Parameters of Variation in the Syntax of Homophones

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1. Introduction

This paper aims to answer the following question: what is the syntactic structure of homophonous linguistic objects (LOs)¹? Homophonous LOs are traditionally described as having the same sound but different semantic meanings, as shown in table 1. But what about their syntax? Do they have the same or different syntactic structures?

	Homophonous LOs
Meaning	different
Sound	same

Table 1: Traditional accounts

I investigate three sets of Russian homophonous suffixes, as shown in (1), and argue that homophonous LOs differ not in one, but in two respects. Namely, they have not only different meanings, but also different syntactic structures, as illustrated in table 2.

(1)	aišč' 'place/site'	vs.	-išč' 'augmentative (aug.)'
	bec 'person'	vs.	-ec 'diminutive (dim.)'
	ck 'female'	vs.	-k 'diminutive (dim.)'

	Homophonous LOs
Meaning	different
Sound	same
Structure	different

Table 2: Current proposal

Although a lot of literature has been devoted to the syntax of Russian prefixes (including homophonous prefixes) (Babko-Malaya 1999; DiSciullo 1997; Filip 1999, 2005; Ramchand



¹ Many thanks to the anonymous reviewers for their very helpful comments.

2004; Romanova 2004, 2006; Svenonius 2004a, 2004b, 2005; Tatevosov 2008; among others), I am not aware of studies devoted to the syntax of Russian homophonous suffixes.

2. The puzzle

Russian homophonous suffixes differ with respect to their distributional properties. For example, the suffix $-i\check{s}\check{c}'$ with the meaning 'place/site' can change syntactic category (2), gender (3)–(4), and inflectional class (4) of the base.

(2)	a. u-b'ež-á-t'	b.	u-b'éž-išč'-e
	VERB.PREF-run-TH-INF		verb.pref-run-place-n.sg (neut; class I)
	'run away'		'shelter'
(3)	a. požár	b.	požár'-išč'-e
	fire.n.sg (masc; class I)		fire-place-n.sg (neut; class I)
	'fire'		'site of fire'
(4)	a. konopl'-á	b.	konopl'-íšč'-e
	hemp-n.sg (fem; class II)		hemp-place-n.sg (neut; class I)
	'hemp'		'place for gathering hemp'

Its homophonous counterpart, the suffix $-i\check{s}\check{c}'$ with an augmentative meaning, does not change syntactic category, gender, or inflectional class of the base, as shown in (5)–(7).

(5)	a. dóm	b.	dom'-íšč'-e
	house.n.sg (masc; class I)		house-aug-n.sg (masc; class I)
	'house'		'big house'
(6)	a. ruk-á	b.	ruč'-íšč'-a²
	hand-n.sg (fem; class II)		hand-aug-n.sg (fem; class II)
	'hand'		'big hand'
(7)	a. bolót-o	b.	bolót'-išč'-e
	swamp-n.sg (neut; class I)		swamp-aug-n.sg (neut; class I)
	'swamp'		'big swamp'

The suffix -ec with the meaning 'person' can change syntactic category, gender, and inflectional class of the base (8), (9).

(8)	a. pláv-a-t´	b.	plav´-éc
	swim-th-inf		swim-pers.n.sg (masc; class I)
	'to swim'		'swimmer'
(9)	a. gor-á	b.	gór'-ec
	mountain-n.sg (fem; class II)		mountain-pers.n.sg (masc; class I)
	'mountain'		'mountain dweller'

² There is $k \sim \check{c}'$ alternation in this word.

Its homophonous counterpart, the suffix -ec with a diminutive meaning, does not change syntactic category, gender, or inflectional class of the base (10), (11).

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(10) a. brát b. brát'-ec
brother.N.SG (MASC; CLASS I) brother-DIM.N.SG (MASC; CLASS I)
'brother' 'little brother'

(11) a. sos-ún b. sos-un'-éc
suck-NOM.N.SG (MASC; CLASS I)
'suckling' 'little suckling'
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The suffix -k, with the meaning 'female', can change gender and inflectional class of the base (12), (13).

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(12) a. vnúk b. vnúč'-k-a grandchild.n.sg (MASC; CLASS I) grandchild-FEM-N.SG (FEM; CLASS II) 'grandchild' 'granddaughter'

(13) a. stud'ént b. stud'ént-k-a student.n.sg (MASC; CLASS I) student-FEM-N.SG (FEM; CLASS II) 'female student'
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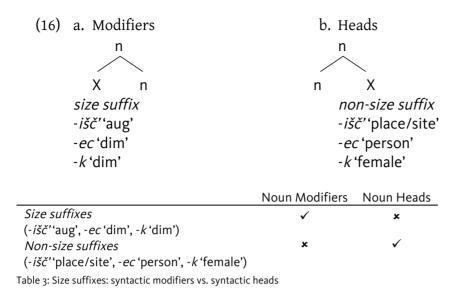
Its homophonous counterpart, the diminutive suffix -k 'dim', does not change syntactic category, gender, or inflectional class of the base (14), (15).

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(14) a. ríb-a b. ríb-k-a
fish-n.sg (fem; class II) fish-dim-n.sg (fem; class II)
'fish' 'little fish'
(15) a. s'irot-á b. s'irót-k-a
orphan-n.sg (masc/fem; class II)
'orphan' 'little orphan'
```

Thus, augmentative and diminutive suffixes (or 'size suffixes') do not normally produce a change in syntactic category, gender, or inflectional class of the base. In contrast, their homophonous counterparts (or 'non-size suffixes') produce such a change. The following question arises: If the only difference between homophonous LOs is their meaning, how do we account for the differences in their distributional properties?

3. Proposal

I propose that homophonous LOs have different syntax. In Russian, they differ in their manner of attachment in a syntactic tree and belong to two distinct syntactic types (syntactic modifiers vs. syntactic heads). I argue that the size suffixes -išč' 'aug', -ec 'dim', and -k 'dim' are noun modifiers, while the non-size suffixes -išč' 'place/site', -ec 'person', and -k 'female' are noun heads, as shown in (16). This proposal goes along the lines of Hippisley's (1996) analysis that showed in the framework of Network Morphology that expressive derivation preserves the word-class and morphosyntactic features of the base.

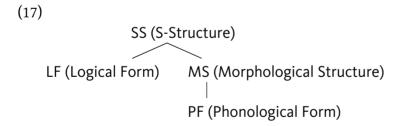


4. Assumptions

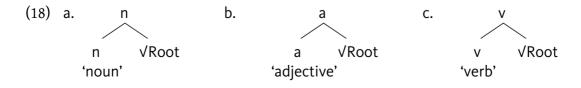
4.1. Adopted framework

I adopt a model of grammar in which syntax and morphology are analyzed as a single engine, as in the framework of Distributed Morphology (DM) (Halle & Marantz 1993, Halle 1997, Marantz 1997, among others).

The central claim of DM is that there is no unified Lexicon. The functions of the Lexicon are *distributed* among other components of the grammar. DM adopts the basic organization of a Principles-and-Parameters grammar, adding the level of Morphological Structure (MS) as the interface between syntax and phonology (17). It separates the terminal elements (or *morphemes*) involved in the syntax from the phonological realization of these elements. The morphemes are supplied with phonological features after Vocabulary insertion at MS.



A particular assumption of DM that I adopt is in regards to the treatment of $\sqrt{\text{Roots}}$ and syntactic categories. $\sqrt{\text{Roots}}$ are language-specific combinations of sound and meaning, such as $\sqrt{\text{break}}$ - or $\sqrt{\text{cat}}$ - in English. $\sqrt{\text{Roots}}$ have no category *per se*, but can never appear 'bare': they have to be categorized by combining with a category-defining functional head, such as the 'little' n, a, or v, to form nouns, adjectives, or verbs, respectively, as illustrated in (18).



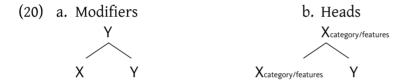
The category-defining functional heads are determined either by phonologically realized or zero affixes, as shown in (19).

(19) the noun 'cat'



4.2. The distinction between syntactic modifiers and syntactic heads

The distinction between syntactic modifiers and syntactic heads lies in the projection of category features (Bachrach & Wagner 2007, Bierwisch 2003, Schütze 1995, Steriopolo 2009). Syntactic modifiers do not project, thus they do not determine syntactic category or grammatical features of the output (e.g., grammatical gender, inflectional class). In contrast, syntactic heads project, thus they determine syntactic category and grammatical features of the output, as shown in (20).



The following diagnostics (21) are used to determine syntactic types of homophonous suffixes.

(21) Diagnostics (cf. Bachrach & Wagner 2007, Steriopolo 2009):

Diagnostic I: Do they change syntactic category?

Diagnostic II: Do they change grammatical gender?

Diagnostic III: Do they change inflectional class?

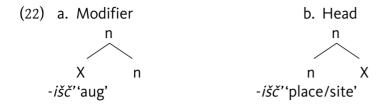
Suffixes are classified as syntactic modifiers if the answers to (21) are negative. Suffixes are classified as syntactic heads if the answers to (21) are affirmative (table 4).

Diagnostics	Modifiers	Heads
I. Do homophonous suffixes change category?	×	✓
II. Do homophonous suffixes change gender?	*	\checkmark
iii. Do homophonous suffixes change class?	×	\checkmark
Table 4: Diagnostics		

5. Analysis

5.1. An analysis of the size suffix -išč' 'aug' and the non-size suffix -išč' 'place/site'

Here I show that the size suffix -išč' 'aug' is a noun modifier, while the non-size suffix -išč' 'place/site' is a noun head, as illustrated in (22).

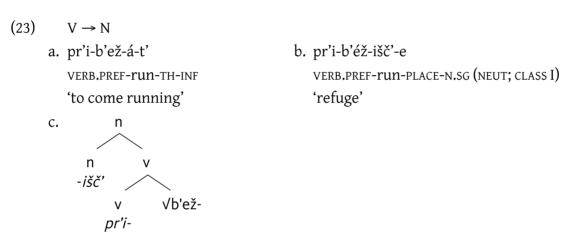


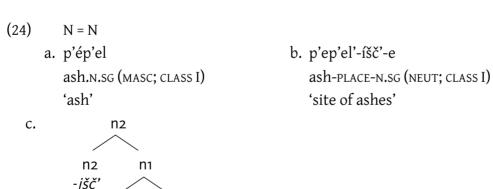
5.1.1. The non-size suffix -išč' 'place/site' is a noun head

Evidence that the suffix -išč' 'place/site' is a syntactic head stems from the fact that it changes syntactic category (§5.1.1.1), grammatical gender (§5.1.1.2), and inflectional class (§5.1.1.3) of the base.

5.1.1.1. Change in syntactic category

Affixation of the non-size suffix -išč' 'place/site' always results in a noun, independent of the category of the base. For example, in (23), the suffix attaches to a verb and returns a noun. In (24), it attaches to a noun also returning a noun.



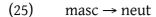


√p'ep'el-

5.1.1.2. Change in grammatical gender

n1

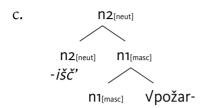
Affixation of the non-size suffix -išč' 'place/site' always results in a neuter noun, independent of the gender of the base. For example, in (25), it attaches to a masculine noun and returns a neuter noun. In (26), it attaches to a feminine noun and also returns a neuter noun.



a. požár

fire.N.SG (MASC; CLASS I)

'fire'



b. požár'-išč'-e

fire-place-n.sg (neut; class I)

'site of fire'

- (26) fem \rightarrow neut
 - a. konopl'-á

hemp-N.SG (FEM; CLASS II)

'hemp'

c. $n2_{[neut]}$ $n2_{[neut]} \quad n1_{[fem]}$ $-i\check{s}\check{c}' \quad vkonopl'-$

b. konopl'-íšč'-e

hemp-place-n.sg (NEUT; class I)

'place for gathering hemp'

5.1.1.3. Change in inflectional class

Affixation of the non-size suffix -išč' 'place/site' always results in a Class I noun, independent of the inflectional class of the base. For example, in (27), it attaches to a Class II noun and returns a Class I noun. In (28), it attaches to a Class I noun also returning a Class I noun. See also (26) above.

- (27) Class II → Class I
 - a. igr-á

game-N.SG (FEM; CLASS II)

'game'

Sum

b. ígr'-išč'-e game-PLACE-N.SG (NEUT; CLASS I) 'place for playing games'

C. $\begin{array}{c} n_{2[class \, I]} \\ n_{2[class \, I]} \\ -i\check{s}\check{c}' \\ n_{1[class \, II]} \\ \hline \end{array}$

- (28) Class I = Class I
 - a. górod

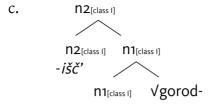
town.N.SG (MASC; CLASS I)

'town'

b. gorod'-íšč'-e

town-place-n.sg (Neut; class I)

'site of ancient settlement'



5.1.1.4. Summary

To summarize, the non-size suffix -išč' 'place/site' is a noun head, because it always forms neuter nouns of Class I, independent of the category or category features of the base, as shown in (29).

5.1.2. The size suffix -išč' 'aug' is a noun modifier

Evidence that -išč' 'aug' is a syntactic modifier stems from the fact that it does not change syntactic category (§5.1.2.1), grammatical gender (§5.1.2.2), or inflectional class (§5.1.2.3) of the base.

5.1.2.1. No change in syntactic category

Affixation of the size suffix -išč' 'aug' does not change syntactic category of the base. This suffix can only attach to nouns and return nouns. For example, in (30), it attaches to the noun base *kras-ot-* 'beauty' evidenced by the nominal suffix -ot, returning an augmentative noun 'big beauty'. Notice no change in gender or inflectional class of the word. The ungrammatical data (31) and (32) illustrate that the suffix cannot attach to a verb returning a verb or returning a noun, respectively. The same holds when attaching to an adjective.

(30) N = Nb. kras-ot'-íšč'-a a. kras-ot-á beaut-/red-nom-aug-n.sg (fem; class II) beaut-/red-nom-n.sg (FEM; CLASS II) 'beauty' 'big beauty' c. *kras'-išč'-a d. n beaut-/red-AUG-N.SG 'big beauty' -išč' Vkrasn -ot

$$(31)$$
 *V = V

a. pr'i-b'ež-á-t'

VERB.PREF-run-TH-INF

'to come running'

 $(32) \qquad *V \rightarrow N$

a. ras-t'er'-á-t'

verb.pref-lose-th-inf

'to lose'

b.*pr'i-b'ež-išč'-a-t'

VERB.PREF-run-AUG-TH-INF

'to come running (aug.)'

b. *ras-t'er'-išč'-e/a

VERB.PREF-lose-AUG-N.SG

'someone who loses things (aug.)'

5.1.2.2. No change in grammatical gender

Affixation of the size suffix -išč' 'aug' does not change grammatical gender of the base. In (33), it attaches to a masculine noun and returns a masculine noun. In (34) it attaches to a feminine noun and returns a feminine noun. In (35), there is no change in the neuter gender.

(33) a. dóm

house.N.SG (MASC; CLASS I)

'house'

s I)

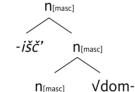
b.

house-aug-N.SG (MASC; CLASS I)

'big house'

dom'-íšč'-e

С.



(34) a. ruk-á

hand-N.SG (FEM; CLASS II)

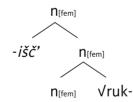
'hand'

b. ruč'-íšč'-a

hand-AUG-N.SG (FEM; CLASS II)

'big hand'

c.



(35) a. bolót-o

swamp-N.SG (NEUT; CLASS I)

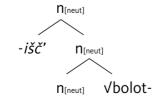
'swamp'

b. bolóť-išč'-e

swamp-Aug-N.SG (NEUT; CLASS I)

'big swamp'

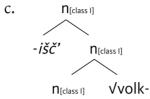
c.



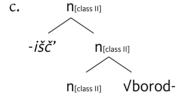
5.1.2.3. No change in inflectional class

Affixation of the size suffix -išč' 'aug' does not change inflectional class of the base. For example, in (36), a Class I noun remains in Class I and in (37), a Class II noun remains in Class II. See also (33)–(35) above.

- (36) a. vólk
 wolf.n.sg (masc; class I)
 'wolf'
- b. volč'-íšč'-ewolf-Aug-N.SG (MASC; CLASS I)'big wolf'

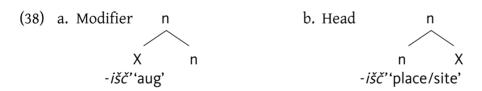


- (37) a. borod-á
 beard-N.SG (FEM; CLASS II)
 'beard'
- b. borod'-íšč'-abeard-AUG-N.SG (FEM; CLASS II)'big beard'



5.1.3. Intermediate conclusion and further question

The size suffix -išč' 'aug' is a noun modifier, while the non-size suffix -išč' 'place/site' is a noun head, as shown in (38).



It is worth mentioning that there in another suffix in Russian, namely the suffix -in, that also has an augmentative meaning (Stankiewicz 1968, p. 108; Zaliznjak 1977, p. 74), for example, dóm 'house' - dom'-ín-a 'big house'; vólk 'wolf' - volč'-ín-a 'big wolf'. The suffix seems to have at least two homophones: (i) -in that has a vulgar meaning (but not augmentative), for example, star'-ík 'old man' - star'-ič'-ín-a 'old man (vulg)'; and (ii) -in that works as a classifier, for example, v'inográd 'vine' - v'inográd'-in-a 'a grape'.

All these homophones (-in 'aug', -in 'vulgar', and -in 'classifier') can change inflectional class and sometimes also grammatical gender of the base. The question arises: how do we account for this? If all these homophones are indeed syntactic heads since they produce a change in inflectional class, what is the difference in their syntactic structures? I leave this interesting question for further research.

5.2. An analysis of the size suffix -ec 'dim' and non-size suffix -ec 'person'

Here I show that the size suffix -ec 'dim' is a noun modifier (39a), while the non-size suffix -ec 'person' is a noun head (39b).

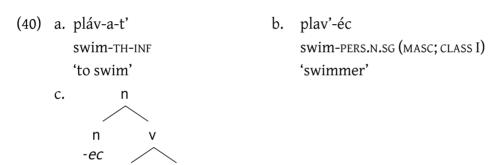


5.2.1. An analysis of the size suffix -ec 'dim' and non-size suffix -ec 'person'

The suffix -ec 'person' is a syntactic head because it can change syntactic category (§5.2.1.1), grammatical gender (§5.2.1.2), and inflectional class (§5.2.1.3) of the base.

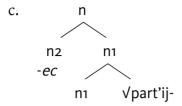
5.2.1.1. Change in syntactic category

Affixation of the non-size suffix *-ec* 'person' always results in a noun, independent of the syntactic category of the base. For example, in (40), it attaches to a verb and returns a noun. In (41), it attaches to an adjective and returns a noun. In (42), it attaches to a noun without a change in the category.



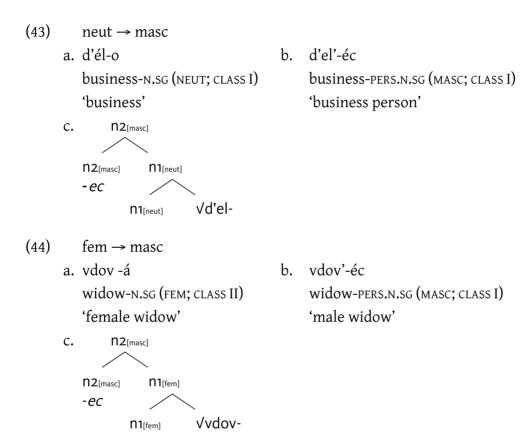
√plav-

- (41) a. górd-ij b. gord'-éc
 proud-MASC.N.SG proud-PERS.N.SG (MASC; CLASS I)
 'proud' 'proud person'
 c. n
 - n a -ec a Vgord-
- (42) a. párt'ij-a b. part'íj-ec party-n.sg (FEM; CLASS II) party-PERS.N.SG (MASC; CLASS I) 'party' 'party member'



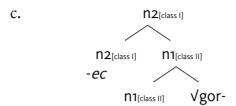
5.2.1.2. Change in grammatical gender

Affixation of the non-size suffix -ec 'person' always results in a masculine noun, independent of the gender of the base. For example, in (43), it attaches to a neuter noun and returns a masculine noun. In (44), it attaches to a feminine noun and returns a masculine noun.



5.2.1.3. Change in inflectional class

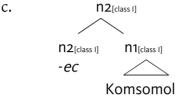
Affixation of the non-size suffix -ec 'person' always results in a Class I noun, independent of the inflectional class of the base. For example, in (45), it attaches to a Class II noun and returns a Class I noun. In (46), it attaches to a Class I noun without changing the inflectional class. See also (43) and (44) above.



(46) a. Komsomól Komsomol.n.sg (MASC; CLASS I)

b. Komsomól'-ecKomsomol-Pers.N.SG (MASC; CLASS I)'a member of Komsomol'

'Komsomol'



5.2.1.4. Summary

To summarize, the non-size suffix -ec 'person' is a noun head, because it always forms neuter nouns of Class I, independent of the category or category features of the base, as shown in (47).

(47) Head
$$n_{[masc]/[class I]}$$

$$n_{[masc]/[class I]} X$$

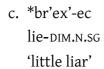
$$-ec'person'$$

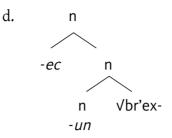
5.2.2. The size suffix -ec 'dim' is a noun modifier

The diminutive suffix -ec 'dim' is a syntactic modifier because it does not change syntactic category (§5.2.2.1), grammatical gender (§5.2.2.2), or inflectional class (§5.2.2.3) of the base.

5.2.2.1. No change in syntactic category

Affixation of the size suffix -ec 'dim' does not change syntactic category of the base. This suffix can only attach to nouns and return nouns. For example, in (48), it attaches to the noun base br'ex-un' 'liar', evidenced by the nominal suffix -un, and returns the diminutive noun br'ex-un'-ec 'little liar'. The ungrammatical data in (49) and (50) show that it cannot attach to a verb to return a verb (49) or to return a noun (50). The same holds when attaching to an adjective.





*pr'i-b'ež-ec-a-t'

$$(49)$$
 *V = V

- a. pr'i-b'ež-á-t' VERB.PREF-run-TH-INF
 - VERB.PREF-run-DIM-TH-INF 'to come running (dim.)' 'to come running'

b.

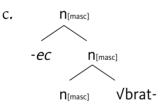
- $V \rightarrow N$ (50)a. ras-t'er'-á-t'
 - b. *ras-t'er'-ec VERB.PREF-lose-TH-INF VERB.PREF-lose-DIM.N.SG 'to lose' 'someone who loses things (dim.)'

5.2.2.2. No change in grammatical gender

Affixation of the size suffix -ec 'dim' does not change grammatical gender of the base. This suffix can only attach to masculine nouns returning masculine nouns, as shown in (51).

(51)masc= masc

- a. brát brother.N.SG (MASC; CLASS I) 'brother'
- b. bráť-ec brother-DIM.N.SG (MASC; CLASS I) 'little brother'



Its allomorphs, the diminutive suffixes -ic 'dim' and -c 'dim', can only attach to feminine and neuter nouns, respectively. These suffixes do not produce a change in grammatical gender of the base, as illustrated in (52) and (53).

(52)fem= fem

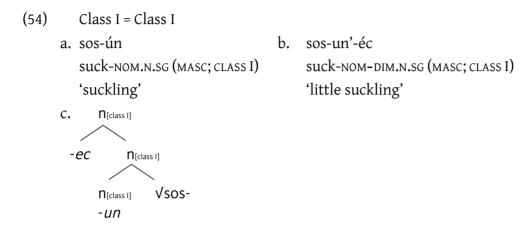
- a. s'estr-á sister-N.SG (FEM; CLASS II) 'sister'
- b. s'estr'-íc-a sister-dim-n.sg (fem; class II) 'little sister'

(53)neut = neut

- a. bolót-o swamp-N.SG (NEUT; CLASS I) 'swamp'
- b. bolót-c-e swamp-dim-n.sg (Neut; class I) 'little swamp'

5.2.2.3. No change in inflectional class

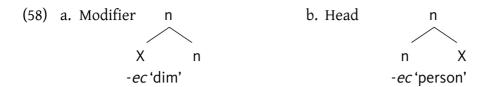
Affixation of the size suffix -ec 'dim' does not change inflectional class of the base. It can only attach to Class I nouns and return Class I nouns, as shown in (54). See also (51) above.



Its allomorphs, the diminutive suffixes -ic 'dim' and -c 'dim', can attach to Class II and Class I nouns, respectively. The suffixes do not change inflectional class of the base, as illustrated in (55) and (56). See also (52) and (53) above. However, the allomorph -c 'dim' can also attach to Class III nouns, in which case there is a change in inflectional class: Class III changes for Class II, as shown in (57). This poses a problem for the current analysis that will be discussed later in §5.3.2.4.

5.2.3. Intermediate conclusion

The size suffix -ec 'dim' is a noun modifier (the allomorph -c 'dim' is problematic when attaching to Class III nouns). The non-size suffix -ec 'person' is a noun head, as shown in (58).



5.3. An analysis of the size suffix -k 'dim' and non-size suffix -k 'female'

I argue that the size suffix -k 'dim' is a noun modifier, while the non-size suffix -k 'female' is a noun head, as illustrated in (59).

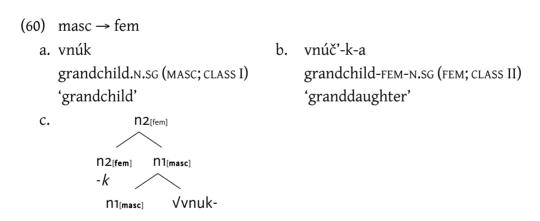


5.3.1. The non-size suffix -k 'female' is a noun head

Evidence that the non-size suffix -k 'female' is a syntactic head stems from the fact that it can change grammatical gender (§5.3.1.1) and inflectional class (§5.3.1.2) of the base.

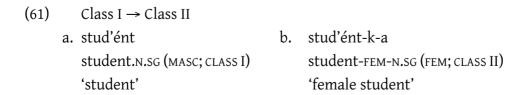
5.3.1.1. The non-size suffix -k 'female' is a noun head

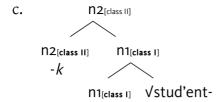
Affixation of the suffix -k 'female' always results in a feminine noun. For example, in (60), it attaches to a masculine noun and returns a feminine noun.



5.3.1.2. Change in inflectional class

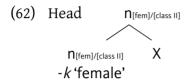
Affixation of the suffix -k 'female' always results in a Class II noun. For example, in (61), it attaches to a Class I noun and returns a Class II noun. See also (60) above.





5.3.1.3. Summary

To summarize, the non-size suffix -k 'female' is a noun head, because it always forms feminine nouns of Class II, as shown in (62).

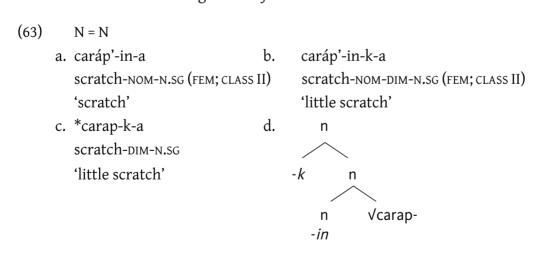


5.3.2. The size suffix -k 'dim' is a noun modifier

Evidence that -k 'dim' is a syntactic modifier comes from the fact that it does not change syntactic category (§5.3.2.1), grammatical gender (§5.3.2.2), or inflectional class (§5.3.2.3) of the base.

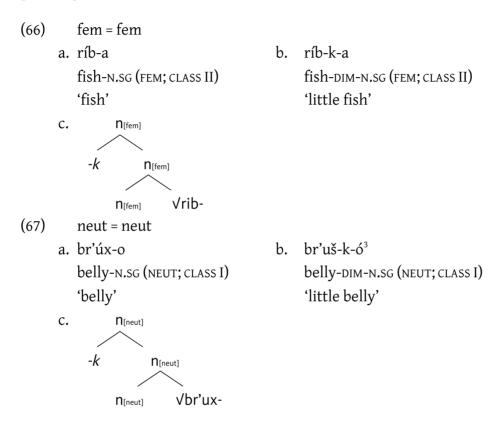
5.3.2.1. No change in syntactic category

Affixation of the size suffix -k 'dim' does not change syntactic category of the base. This suffix can only attach to nouns and return nouns. For example, in (63), it attaches to the noun base carap'-in- 'scratch', evidenced by the nominal suffix -in. It cannot attach to a verb to return a verb or to return a noun, as shown in the ungrammatical examples (64) and (65). The same holds when attaching to an adjective.



5.3.2.2. No change in grammatical gender

Affixation of the size suffix -k 'dim' does not change grammatical gender of the base. It can only attach to feminine and neuter nouns and return feminine and neuter nouns, respectively, as shown in (66) and (67).

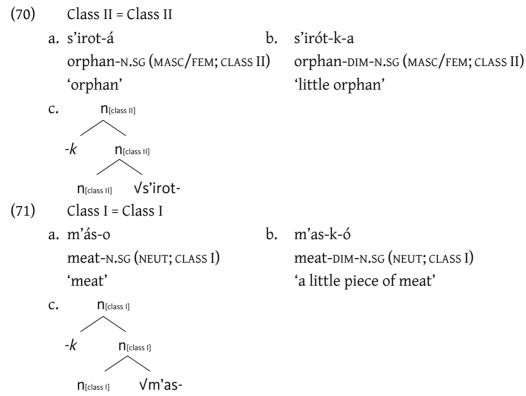


Its allomorphs, the diminutive suffixes -ok 'dim' and -ek 'dim', can only attach to masculine nouns. These suffixes do not change grammatical gender of the base, as shown in (68) and (69).

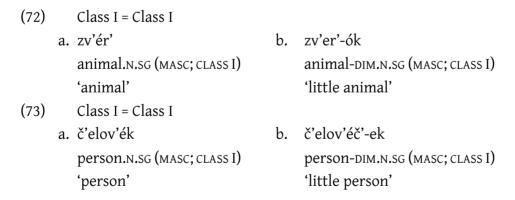
³ There is $x \sim \check{s}$ alternation in this word.

5.3.2.3. No change in inflectional class

When the size suffix -k 'dim' attaches to Class II and Class I nouns, there is no change in inflectional class, as illustrated in (70) and (71). See also (66)–(69) above.



Its allomorphs, the diminutive suffixes -ok 'dim' and -ek 'dim', can only attach to Class I nouns. They produce no change in inflectional class of the base, as shown in (72) and (73). See also (68) and (69) above.



However, when attaching to Class III nouns, the diminutive suffix -k 'dim' shows a different behaviour. The inflectional class changes for Class II, as shown in (74). The same change occurs when the diminutive suffix -c 'dim' attaches to Class III nouns, as described earlier in §5.2.2.3.

```
    Class III → Class II
    a. nóč'
    b. nóč'-k-a
    night.N.SG (FEM; CLASS III)
    night'
    night-DIM-N.SG (FEM; CLASS II)
    'little night'
```

The question arises: What accounts for this behaviour of the size suffixes -k 'dim' and -c 'dim'? Does it mean that these suffixes are syntactic heads associated with an inflectional class of their own? If they were associated with their own inflectional class, they would systematically produce nouns of the same class, like attitude suffixes. However, as the data above show, it is not the case. Class I nouns remain in Class I and Class II nouns remain in Class II, when these suffixes attach. I propose that an answer to this question lies within the phonological properties of Class III nouns.

5.3.2.4. Phonological properties of Class III nouns

As observed in Thelin (1975), there is a systematic correlation between the final consonants of a feminine stem and its inflectional class. A 'stem' is traditionally understood as a $\sqrt{\text{Root}}$ + derivational and/or modifying suffix, excluding an inflectional ending (75).

For example, in (76), the stem consists of the $\sqrt{\text{Root } kr'ep}$ -, the derivational nominal suffix *-ost*, and the modifying suffix *-c*. The stem does not include the inflectional nominative singular ending *-a*.

Thelin notes that feminine stems can end in a 'hard' (non-palatalized) or 'soft' (palatalized) consonant (e.g., $/n/ \sim /n'/$, $/t/ \sim /t'/$). Most consonants can be hard or soft, but c, \check{s} , \check{z} are only hard, while j, \check{c}' , $\check{s}\check{c}'$ are only soft. If the final consonant of the stem is c, j, or the hard member of a hard-soft pair, the noun belongs to Class II (e.g., pt'ic-a 'bird', $all'\acute{e}j$ -a 'alley', stran- \acute{a} 'country'). If the final consonant of the stem is \check{s} , \check{z} , \check{c}' , $\check{s}\check{c}'$ or the soft member of a hard-soft pair, the inflectional class cannot be predicted. In table 5, I list some contrasting examples from Thelin (cited in Corbett 1982, p. 213).

Class II	Class III
p'ésn'-a 'song'	žízn' 'life'
grúš-a 'pear'	túš 'ink'
dáč'-a 'country house'	nóč' 'night'
Table 5: Contrasting examples (Class I	and Class III nouns)

Thus, based on Thelin's generalizations, the difference between Class II and Class III stems is that Class II stems can end in different hard or soft consonants, while Class III stems can

only end in a soft consonant (including \check{c} ' and $\check{s}\check{c}$ ' that are always soft), with the exception of two hard consonants \check{s} and \check{z} . The final consonants of Class III stems are illustrated in table 6.

	Soft	Hard
Final consonants of Class III stems	t', d', n', s', z', č', šč'	š, ž
T 11 6 51 1 1 1 661 111 1		

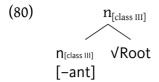
Table 6: Final consonants of Class III stems

The following question arises: what do the soft consonants and the hard consonants \check{s} , \check{z} in table 6 have in common? Under Clements & Hume's (1995) version of feature geometry, front vowels/glides, including the secondary palatalization aspect of palatalized consonants, and are represented as having a [coronal] place node containing the [-anterior] ([-ant]) feature, situated underneath their VPlace (Vocalic Place) node. According to this feature-geometric model, both the palatalized consonants and the hard consonants \check{s} , \check{z} share the [-ant] feature. This means that all Class III nouns in Russian contain [-ant] at the end of the stem. One way to account for this is to assume a floating [-ant] morpheme that marks Class III as such. Under this assumption, the stem of the Class III noun $kr\acute{o}v$ 'blood,' consists of the \sqrt{Root} krov- and the [-ant] morpheme, as shown in (77).

If [-ant] is a floating morpheme and is not part of the $\sqrt{\text{Root}}$, we would expect to find $\sqrt{\text{krov-}}$ without palatalization. This is indeed what we find in Russian. For example, in the adjective krov- áv-ij 'bloody,' the $\sqrt{\text{Root}}$ krov- ends in a hard consonant /v/. More examples of this phenomenon are given in (78) and (79).

The assumption that Class III stems end in the [-ant] morpheme is also supported by historical evidence. In the history of Slavic languages, all Class III nouns ended in /i/, which caused historical palatalization of the preceding consonant. In the course of history, /i/ turned into a so-called *jer* vowel and eventually disappeared in this position (Hermans 2002, Rubach 1986, Yearley 1995, among others). In modern Russian, this suffixal vowel is no longer present, but we can see its traces in the [-ant] feature of the Class III stems.

The representation for Class III nouns is proposed in (80). In this representation, Class III nouns have an internal structure consisting of a $\sqrt{\text{Root}}$ and a floating [-ant] morpheme. This means that all Class III nouns are morphosyntactically derived.



Let us now come back to the problem discussed earlier: the size suffixes -k and -c turning Class III into Class II nouns. As I suggested above, this is related to the phonological properties of Class III nouns. When the suffixes -k and -c attach to Class III nouns, the stem no longer ends in [-ant], but instead it ends in a hard consonant of the suffix. For example, in (81), the stem is $no\check{c}$ -k-. It ends in /k/ which is [+ant]. In (82), the stem is kr'ep-ost-c. It ends in /c/, which is also a [+ant] consonant.

(81) nóč'-k-a
night-dim-n.sg (fem; class II)
'little night'
(82) kr'ep-ost-c-á
strong-nom-dim-n.sg (fem; class II)
'little fortress'

Since the stems above do not end in [-ant] anymore, the newly formed nouns $n\acute{o} \check{c}$ -k-a 'little night' and $kr\acute{e}p$ -ost-c-a 'little fortress' cannot belong to Class III, either. The only class in which they can belong now is Class II, because it is the only class besides Class III that contains feminine nouns. Thus, by changing the final consonant of the stem, the inflectional class also changes.

The augmentative suffix -išč', which ends in a [-ant] consonant, almost never attaches to Class III nouns. For example, when it is added to the nouns $n\acute{o}$ č' 'night' or $kr'\acute{e}p$ -ost' 'fortress,' the resulting data are ungrammatical (83), (84). Thus, there is no evidence here to suggest that there is a change in inflectional class.

(83) *noč'-išč'-(a)
night-Aug-(N.SG)
'big night'
(84) *kr'ep-ost'-išč'-(a)
strong-Nom-Aug-(N.SG)
'big fortress'

To the best of my knowledge, there is only one word in which -išč' attaches to a Class III noun: von'-íšč'-a 'stench'. Here the inflectional class changes from Class III to Class II, which is unexpected under the current hypothesis. Since the suffix -išč' ends in [-ant], we wrongly predict no change in class. On the other hand, it is unclear whether in this particular word, -išč' is indeed a size suffix. The Contemporary Explanatory Dictionary of Russian (Efremova 2006) lists von'-íšč'-a 'stench' as being a vulgar noun, while vón' 'stench' is not vulgar (85). The added meaning of vulgarity is not typical for the augmentative size suffix -išč' (Stankiewicz 1968, p. 99). Compare, for example, with (86), repeated from (36), where -išč'

indicates a large size and has no vulgar meaning. Because of lack of data, it is hard to say whether the current hypothesis is incorrect because it cannot account for (85), or whether there is something special about this particular example. In any case, it remains unclear why the augmentative -išč' cannot attach to Class III nouns, and why in the only case it does attach to a Class III noun (85), it has a vulgar meaning.

(85) a. vón' b. von'-íšč'-a
stench.n.sg (fem; class III) stench' stench (vulg.)'

(86) a. vólk b. volč'-íšč'-e
wolf.n.sg (masc; class I) wolf-aug-n.sg (masc; class I)
'wolf' 'big wolf'

To summarize, I have suggested that Class III stems end in a floating [-ant] morpheme that marks nouns as Class III. It should be pointed out that this analysis conflates two different patterns: (i) deadjectival derived nouns that involve softening of the final consonant and a stress shift, e.g., z'él'en' 'greenery' from z'el'ón-ij 'green', and (ii) all other Class III nouns, including underived ones. The question arises whether we are dealing with two different [-ant] morphemes or just one. This idea requires further research that goes beyond the scope of this paper. Hopefully, the analysis I propose contributes toward understanding why Class III nouns change their inflectional class for Class II when the size suffixes -k and -c attach. If this idea is on the right track, a change in Class III nouns has nothing to do with the syntactic properties of the size suffixes. Instead, it is determined by the phonological properties of Class III nouns.

5.3.3. Intermediate conclusion

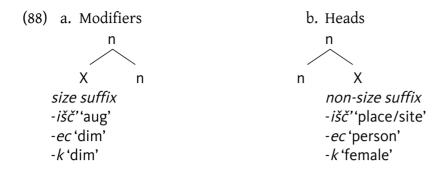
The size suffix -k 'dim' is a noun modifier (in spite of the change in Class III nouns), while the non-size suffix -k 'female' is a noun head (87).



6. Conclusions and further questions

6.1. Conclusions

The Russian homophonous suffixes under investigation have different syntactic structures and belong to two distinct syntactic types: heads vs. modifiers. The size suffixes are noun modifiers, while the non-size suffixes are noun heads, as illustrated in (88). This is schematized in table 7.



	Noun modifier	Noun head
Size suffix - <i>išč</i> ''aug'	✓	×
Size suffix -ec 'dim'	✓	×
Size suffix -k 'dim'	✓	×
Non-size suffix -išč''place/site'	*	✓
Non-size suffix -ec 'person'	*	✓
Non-size suffix -k 'female'	×	✓

Table 7: Distinct syntactic types of homophonous suffixes in Russian

This case study of Russian homophonous suffixes shows that homophonous LOs differ not in one, but in two respects. Not only do they differ in meaning, but also in syntactic structure, leaving just the sound the same, as illustrated in table 8.

	Homophonous LOs	
Meaning	different	
Sound	same	
Structure	different	

Table 8: Homophonous LOs are different in meaning and syntactic structures

6.2. Further question

A further research question is whether this property of homophonous LOs also holds cross-linguistically. The following part of the paper is based on my preliminary work on diminutive suffixes in Kolyma Yukaghir (see also Steriopolo 2013), a language genetically unrelated to Russian. Kolyma Yukaghir is a moribund language spoken by about 50 people in the settlements of Nelemnoye and Zaryanka, Upper Kolyma district, Yakutia Republic, and in Magadan region, Russia. The data are from A Grammar of Kolyma Yukaghir by Maslova (2003). In Kolyma Yukaghir, there is a set of homophonous suffixes -die: (i) the diminutive suffix -die and (ii) the suffix -die that is used to make Russian borrowings into Yukaghir more 'Yukaghir-like'.

6.2.1. The diminutive suffix -die in Kolyma Yukaghir

The diminutive is derived by means of the diminutive suffix -die (-tie after obstruents). For example, in (89), the word uø 'child' is used with the diminutive suffix -die. In (90), the suffix attaches to the word terikie 'old woman'.

(89) taŋ pajpe uø-die laŋin juø-de-če.
that woman child-dim direction see-detransitive-perf.intransitive.1sg
'I looked at the girl (dim.).' (Maslova 2003, 577)

(90) terikie-die iŋd'e-t modo-j.
old.woman-dim sew-same-subject.marker.imperf. sit-intransitive.3sg.
'The old woman (dim.) is/was sitting and sewing.' (Maslova 2003, 168)

When used with the plural suffix -p(ul), the diminutive suffix follows the plural marker, as shown in (91c) and (92c) (cf. Maslova 2003, pp. 51, 74, 129, 428, 474, 576).

(91) a. uø-die b. uør-pe c. uø:re-p-tie child-dim child-pl child-pl-dim 'child (dim.)' 'children' 'children (dim.)'

(92) a. terikie-die b. terike-pul c. terike-p-tie old.woman-dim old.woman-pl old.woman-pl-dim 'old woman (dim.)' 'old women' 'old women (dim.)'

In (93), there is an example of this ordering used in text.

(93) uø:re-p-tie, jaq ukej-delle qāqā-ŋin child-pl-dim imperative go.out-same.subj.perf grandfather-dat tit qorobo igeje-š-telle tadī-ŋi-k.

your cow rope-proprietive.caus-same.subj.perf give-pl-imp.2

'Children (dim.), go, tie your cow and give it to grandfather.' (Maslova 2003, 474)

6.2.2. The 'Yukaghir-like' suffix -die in Kolyma Yukaghir

A homophonous counterpart of the diminutive suffix is the suffix -die that is productively used in combination with borrowings from Russian. Its function is to make a word more 'Yukaghir-like' (Maslova 2003, p. 130). In such cases, there is no diminutive meaning. For example, šuke - šuke-die (from the Russian word schuka 'pike'), čajka - čajka-die (from the Russian word chajka 'sea gull'). The suffix is commonly used with Russian first names, for example, Aleks'ej-die (from the Russian first name Aleksej).

(94) šuke-die tāt eskerī-l'-ie-l'el-u-m pike-Yukaghir connective attack-0-ingressive-inferential-0-trans.3sg 'The pike (Yukaghir) attacked (him).' (Maslova 2003, 523)

(95) aduøn aleksej-die čune-l this Aleksej-Yukaghir whistle-subject.focus 'It is Aleksej (Yukaghir) who is whistling.' (Maslova 2003, 453)

When used with the plural suffix -p(ul), the 'Yukaghir-like' -die precedes the plural marker (96c), contrary to its homophonous counterpart, the diminutive -die, that follows it (91c), (92c).

(96) a. šuke-die b. šuke-pul c. šuke-die-pe pike-Yukaghir pike-pl pike-Yukaghir-pl 'pike (Yukaghir)' 'pikes' 'pikes (Yukaghir)'

In (97), the same word is used in text, where different types of fish are listed. Here, it is the only word that is used with the Yukaghir suffix -die, because it is the only Russian borrowing.

(97) d'e tude-gele gudel'e-š-ie-l'el-nā tāt ani-n discourse.part connective he-acc prepare-caus-ingr-ingr-3pl.tr fish-attr pulut-pe, tin šuke-die-pe n'atn'ujā-pe čamani-pe īče-pul old.man-pl this pike-Yukaghir-pl burbot-pl white.salmon-pl sturgeon-pl jen-ben-pe. other-rel.nominal.pl 'Well, the fish elders began to prepare him for the trip, the pikes (Yukaghir), burbots, white salmons, sturgeons, and others.' (Maslova 2003, 564)

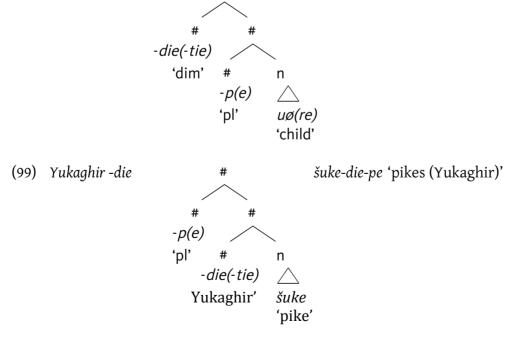
On a cautious note, there are many examples of *-die* used in singular, but just a few examples used in plural. More empirical research is required to fully understand the ordering of morphemes in this very interesting language.

6.2.3. Different syntax of the homophonous suffixes in Kolyma Yukaghir

(98) Diminutive -die(-tie)

Based on the data above, the homophonous suffixes -die 'dim' and -die 'Yukaghir-like' differ in terms of ordering of morphemes. The diminutive -die follows the plural marker, while the 'Yukaghir-like' -die precedes it, as illustrated in (98) and (99). Both suffixes are analyzed as syntactic modifiers because they do not produce any change in syntactic category or category features of the base.

uø:re-p-tie 'children (dim.)'



If this conclusion is correct, we observe that the syntactic differences in homophonous LOs are either in the manner (as in Russian) or in the place (as in Kolyma Yukaghir) of

attachment. More empirical and theoretical research is needed on the syntax of homophonous LOs across languages.

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