yetî** ‘state or condition’ in Kurdish can be added to ‘abstract nouns’ *adult* and *pya:w* ‘men’ to derive the abstract nouns *adulthood* and *pya:wetî* ‘manhood’ (see III.B.1; IV,B,1 Group 2). In Kurdish, the suffixes **-i**, **-ati**, **-yati**, **-a:yati** ‘state or condition’ can be added to the ‘concrete nouns’ *mina:l* ‘child’, *pya:w* ‘man’, *bra* ‘brother’ and *dost* ‘friend’ to form the abstract nouns *mina:li* ‘childhood’, *pya:wetî* ‘manhood’, *bra:yati* ‘brotherhood’ and *dosta:yati* ‘friendship’. While in English, the suffix **‘hood’** can be attached to the ‘concrete nouns’ *child*, *man*, *brother* and the suffix **-ship** can be added

to the noun *friend* to derive the abstract nouns *childhood*, *manhood*, *brotherhood* and *friendship*, respectively.

In English, the prefix **ex-** ‘former’ can be added to a ‘concrete noun’ *wife* to derive a new concrete noun *ex-wife*, whereas in Kurdish, a prefix **haw-** can be added to an ‘abstract noun’ *ka:r* ‘work’ to form a ‘concrete noun’ *hawka:r* ‘co-worker’ (see III.B.1; IV, B,1 Group 1).

In the classification of **adjectival affixes**, both languages are similar in that ‘adjectives’ can retain their grammatical categories and can add other new meanings to the new derived ‘adjectives’ by attaching a prefix and a suffix to the existing ones. For instance, the prefixes **il-** in English and **na-** in Kurdish can be attached to the ‘adjectives’ *logical* and *ya:sa:i*, ‘legal’ to derive the negative adjectives *illogical* and *na:ya:sa:i*, ‘illegal’. The suffixes **-ish** in English and **-baw** ‘of the shade of’ in Kurdish can be attached to ‘color adjectives’ *green* and *reş* ‘black’ to derive *greenish* and *reşbaw* ‘blackish’.

In the classification of **verbal affixes**, English and Kurdish are similar in deriving new verbs by attaching prefixes to the existing verbs. For instance, the prefixes **re-** in English and **wer-** ‘cause to do the action’ in Kurdish can be added to the verbs *organize* and *ga’ra,n* ‘search’ to form the two verbs *reorganize* and *werga’ra,n* ‘flipping’. The two languages are different in that verbs in Central Kurdish have the capability of deriving a new verb by adding a suffix to the given verb such as *birdn* ‘taken’ when the suffix **-ewe** is attached to it, it becomes *birdinewe* ‘winning’. Thus, the meaning of the existing verb *birdin* will be changed to a totally different meaning *birdinewe*, whereas in English, no apparent suffixes can be attached in the formation of deriving new verbs.

In the classification of **numeral affixes**, in English, the cardinal numerals *two*, *three*, *four*, etc. remain cardinals when the suffixes **-teen** and **-ty** are attached to them. For instance, the cardinal numeral *four* when the suffix **teen** and **-ty** are attached to, it becomes *fourteen* and *forty*. In Kurdish, when the suffix **-a:** is attached to the cardinal numbers *hewt/heft* ‘seven’ and *hešt* ‘eight’, the cardinals remain cardinals and the numbers *hefta*: ‘seventy’ and *hešta*: ‘eighty’ will be formed. These cardinal numbers in both languages belong to the same classes of numerals. In other cases, in both languages, when the suffixes **-th** in English and **(h)am** and **(h)amin** in Kurdish are attached to the cardinal numerals *seven* and *yak* ‘one’, the ordinal numbers *seventh*, *yak(h)am* ‘the first’ and *seventieth* and *yak(h)amin* ‘the first’ are formed. This could be applicable for all the other cardinal numerals in both languages.

The above-mentioned comparative analysis is the answer of the first research question addressed in the methodology section of this paper:

What are the points of similarity and difference between Standard English and Central Kurdish as far as class maintaining derivational affixes are concerned?

The second addressed research question:

Can class maintaining derivational affixes be attached to the word classes of nouns, adjectives, verbs and numerals to derive new lexemes in Standard English and Central Kurdish?

could be answered and fulfilled by explaining that in both languages class maintaining derivational affixes could be attached to the lexical categories of 'nouns', 'verbs' and 'adjectives' with no changes in the grammatical categories but rather with the new meanings of the existing 'nouns', 'verbs' and 'adjectives'. Only in Central Kurdish, the suffix *-a*: could be added to some cardinal numerals to derive other cardinal numerals.

B. Findings

In this paper, the following findings have been drawn:

1. In both languages, derivational affixes can retain the grammatical categories and can change the lexical meanings of the original lexemes.
2. Both languages are similar in the formation of deriving new meanings of the newly added lexemes by a process called derivation to derive new lexical items without changing their grammatical categories.
3. In English, two suffixes can only be attached to 'cardinal numerals' to form new 'cardinal' and 'ordinal numerals' while in Kurdish, more than one affix could be attached to 'concrete nouns' to derive 'abstract nouns' by a process called *multiple affixations*.
4. In both languages, class maintaining derivational affixes can be added to the lexical categories of a 'noun', an 'adjective', a 'verb', as well as a 'numeral'.
5. English and Kurdish are similar in that 'concrete nouns' could remain 'concrete nouns', as well as could convert into 'abstract nouns' by adding certain suffixes.
6. In English, a prefix can be added to a 'concrete noun' to derive a new 'concrete noun', whereas in Kurdish, a prefix can be added to an 'abstract noun' to form a 'concrete noun'.
7. Both languages are similar in that 'adjectives' can derive new 'adjectives' by attaching a prefix and a suffix to the existing lexemes.
8. English and Kurdish are similar in deriving 'new verbs' by attaching prefixes to the 'existing verbs', whereas in Kurdish verbs have the capability of deriving a 'new verb' by also adding a suffix to the 'existing verbs'.
9. In both languages, the 'cardinal numerals' remain 'cardinals' when the suffixes *-teen* and *-ty* are added in English and the suffix *-a* in Kurdish are added to the 'cardinal numerals' *hewt/heft* 'seven' and *hešt* 'eight'.
10. The suffixes *-th* in English and *(h)am* and *(h)amin* in Kurdish can be attached to the 'cardinal numerals' to derive the 'ordinal numerals'.

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APPENDIX

Key to Kurdish Phonemic symbols

1-Consonants:

- /p/ is a voiceless bilabial as in pi:r 'old'
 /b/ is a voiced bilabial stop as in ba:wk 'father'
 /t/ is a voiceless dental stop as in ta:wa:n 'crime'
 /d/ is a voiced dental stop as in da:n 'teeth'
 /k/ is a voiceless velar stop as in kič 'girl'

/g/ is a voiced velar stop as in gu:rg ‘wolf’
 /f/ is a voiceless labio-dental fricative as in bafir ‘snow’
 /v/ is a voiced labio-dental fricative as in mirov ‘human’
 /s/ is a voiceless alveo-dental fricative as in ma:si ‘fish’
 /z/ is a voiced alveo-dental fricative as in zima:n ‘tongue’
 /š/ is a voiceless alveo-palatal fricative as in ša:no ‘stage’
 /ž/ is a voiced alveo-palatal fricative as in ža:n ‘pain’
 /č/ is a voiceless alveo-palatal affricate as in čiya ‘mount’
 /j/ is a voiced alveo-palatal affricate as in jwa:n ‘beauty’
 /m/ is a voiced bilabial nasal as in maR ‘sheep’
 /n/ is a voiced dental nasal as in nawa ‘generation’
 /ŋ/ Is a voiced velar nasal as in ha haŋ ‘bee’
 /h/ is a voiceless glottal fricative as in hawir ‘cloud’
 /ħ/ is a voiceless pharyngeal fricative as in hawt
 /l/ is a voiceless velarized lateral as in la:wa:z ‘weak’
 /l̥/ is a voiced dental lateral as in sa:l̥ ‘year’
 /t/ is a voiced alveolar flap as in ta:rik ‘dark’
 /r̥/ is a voiced alveolar trill as in řa:w ‘hunting’
 /x/ is a voiceless velar fricative as in xor ‘sun’
 /x̣/ is a voiced velar fricative as in x̣amba:r ‘sad’
 /q̣/ is a voiceless uvular stop as in q̣a:wa ‘coffe’
 /ʔ/ is a voiceless pharyngeal fricative as in sa`a:t ‘hour’
 /y/ is a voiced palato-alveolar glide as in ya:ri ‘game’
 /w/ is a voiced labiovelar rounded glide as in ča:w ‘eye’

2- Vowels

/a/ low Standard unrounded, short vowel as in sar ‘head’
 /a:/ low Standard unrounded, long vowel as in sha: ‘king’
 /è/ mid very close front unrounded long vowel as in èš ‘pain’
 /i/ high close front unrounded short vowel as in pišt ‘back’
 /i:/ high close front unrounded long vowel as in hi:è ‘nothing’
 /u/ high open back rounded short vowel as in kur ‘boy’
 /u:/ high close back rounded long vowel as in du:r ‘far’
 /o/ mid open back rounded short vowel as in košik ‘palace’