# Syntactic types of Russian expressive suffixes Olga Steriopolo

University of British Columbia olgasteriopolo@hotmail.com

#### ABSTRACT

In this paper, I investigate Russian expressive suffixes. I show that they have different formal properties: some suffixes can change categorial properties of the base, while others cannot. I propose that this difference in formal properties is syntactically conditioned: some expressive suffixes are syntactic heads, while others are syntactic modifiers.

Keywords: morphosyntax; morphology; Russian; expressive; suffixes.

#### 1 Introduction

Russian expressive suffixes differ in their formal properties. Some expressive suffixes change categorial properties of the base form, while others never do. For example, in (1), the expressive suffix -in changes grammatical gender and inflectional class of the noun bolót-o 'swamp'. In (2), a different expressive suffix, -c, does not change gender or inflectional class of this noun.

- (1) a. bolót-o

  swamp-N.SG (NEUT; CLASS I)

  'swamp'
- b. bolót'-in-a

  swamp-EXPR-N.SG (FEM; CLASS II)

  'swamp (expressive)'
- (2) a. bolót-o

  swamp-N.SG (NEUT; CLASS I)

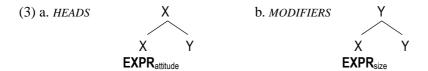
  'swamp'
- b. bolót-**c**-e

  \*\*swamp-EXPR-N.SG (NEUT; CLASS I)

  \*\*swamp (expressive)\*

With respect to the data above, the following questions arise: (i) What are the formal morphosyntactic properties of Russian expressive suffixes? and (ii) What accounts for the differences in their formal properties?

As is shown in Steriopolo (2008), expressive suffixes in Russian belong to different semantic types: Type I suffixes express the speaker's attitude towards the referent (attitude suffixes); while Type II suffixes refer to the size of the referent (size suffixes). In this paper, I argue that Russian expressive suffixes also differ syntactically. Attitude suffixes are syntactic heads (3a), while size suffixes are syntactic modifiers (3b).



The traditionally accepted distinction between heads and modifiers lies in the projection of category features. Heads project (i.e., they determine a category and grammatical features of the output), while modifiers do not project (i.e., they do not determine a category and grammatical features of the output) (see Bierwisch 2003, Schütze 1995, Bachrach & Wagner 2007 for a discussion on heads vs. modifiers). Based on this distinction, the following three diagnostics will be used to determine syntactic types of Russian expressive suffixes (4).

(4) Diagnostics (cf. Bachrach & Wagner 2007, p. 4)

Diagnostic I: Do expressive suffixes change syntactic category? Diagnostic II: Do expressive suffixes change grammatical gender? Diagnostic III: Do expressive suffixes change inflectional class?

Expressive suffixes are classified as syntactic heads if the answers to the questions in (4) are affirmative. In contrast, expressive suffixes are classified as modifiers if the answers to the questions are negative (Table 1).

 Table 1

 Diagnostics for syntactic heads vs. syntactic modifiers

Diagnostics	Syntactic heads	Syntactic modifiers
Do expressive suffixes change syntactic category?	<b>~</b>	*
Do expressive suffixes change grammatical gender?	~	*
Do expressive suffixes change inflectional class?	~	*

I use these diagnostics to argue that attitude suffixes are heads, while size suffixes are modifiers. In §2, I analyze a change in syntactic category; in §3, I analyze a change in grammatical gender; in §4, I analyze a change in inflectional class; and in §5, I present the conclusions.

## 2 Change in category

In this section, I apply Diagnostic I (change in syntactic category). I show that attitude suffixes produce a change in syntactic category and behave like syntactic heads. Size suffixes do not produce a change in syntactic category and behave like syntactic modifiers.

I provide evidence that attitude suffixes merge with any input category (a/v/n) and always form a noun, no matter what the input category is. In contrast, size suffixes only merge with nouns that remain nouns. In other words, attitude suffixes act as nominalizers (5a), while size suffixes act as noun modifiers (5b).



In §2.1, I analyze attitude suffixes; in §2.2, I analyze size suffixes; and in §2.3, I present the conclusions.

# 2.1 Attitude suffixes

- (6) a. žád-**n**-ij stingy-ADJ-MASC.SG 'stingy'
- b. žad-**n'-úg**-a stingy-ADJ-EXPR-N.SG (MASC/FEM) 'stingy animate (vulgar)'
- (7) a. gr'áz-**n**-ij *dirty-ADJ-MASC.SG* 'dirty'
- b. gr'az-**n-úx**-a dirty-ADJ-EXPR-N.SG (MASC/FEM) 'dirty animate (vulgar)'
- (8) a. rod-**n**-ój kin-ADJ-MASC.SG 'dear'
- b. rod-**n-úl**'-a *kin-ADJ-EXPR-N.SG* (MASC/FEM)

  'dear animate (affectionate)'

The data in (9)–(11) show that attitude suffixes can also turn verbs into nouns. For example, in (9), the word pr'i-l'ip- $\acute{a}$ -t' 'to cling' is a verb formed with a productive verbal prefix pri-. When the attitude suffix - $\acute{a}l$  is attached, the verb becomes a noun pr'i-l'ip- $\acute{a}l$ -a 'clinging animate (vulgar)'. In (10), the word ras-t'er'- $\acute{a}$ -t' 'to lose' is also a verb formed with a verbal prefix ras-. When the attitude suffix - $\acute{a}$ s is added, the verb turns into a noun ras-t'er'- $\acute{a}$ s 'animate that loses things (affectionate)'.

- (9) a. **pr'i**-l'ip-á-t'

  VERB.PREF-cling-TH-INF

  'to cling'
- b. **pr'i**-l'ip-**ál**-a *VERB.PREF-cling-EXPR-N.SG* (MASC/FEM)

  'clinging animate (vulgar)'
- (10) a. **ras**-t'er'-á-t'

  VERB.PREF-lose-TH-INF

  'to lose'
- b. **ras**-t'er'-**áš**-a *VERB.PREF-lose-EXPR-N.SG* (MASC/FEM)

  'animate who loses things (affectionate)'

- (11) a. **za-**v'ir-á-t' *VERB.PREF-lie-TH-INF* 'to lie'
- b. **za**-v'ir-**úx**-a *VERB.PREF-lie-EXPR-N.SG* (MASC/FEM) 'lying animate (affectionate)"

The data in (12)–(13) illustrate that attitude suffixes can also combine with nouns. Nouns that are used with attitude suffixes do not change their syntactic category. For example, in (12a), the word  $\check{c}ud$ - $\acute{a}k$  'an eccentric' is a noun formed with a productive nominal suffix -ak. In (12b), the vulgar suffix -in is attached, which does not change the syntactic category. The word  $\check{c}ud$ - $a\check{c}'$ -in-a 'an eccentric (vulgar)' is still a noun.

- (12) a. čud-**ák**wonder-NOM.N.SG (MASC)

  'an eccentric'
- b. čud-ač'-ín-a

  wonder-NOM-EXPR-N.SG (MASC/FEM)

  'an eccentric (vulgar)'
- (13) a. kras-ot-á

  pretty-NOM-N.SG (FEM)

  'beauty/prettiness'
- b. kras-ot-úl'-a pretty-NOM-EXPR-N.SG (MASC/FEM) 'pretty animate (affectionate)'

To summarize, attitude suffixes turn adjectives and verbs into nouns. Thus, they can change syntactic category, which, according to Diagnostic I, is a property of syntactic heads. Attitude suffixes always form nouns, regardless of the input category (14).

**Table 2** Attitude suffixes (change in a category)

EXPR <sub>attitude</sub>	Input	Output
-án', -áš, -ón, -úl', -ún', -úr, -ús', -úš,	adjective	noun
-ág, -ák, -ál, -án, -ár, -áx, -íl, -in, -ób, -ot, -óx, -úg, -úk, -úx	verb	noun
or, ox, ug, ux, ux	noun	noun

## 2.2 Size suffixes

In contrast to attitude suffixes, size suffixes do not change syntactic category. The data in (15)–(16) illustrate this behaviour. Neither adjectives nor verbs can turn into nouns when merging with a size suffix. For example, in (15) the adjective  $\check{z}\acute{a}d$ -n-ij 'stingy' does not become a noun when size suffixes are added. Instead, all the data used with size suffixes are ungrammatical.

b. \*žad-**n-ok**stingy-ADJ-EXPR.N.SG

'stingy animate (diminutive)'

- c. \*žad-**n**'-**ec**stingy-ADJ-EXPR.N.SG

  'stingy animate (diminutive)'
- (16) a. gr'áz-**n**-ij *dirty-ADJ-MASC.SG* 'dirty'
  - c. \*gr'az-n'-ec
    dirty-ADJ- EXPR.N.SG
    'dirty animate (diminutive)'
- d. \*žad-n'-išč'-estingy-ADJ-EXPR-N.SG'stingy animate (augmentative)'
- b. \*gr'az-**n-ok** *dirty-ADJ-EXPR.N.SG*'dirty animate (diminutive)'
- d. \*gr'az-n'-išč'-e

  dirty-ADJ-EXPR-N.SG

  'dirty animate (augmentative)'

In (17), the verb *pr'i-l'ip-á-t'* 'to cling' cannot turn into a noun when size suffixes are added. Here, like in the examples above, all the data used with size suffixes are ungrammatical.

- (17) a. **pr'i**-l'ip-á-t' *VERB.PREF-cling-TH-INF*'to cling'
  - c. \*pr'i-l'ip'-ec

    VERB.PREF-cling-EXPR.N.SG

    'clinging animate (diminutive)'
- b. \*pr'i-l'ip-ok

  VERB.PREF-cling-EXPR.N.SG

  'clinging animate (diminutive)'
- d. \*pr'i-l'ip'-išč'-e

  VERB.PREF-cling-EXPR.N.SG

  'clinging animate (augmentative)'

I have shown above that size suffixes cannot turn adjectives and verbs into nouns. In addition, they cannot combine with adjectives and verbs to preserve a category. The data below show that size suffixes cannot combine with adjectives to mean 'a little bit' or 'a lot'. For example, in (18b), the diminutive suffix *-ok* is added to the adjective 'stingy'. The resulting word \**žad-n-ok* does not mean 'a little bit stingy', but instead it is ungrammatical. The same holds for (18c) and (18d), where the diminutive *-ec* and the augmentative *-išč*' are ungrammatical.

- (18) a. žád-**n**-ij stingy-ADJ-MASC.SG 'stingy'
  - c. \*žad-n'-ec stingy-ADJ-EXPR.N.SG 'a little bit stingy (diminutive)'
- b. \*žad-**n-ok**stingy-ADJ-EXPR.N.SG

  'a little bit stingy (diminutive)'
- d. \*žad-**n**'-**išč'**-e

  stingy-ADJ-EXPR-N.SG

  'a lot stingy (augmentative)'

In (19), size suffixes are added to the verb 'to cling'. The resulting words do not mean 'to cling a little bit' or 'to cling a lot', but instead they are ungrammatical.

- (19) a. **pr'i**-l'ip-á-t'

  VERB.PREF-cling-TH-INF

  'to cling'
- b. \*pr'i-l'ip-ok/ek

  VERB.PREF-cling-EXPR.N.SG

  'to cling a little bit (diminutive)'

- c. \*pr'i-l'ip'-ec VERB.PREF-cling-EXPR.N.SG 'to cling a little bit (diminutive)'
- d. \*pr'i-l'ip'-išč'-e VERB.PREF-cling-EXPR.N.SG 'to cling a lot (augmentative)'

The data above illustrate that not only are size suffixes unable to turn adjectives and verbs into nouns, but they are also unable to combine with these categories to express the meaning 'a little bit' or 'a lot'. Although size suffixes do not combine with adjectives or verbs, they are productively used with nouns expressing the meaning 'little' or 'big'. For example, in (20), the size suffix -ok attaches to the noun čud-ák 'an eccentric'. The resulting word is a noun with the diminutive meaning čud-ač'-ók 'a little eccentric'. In (21), the size suffix -išč' is added to the noun kras-ot-á 'beauty'. The resulting word is a noun with the augmentative meaning kras-ot-íšč'-a 'big beauty'.

b. čud-ač'-ók

- (20) a. čud-**ák** wonder-NOM.N.SG (MASC)
  - wonder-NOM-EXPR.N.SG (MASC) 'an eccentric' 'a little eccentric'
- (21) a. kras-**ot**-á pretty-NOM-N.SG (FEM) 'beauty/prettiness'
- b. kras-ot'-íšč'-a pretty-NOM-EXPR-N.SG (FEM) 'big beauty'
- (22) a. sos-**ún** suck-NOM.N.SG (MASC) 'suckling'
- b. sos-un'-éc suck-NOM-EXPR.N.SG (MASC) 'little suckling'

To summarize, size suffixes can only combine with nouns with no change in syntactic category: a noun always remains a noun. Based on Diagnostic I (change in syntactic category), size suffixes behave like syntactic modifiers (namely as noun modifiers), since modifiers do not change syntactic category (23).

Table 3 Size suffixes (No change in category)

EXPR <sub>size</sub>	Input	Output
-k/-ek/-ok/-ik; -c/-ec/-ic; -išč'	adjective	*noun/*adjective
	verb	*noun/*verb
	noun	noun

At this point, however, the evidence is not fully conclusive, because size suffixes could be noun heads that can only combine with nouns to create nouns. In §3 and §4, I provide more evidence from Russian grammatical gender and inflectional class that shows that size suffixes are noun modifiers.

#### 2.3 Conclusion

I have shown above that attitude suffixes can turn adjectives and verbs into nouns. They can also combine with nouns without changing syntactic category. In other words, no matter what the input category is, the resulting category is always a noun.

Size suffixes demonstrate a different behaviour. They cannot combine with adjectives and verbs, but can only combine with nouns. When used with nouns, they never change syntactic category: nouns always remain nouns (Table 4).

**Table 4**Comparison of attitude and size suffixes

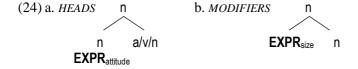
	Input	Output
EXPR <sub>attitude</sub>	adjective	noun
	verb	noun
	noun	noun
EXPR <sub>size</sub>	adjective	*noun/*adjective
	verb	*noun/*verb
	noun	noun

To conclude, attitude suffixes and size suffixes have different formal properties with respect to a change in syntactic category. Attitude suffixes can change syntactic category of the base, while size suffixes cannot (Table 5).

**Table 5**Change in category

	Change in category
EXPR <sub>attitude</sub>	<b>&gt;</b>
EXPR <sub>size</sub>	*

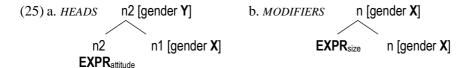
Based on Diagnostic I, since attitude suffixes can change syntactic category, they behave like syntactic heads (24a). Size suffixes cannot change syntactic category, therefore, they behave like syntactic modifiers (24b).



# 3 Change in grammatical gender

In this section, I apply Diagnostic II (change in grammatical gender). I show that attitude suffixes can change grammatical gender and thus, they behave like syntactic heads (25a).

Size suffixes, on the other hand, cannot change grammatical gender and thus, they behave like syntactic modifiers (25b).



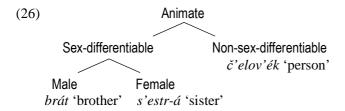
In §3.1, I analyze attitude suffixes; in §3.2, I analyze size suffixes; and in §3.3, I present the conclusions.

#### 3.1 Attitude suffixes

Here I present evidence that attitude suffixes can change grammatical gender. Russian grammatical gender is dependent on animacy and natural gender, which are part of the semantic information of the  $\sqrt{\text{Root}}$  (in the sense of Marantz 1997; notation from Pesetsky 1995). To show how attitude suffixes change gender, we first need to understand how grammatical gender is assigned. For this reason, I first look at gender assignment; after that, I analyze a change in gender. In §3.1.1, I deal with animate nouns; in §3.1.2, I deal with inanimate nouns; and in §3.1.3, I summarize the findings.

#### 3.1.1 Animate nouns

Russian animate nouns denote living beings, such as humans, animals, and insects (Corbett 1980). Animate nouns are sex-differentiable or non-sex-differentiable (Corbett 1982, 1991). Sex-differentiable nouns are those that denote natural gender (male or female) as part of their semantics. Non-sex-differentiable nouns do not denote natural gender (26).



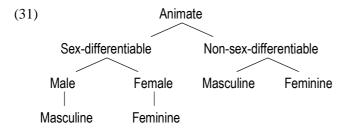
For example, the nouns  $br\acute{a}t$  'brother' and  $s\'estr-\acute{a}$  'sister' are animate and sex-differentiable. They are animate because they denote living beings. They are sex-differentiable because  $br\acute{a}t$  'brother' can only denote a male being, while  $s\'estr-\acute{a}$  'sister' can only denote a female being. In contrast, the noun  $\check{c}\'elov\'ek$  'person' is non-sex-differentiable because it can denote persons of either sex.

In Russian sex-differentiable nouns, natural gender always takes precedence over grammatical gender (Corbett 1982, 1991). Thus, a noun that has the natural gender 'male' is always masculine. A noun that has the natural gender 'female' is always feminine (27)–(28).

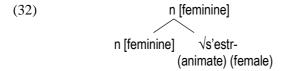
(27)	a.	xoróš-ij	brát	b.	*xoróš-aja	brát
		good-MASC.SG	brother.N.SG (MASC)	)	good- <b>FEM</b> .SG	brother.N.SG (FEM)
		'good brother'			'good brother'	

As Russian non-sex-differentiable nouns do not have natural gender, there is no dependency of grammatical gender on natural gender. Like sex-differentiable nouns, non-sex-differentiable ones are either masculine or feminine; but unlike sex-differentiable nouns, non-sex-differentiable nouns are assigned grammatical gender arbitrarily. For example, compare  $\check{c}$  'elov'ék 'person' and p'ersón-a 'person'. Both nouns are non-sex-differentiable because they can denote male and female persons, but  $\check{c}$ 'elov'ék 'person' is masculine, while p'ersón-a 'person' is feminine (29)–(30).

Thus, sex-differentiable nouns can be masculine or feminine depending on whether the natural gender is male or female, respectively. Non-sex-differentiable nouns can also be masculine or feminine, but instead of being determined by natural gender, their grammatical genders are assigned arbitrarily (31).



In the framework of Distributed Morphology, animacy and natural gender are analyzed as part of the semantic information of the  $\sqrt{\text{Root}}$  (Müller 2005). For example, the semantics of the  $\sqrt{\text{Root}}$  s'estr- 'sister' indicate that it is animate (i.e., it can only denote a living being) and sex-differentiable (i.e., it can only denote a female). When the  $\sqrt{\text{Root}}$  s'estr- is nominalized by combining with a functional head n, the grammatical gender of the resulting noun depends on the natural gender 'female' which is encoded as part of the semantics of the  $\sqrt{\text{Root}}$ . As the natural gender 'female' always determines feminine grammatical gender, the resulting word s'estr- $\hat{a}$  'sister' is a feminine noun (32).



The  $\sqrt{\text{Root } brat}$ - 'brother', on the other hand, can only denote a male being. Since the natural gender 'male' always determines masculine grammatical gender, the resulting word  $br\acute{a}t$  'brother' is a masculine noun (33).

The  $\sqrt{\text{Roots }}\check{c'elov'ek}$  'person' and p'erson- 'person' do not have natural gender as part of their semantics and can denote both male and female persons. As a result, their grammatical gender is assigned arbitrarily: the noun  $\check{c'elov'}\acute{ek}$  'person' is masculine (34a), and the noun  $p'ers\acute{on}-a$  'person' is feminine (34b).

(34) a. n [masculine] b. n [feminine] n [masculine] 
$$\sqrt{\check{c}}$$
'elov'ek- (animate) n [feminine]  $\sqrt{person-(animate)}$ 

Below I discuss a different kind of animate noun. These nouns can trigger either masculine or feminine agreement and are traditionally called 'common gender' nouns. For example, the noun *s'irot-á* 'orphan' triggers either masculine or feminine agreement (35).

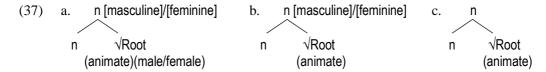
I propose that the distributional difference between common gender nouns and nouns that are not in common gender, is that the former are unspecified for grammatical gender, while the latter are specified. In Russian, common gender nouns are only animate; there are no inanimate nouns of common gender. And since Russian animate nouns are either masculine or feminine, common gender nouns are also either masculine or feminine. This is seen from masculine or feminine agreement in the data (35). A proposed structure for a common gender noun is given in (36).

To summarize, in Russian, there are the following three types of animate nouns:

Type I: Animate sex-differentiable nouns whose grammatical gender is determined by their natural gender (37a)

Type II: Animate non-sex-differentiable nouns whose grammatical gender is assigned randomly (37b)

Type III: Animate common gender nouns that are unspecified for grammatical gender (37c)



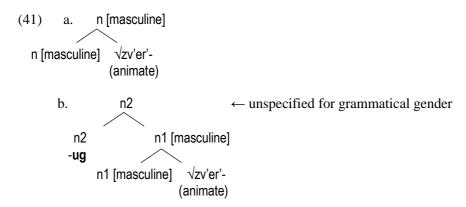
Now that gender assignment in Russian has been discussed, we can apply Diagnostic II to see if there is any change in grammatical gender when attitude suffixes are added. Here I show that attitude suffixes indeed produce a change in grammatical gender. This change involves Type II nouns (animate, non-sex-differentiable).

In (38a), the noun  $zv'\acute{e}r'$  'animal' is animate because it denotes a living being. It is non-sex-differentiable (Type II), because it does not denote natural gender as part of its semantics  $(zv'\acute{e}r')$  'animal' denotes both male and female animals). The grammatical gender assigned to this noun is masculine. In (38b), the attitude suffix  $-\acute{u}g$  attaches, which changes the grammatical gender of the base. The resulting word  $zv'\acute{e}r'$ - $\acute{u}g$ -a 'animal (vulgar)' is now a common gender noun (MASC/FEM).

The difference in agreement between a common gender noun zv'er'-ug-a 'animal (vulgar)' and a masculine noun zv'er' 'animal' is shown below. In (39), zv'er'-ug-a triggers either masculine or feminine agreement. In (40), zv'er' 'animal' can only trigger masculine agreement.

- (39) a. bol'š-ój zv'er'-**úg**-a big-ADJ.MASC.SG animal-EXPR-N.SG (MASC) 'big animal (vulgar)'
  - b. bol'š-ája zv'er'-**úg**-a
    big-ADJ.FEM.SG animal-EXPR-N.SG (FEM)
    'big animal (vulgar)'
- (40) a. bol'š-ój zv'ér'
  big-ADJ.MASC.SG animal.N.SG (MASC)
  'big animal'

As I proposed above, common gender nouns are unspecified for grammatical gender. For this reason, they can trigger either masculine or feminine agreement. Thus, a change in grammatical gender should more precisely be described as a blocking of grammatical gender, when a masculine noun becomes unspecified for grammatical gender (41).



The same effect of gender blocking is seen in (42). In (42a), the noun  $tv\acute{a}r'$  'animal' is animate, because it denote a living being. It is non-sex-differentiable (Type II), because it does not denote natural gender as part of its semantics ( $tv\acute{a}r'$  'animal' denotes both male and female animals). The grammatical gender of this noun is feminine. In (42b), the attitude suffix  $-\acute{u}k$  is added, which blocks grammatical gender of the base. The resulting noun  $tvar'-\acute{u}k-a$  'animal (vulgar)' is now in common gender.

The difference in agreement between a common gender noun *tvar'-úk-a* 'animal (vulgar)' and a feminine noun *tvár'* 'animal' is shown below. In (43), *tvar'-úk-a* can trigger either masculine or feminine agreement, while in (44), *tvár'* can only trigger feminine agreement.

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(43) a. bol'š-ój tvar'-úk-a
big-ADJ.MASC.SG animal-EXPR-N.SG (MASC)

b. bol'š-ája tvar'-úk-a
big-ADJ.FEM.SG animal-EXPR-N.SG (FEM)

'big animal (vulgar)'
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(44) a. bol'š-ája tvár'

big-ADJ.FEM.SG animal.N.SG (FEM)

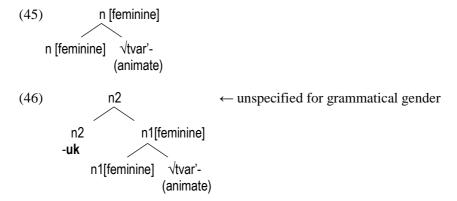
'big animal'

b. \*bol'š-ój tvár'

big-ADJ.MASC.SG animal.N.SG (MASC)

'big animal'

Proposed structures for these data are shown in (45)–(46). In (45), the noun  $tv\acute{a}r$ ' 'animal' is assigned feminine grammatical gender. In (46), the attitude suffix  $-\acute{u}k$  is attached and it blocks grammatical gender of the base. As a result, the word tvar'- $\acute{u}k$ -a 'animal (vulgar)' triggers either masculine or feminine agreement.



It is important to show that the blocking effects of grammatical gender also hold for data with nominalizing suffixes. In (47a), the noun *dur-ák* 'stupid animate' is formed by means of a productive nominalizing suffix -ak and is masculine. In (47b), the attitude suffix -in is added. As a result, the word *dur-ač'-ín-a* 'stupid animate (vulgar)' becomes a common gender noun.

(47) a. dur-**ák** b. dur-**ač'-ín-a**stupid-NOM.N.SG (MASC) stupid-NOM-EXPR-N.SG (MASC/FEM)

'stupid animate' 'stupid animate (vulgar)'

The difference in agreement between a common gender noun *dur-ač'-ín-a* 'stupid animate (vulgar)' and a masculine noun *dur-ák* 'stupid animate' is shown below. In (48), *dur-ač'-ín-a* triggers either masculine or feminine agreement, while in (49), *dur-ák* can only trigger masculine agreement.

- (48) a. bol'š-ój dur-**ač'-ín-a**big-ADJ.MASC.SG stupid-NOM-EXPR-N.SG (MASC)
  'very stupid animate (vulgar)'
  - b. bol'š-ája dur-**ač'-ín-a**big-ADJ.FEM.SG stupid-NOM-EXPR-N.SG (FEM)
    'very stupid animate (vulgar)'

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(49) a. bol'š-ój dur-ák
big-ADJ.MASC.SG stupid-NOM.N.SG (MASC)
'big stupid animate'
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b. \*bol'š-ája dur-ák
 big-ADJ.FEM.SG stupid-NOM.N.SG (FEM)
 'big stupid animate'

Proposed structures for these data are given in (50)–(51). In (50), the noun *dur-ák* 'stupid animate' is assigned masculine grammatical gender. In (51), the attitude suffix *-in* blocks this gender creating an unspecified noun *dur-ač'-ín-a* 'stupid animate (vulgar)'.

(50) n [masculine] n 
$$\sqrt{\text{dur}}$$
-ak (animate)

(51) 
$$n2$$
  $\leftarrow$  unspecified for grammatical gender  $n2$   $n1$  [masculine]  $n1$   $\sqrt{dur}$   $-ak$  (animate)

To summarize, Russian attitude suffixes block grammatical gender of Type II nouns (animate, non-sex-differentiable). Nouns that are used with attitude suffixes are always in common gender, regardless of grammatical gender of the input (Table 6).

**Table 6** Attitude suffixes (used with Type II nouns)

EXPR <sub>attitude</sub>	Input	Output
-án', -áš, -ón, -úl', -ún', -úr, -ús',	animate, [masculine]	animate, unspecified
-úš, -ág, -ák, -ál, -ár, -áx, -íl, -in, -ób, -ot, -óx, -úg, -úk, -úx	animate, [feminine]	animate, unspecified

For consistency, I will show that nouns of the remaining two types (Type I and Type III) do not change grammatical gender when attitude suffixes are attached. I start by looking at Type I nouns (animate, sex-differentiable).

Type I nouns denote natural gender as part of their semantics. As natural gender determines grammatical gender, male nouns are always masculine and female nouns are always feminine. When attitude suffixes merge with these nouns, the nouns remain semantically male or female, and therefore, there is no change in gender (including blocking effects). This is illustrated in the data in (52)-(55).

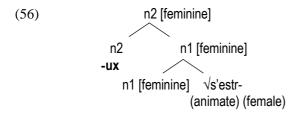
For example, in (52), the noun *s'estr-á* 'sister' is sex-differentiable because the natural gender 'female' is part of its semantics. When the attitude suffix  $-\alpha$  is attached, the resulting noun *s'estr-áx-a* 'sister (vulgar)' is still semantically female, and therefore, it is feminine. In (53), the noun sin 'son' is sex-differentiable because the natural gender 'male' is part of its semantics. When the attitude suffix  $-\alpha$  'is added, the resulting noun sin- $\alpha$  'son (affectionate)' remains semantically male, and therefore, it is masculine.

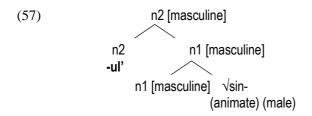
- (52) a. s'estr-á sister-N.SG (FEM) 'sister'
- b. s'estr-**úx**-a sister-EXPR-N.SG (FEM) 'sister (vulgar)'
- (53) a. sín son.N.SG (MASC) 'son'
- b. sin-úl'-a
  son-EXPR-N.SG (MASC)
  'son (affectionate)'

(54) a. d'év-a *girl-N.SG* (**FEM**) 'girl'

- b. d'ev-**áx**-a girl-EXPR-N.SG (FEM) 'girl (vulgar)'
- (55) a. pár'en' *guy.N.SG* (**MASC**)
  'guy'
- b. parn'-**úg**-a guy-EXPR-N.SG (MASC) 'guy (vulgar)'

Proposed structures for the data above are given in (56)–(57). In (56), the attitude suffix  $-\dot{u}x$  does not block grammatical gender of the noun because the natural gender 'female' is part of the semantics of the  $\sqrt{\text{Root } s'estr}$ - and it determines feminine grammatical gender. In (57), the attitude suffix  $-\dot{u}l'$  also does not block the grammatical gender of the noun because the natural gender 'male' is part of the semantics of the  $\sqrt{\text{Root } sin}$ - and it determines masculine grammatical gender.





Another way to analyze the data in (52)–(53) would be to show that attitude suffixes merge directly with  $\sqrt{\text{Roots}}$ , and not with nouns (54)–(55). However, for the current analysis of grammatical gender this does not make a difference, since the output gender, as well as the dependency of grammatical gender upon natural gender, remain the same under either analysis.

(54) 
$$\begin{array}{ccc} & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

To summarize, attitude suffixes do not block grammatical gender of Type I nouns (animate, sex-differentiable) (Table 7).

**Table 7** Attitude suffixes (used with Type I nouns)

EXPR <sub>attitude</sub>	Input	Output
-án', -áš, -ón, -úl', -ún', -úr, -ús',	animate, male,	animate, male,
-úš, -ág, -ák, -ál, -ár, -áx, -íl, -in,	[masculine]	[masculine]
-ób, -ot, -óx, -úg, -úk, -úx	animate, female,	animate, female,
	[feminine]	[feminine]

Let us now consider Type III nouns (common gender). Type III nouns are unspecified for grammatical gender and can trigger either masculine or feminine agreement. When attitude suffixes attach to such nouns, they remain unspecified for gender, and therefore, there is no change (and no blocking effects) of grammatical gender. For example, in (56), the word *s'irot-á'* orphan' is a common gender noun. In (57), the attitude suffix *-in* is attached, which this does not produce a change in gender. The resulting noun *s'irot'-in-a'* orphan (vulgar)' is still in common gender.

- (56) a. bol'š-ój s'irot-á
  big-ADJ-MASC.SG orphan-N.SG (MASC)
  'big orphan'
  - b. bol'š-ája s'irot-á
    big-ADJ-FEM.SG orphan-N.SG (FEM)
    'big orphan'
- (57) a. bol'š-ój s'irot'-**ín**-a
  big-ADJ-MASC.SG orphan-EXPR-N.SG (MASC)
  'big orphan'

The proposed structure for *s'irot'-in-a* 'orphan (vulgar)' is given in (58). The attitude suffix -*in* merges with a common gender noun which is unspecified for grammatical gender. The resulting noun is also unspecified for grammatical gender.

(58) 
$$n2$$
  $\leftarrow$  unspecified for grammatical gender  $\rightarrow$   $n1$   $\leftarrow$  unspecified for grammatical gender  $\rightarrow$   $n1$   $\sqrt{s'irot}$  (animate)

As in the cases with sex-differentiable nouns described above, the noun s'irot'-in-a 'orphan (vulgar)' can be analyzed in a different way: the attitude suffix -in merges directly with the  $\sqrt{\text{Root } s'irot}$ - (59). As in the cases above, this does not make a difference for the current analysis of grammatical gender because the output gender is still the same.

(59) 
$$n \leftarrow \text{unspecified for grammatical gender}$$

$$\begin{array}{ccc} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

To summarize, attitude suffixes do not change grammatical gender of Type III nouns (common gender nouns) (Table 8).

**Table 8**Attitude suffixes (used with Type III nouns)

EXPR <sub>attitude</sub>	Input	Output
-án', -áš, -ón, -úl', -ún', -úr, -ús', -úš, -ág, -ák, -ál, -ár, -áx, -íl, -in, -ób, -ot, -óx, -úg, -úk, -úx	animate, unspecified	animate, unspecified

To conclude, attitude suffixes produce a change in grammatical gender of Type II nouns (animate, non-sex-differentiable). The change is seen in blocking effects of grammatical gender. When attitude suffixes merge with Type II nouns, the resulting words become Type III nouns (animate, common gender). When attitude suffixes merge with Type I (animate, sex-differentiable) or Type III nouns, there is no change in grammatical gender (Table 9: change in grammatical gender is indicted in **bold**).

Tittitude Bullines (un	,	
	Input	Output
	Type I	Type I
	(animate, sex-differentiable)	(animate, sex-differentiable)
EXPR <sub>attitude</sub>	Type II	Type III
	(animate, non-sex-differentiable)	(animate, common gender)
	Type III	Type III
	(animate, common gender)	(animate, common gender)

**Table 9**Attitude suffixes (animate nouns)

The question of why attitude suffixes produce different effects in grammatical genders will be dealt with in §4 (change in inflectional class). In §4, I argue that Russian attitude suffixes are inherently specified for inflectional class and that the differences in grammatical genders fall out directly from their inflectional class.

#### 3.1.2 Inanimate nouns

Let us now look at inanimate nouns to understand whether attitude suffixes produce any change in grammatical gender of these nouns. Inanimate nouns can have masculine, feminine, or neuter grammatical genders in Russian (60). For example, *žurnál* 'magazine' is masculine, *gaz'ét-a* 'newspaper' is feminine, and *p'is'-m-ó* 'letter' is neuter.

Here I show that attitude suffixes produce a change in grammatical gender of inanimate nouns. The majority of attitude suffixes (with the exception of  $-\acute{a}n$ ) create feminine nouns, regardless of grammatical gender of the input. The attitude suffix  $-\acute{a}n$  creates masculine nouns regardless of grammatical gender of the input.

I start by analyzing attitude suffixes that form feminine nouns. For example, the attitude suffix -*in* can attach to nouns of all grammatical genders (masculine, feminine, neuter). In every case, it forms a feminine noun. In (61), a masculine noun *ovrág* 'ditch' becomes feminine when the attitude suffix -*in* is added. In (62), a feminine noun *jám-a* 'ditch' remains feminine when -*in* is added. In (63), a neuter noun *bolót-o* 'swamp' becomes feminine when the suffix -*in* is added.

(61) a. ovrág
ditch.N.SG (MASC)
'ditch'
(62) a. jám-a
pit-N.SG (FEM)
'pit'

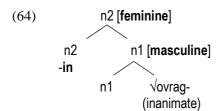
b. ovráž-in-a
ditch-EXPR-N.SG (FEM)
'ditch (vulgar)'
b. jám'-in-a
pit-EXPR-N.SG (FEM)
'pit (vulgar)'

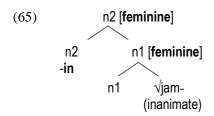
- (63) a. bolót-o swamp-N.SG (NEUT) 'swamp'
- b. bolót'-in-a

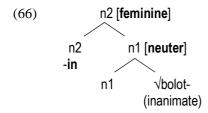
  swamp-EXPR-N.SG (FEM)

  'swamp (vulgar)'

Structures for the data above are given in (64)–(66).







More examples that show that attitude suffixes form feminine nouns are given in (67)–(70).

- (67) a. sm'éx

  laughter.N.SG (MASC)

  'laughter'
- b. sm'ex-ot-á laughter-EXPR-N.SG (FEM) 'laughter (vulgar)'
- (68) a. skúk-a boredom-N.SG (FEM) 'boredom'
- b. skuk-**ot**-á

  boredom-EXPR-N.SG (FEM)

  'boredom (vulgar)'
- (69) a. stíd shame.N.SG (MASC) 'shame'
- b. stid-**úx**-a
  shame-EXPR-N.SG (FEM)
  'shame (vulgar)'
- (70) a. kómnat-a room-N.SG (FEM) 'room'
- b. komnat-úx-a
  room-EXPR-N.SG (FEM)
  'room (vulgar)'

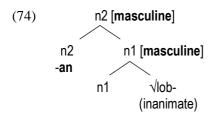
Unlike the majority of attitude suffixes, the attitude suffix  $-\acute{a}n$  forms nouns of masculine gender. For example, in (71), the noun  $l\acute{o}b$  'forehead' is masculine. When the suffix  $-\acute{a}n$  is attached, the resulting noun  $lob-\acute{a}n$  is also masculine. In (72), the noun  $gub-\acute{a}$  'lip' is feminine. When the attitude suffix  $-\acute{a}n$  is attached, the resulting noun  $gub-\acute{a}n$  becomes masculine. In (73), the noun  $p\acute{u}z-o$  'belly' is neuter. When  $-\acute{a}n$  is attached, the resulting noun  $puz-\acute{a}n$  also becomes masculine.

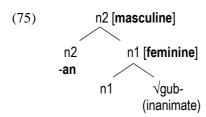
- (71) a. lób forehead.N.SG (MASC) 'forehead'
- b. lob-án forehead-EXPR.N.SG (MASC)'animate with distinct forehead (vulgar)'

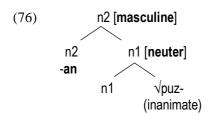
- b. gub-**án** *lip-EXPR.N.SG* (MASC)

  'animate with distinct lips (vulgar)'
- (73) a. púz-o belly-N.SG (NEUT) 'belly'
- b. puz-ánbelly-EXPR.N.SG (MASC)'animate with distinct belly (vulgar)'

Proposed structures for (71)–(73) are given in (74)–(76).







To conclude, attitude suffixes change grammatical gender of inanimate nouns. Most attitude suffixes (except  $-\acute{a}n$ ) form feminine nouns, regardless of the gender of the input. The attitude suffix  $-\acute{a}n$  forms masculine nouns, regardless of the gender of the input (Table 10: change in grammatical gender is indicted in **bold**).

**Table 10** Attitude suffixes (inanimate nouns)

EXPR <sub>attitude</sub>	Input	Output
-án', -áš, -ón, -úl', -ún', -úr, -ús',	inanimate, [masculine]	inanimate, [feminine]
-úš, -ág, -ák, -ál, -ár, -áx, -íl, -in, -ób, -ot, -óx, -úg, -úk, -úx	inanimate, [neuter]	inanimate, [feminine]
	inanimate, [feminine]	inanimate, [feminine]
-án	inanimate, [masculine]	inanimate, [masculine]
	inanimate, [neuter]	inanimate, [masculine]
	inanimate, [feminine]	inanimate, [masculine]

## 3.1.3 Summary

Attitude suffixes produce a change in grammatical gender which depends on animacy and natural gender of the  $\sqrt{\text{Root}}$ . The change is seen in animate non-sex-differentiable nouns (Type II) that become common gender nouns, unspecified for grammatical gender (Type III). The change is also seen in inanimate nouns that become either feminine (with the majority of attitude suffixes) or masculine (with the attitude suffix  $-\hat{a}n$ ) (Table 11).

 Table 11

 Attitude suffixes (change in grammatical gender)

EXPR <sub>attitude</sub>	Input	Output
-án', -áš, -ón, -úl', -ún', -úr, -ús', -úš, -ág, -ák, -ál, -ár, -áx, -íl, -in, -ób, -ot, -óx, -úg, -úk, -úx	animate (non-sex-differentiable), <b>any input</b>	animate (non-sex-differentiable), <b>unspecified</b>
-0л, -иg, -ик, -ил	inanimate, any input	inanimate, [ <b>feminine</b> ]
-án	inanimate, <b>any input</b>	inanimate, [ <b>masculine</b> ]

According to Diagnostic II (change in grammatical gender), attitude suffixes behave like syntactic heads because they produce a change in grammatical gender (77).

Based on these findings, the following question arises: Why is there variation in grammatical gender of nouns that are used with attitude suffixes? If attitude suffixes changed grammatical gender by assigning it, we would expect no variation. On the other hand, if attitude suffixes do not assign grammatical gender, what determines a change in gender? Later (§4) I will argue that attitude suffixes do not assign grammatical gender, but instead they assign inflectional class. I will show that inflectional class determines a change in grammatical gender, which accounts for the variation in gender observed above.

## 3.2 Size suffixes

Unlike attitude suffixes that can change grammatical gender of a noun, size suffixes do not produce a change in gender. Size suffixes can attach to both animate and inanimate nouns of all grammatical genders with the same result: no change in gender. The evidence is provided below.

Let us first look at animate Type I nouns (sex-differentiable). As I discussed above, these nouns denote natural sex (male or female) as part of their semantics. When size suffixes attach to Type I nouns, there is no change in grammatical gender. For example, in (78), the noun *brát* 'brother' is sex-differentiable because natural gender 'male' is encoded in its meaning. As males are always masculine, the noun *brát* 'brother' is assigned masculine grammatical gender. When the size suffixes *-ik* and *-ec* are added to this noun, there is no change in gender. The resulting nouns *brát'-ik* 'brother (dim)' and *brát'-ec* 'brother (dim)' are still masculine.

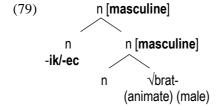
- (78) a. brát

  brother.N.SG (MASC)

  'brother'
  - c. bráť-**ec**brother-EXPR.N.SG (MASC)

    'brother (diminutive)'

A structure for (78) is given in (79).



b. bráť -ik

brother-EXPR.N.SG (MASC)

'brother (diminutive)'

Another example of a sex-differentiable noun is given in (80). The noun  $s'estr-\acute{a}$  'sister' denotes natural gender 'female' as part of its meaning. As females are always feminine, the noun  $s'estr-\acute{a}$  'sister' is assigned feminine grammatical gender. When the size suffix -ic is added, there is no change in gender and the resulting noun  $s'estr'-\acute{a}c-a$  'sister (dim)' remains feminine.

b. s'estr'-**íc**-a
sister-EXPR-N.SG (FEM)
'sister (diminutive)'

A structure for (80) is given in (81).

Let us now look at animate Type II nouns (non-sex-differentiable). Nouns of this type do not denote natural gender as part of their semantics. Here I show that when size suffixes attach to Type II nouns, there is also no change in grammatical gender. For example, in (82), the noun  $zv'\acute{e}r'$  'animal' is non-sex-differentiable because it denotes both male and female animals. The noun  $zv'\acute{e}r'$  'animal' is assigned masculine grammatical gender. When the size suffixes -ok and  $-iš\acute{c}$ ' merge with this noun, there is no change in gender. The resulting nouns  $zv'\acute{e}r'$ - $\acute{o}k$  'animal (dim)' and  $zv'\acute{e}r'$ - $\acute{o}s\acute{c}'$ -e 'animal (aug)' are still masculine.

b. zv'er'-**ók**animal-EXPR.N.SG (MASC)

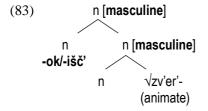
'animal (diminutive)'

```
c. zv'er'-išč'-e

animal-EXPR-N.SG (MASC)

'animal (augmentative)'
```

A structure for (82) is given in (83). The noun  $zv'\acute{e}r'$  'animal' is masculine and does not change gender when the size suffixes -ok and  $-i\check{s}\check{c}'$  are attached.



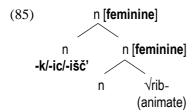
Another example of a non-sex-differentiable noun is shown in (84). The noun *ríb-a* 'fish' is assigned feminine grammatical gender. When the size suffixes *-k*, *-ic*, and *-išč*' merge with this noun, there is no change in gender. The resulting nouns *ríb-k-a* 'fish (dim)', *ríb'-ic-a* 'fish (dim)', and *ríb'-išč'-a* 'fish (aug)' are still feminine.

- (84) a. ríb-a *fish-N.SG* (**FEM**) 'fish'
  - c. ríb'-**ic**-a

    fish-EXPR-N.SG (FEM)

    'fish (diminutive)'
- b. ríb-k-a fish-EXPR-N.SG (FEM) 'fish (diminutive)'
- b. ríb'-**išč'**-a fish-EXPR-N.SG (FEM) 'fish (augmentative)'

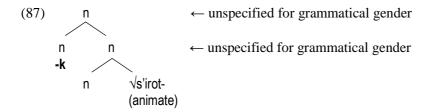
A structure for (84) is in (85). The noun rib-a 'fish' is feminine and does not change gender when the size suffixes -k, -ic, and  $-i\check{s}\check{c}$ ' are attached.



We have discussed animate nouns of Type I and Type II, and we have illustrated that size suffixes do not change grammatical gender of these nouns. One more type of animate noun that remains to be discussed is Type III (common gender nouns).

I show that size suffixes produce no change in grammatical gender of Type III nouns. For example, in (86), the noun s'irot- $\acute{a}$  'orphan' is a common gender noun because it can trigger either masculine or feminine agreement (MASC/FEM). When the size suffix -k merges with this noun, there is no change in gender. The resulting noun s' $ir\acute{o}t$ -k-a 'orphan (dim)' is still a common gender noun that can trigger either masculine or feminine agreement.

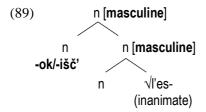
A structure for (86) is given in (87). The noun *s'irot-á* 'orphan' is unspecified for grammatical gender. When the size suffix -k merges with this noun, there is no change in grammatical gender. The resulting noun is still unspecified and can trigger either masculine or feminine agreement.



So far, I have analyzed different types of animate nouns. I have illustrated that there is no change in grammatical gender of animate nouns when size suffixes are added. Below I propose an analysis of inanimate nouns and show that size suffixes do not produce a change in grammatical gender of inanimate nouns.

Let us look at inanimate nouns of different grammatical genders (masculine, feminine, and neuter). In (88),  $l'\acute{e}s$  'forest' is masculine. When the size suffixes -ok and  $-iš\acute{c}$ ' are added, there is no change in grammatical gender. The resulting nouns  $l'es-\acute{o}k$  'forest (dim)' and  $l'es-\acute{t}š\acute{c}'-e$  'forest (aug)' are still masculine.

A proposed structure for (88) is given in (89). The noun  $l'\acute{e}s$  'forest' is assigned masculine gender and does not change gender when the size suffixes -ok and  $-iš\check{c}$ ' are attached.



In (90),  $r \acute{o} \check{s} \check{c}' - a$  'grove' is feminine. When the size suffix -ic is added, there is no change in grammatical gender. The resulting noun  $r \acute{o} \check{s} \check{c}' - ic - a$  'grove (dim)' is still feminine.

A structure for (90) is given in (91).

In (92), bol ot - o 'swamp' is neuter. When the size suffixes -c and  $-i\check{s}\check{c}$ ' are added, there is no change in grammatical gender. The resulting nouns bol ot - c - e 'swamp (dim)' and bol ot '-išc' - e 'swamp (aug)' are still neuter.

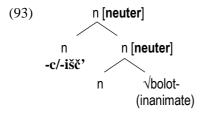
- (92) a. bolót-o swamp-N.SG (NEUT) 'swamp'
  - c. bolót'-**išč'**-e *swamp-EXPR-N.SG* (**NEUT**) 'swamp (augmentative)'

b. bolót-**c**-e

\*\*swamp-EXPR-N.SG (NEUT)

\*\*swamp (diminutive)

A structure for (92) is given in (93).



To summarize, size suffixes produce no change in grammatical gender of both animate and inanimate nouns (Table 12).

**Table 12**Size suffixes (No change in grammatical gender)

EXPR <sub>size</sub>	Input	Output	
	animate, male, [masculine]	animate, male, [masculine]	
-k/-ek/-ok/-ik; -c/-ec/-ic; -išč'	animate, female, [feminine]	animate, female,[feminine]	
c/ cc/ ic, isc	animate, [masculine]	animate, [masculine]	
	animate, [feminine]	animate, [feminine]	
	inanimate, [masculine]	inanimate, [masculine]	
	inanimate, [feminine]	inanimate, [feminine]	
	inanimate, [neuter]	inanimate, [neuter]	

According to Diagnostic II, since size suffixes do not change grammatical gender, they behave like syntactic modifiers (94).

#### 3.3 Conclusions

I applied Diagnostic II (change in grammatical gender). I showed that attitude suffixes can change grammatical gender, which means that they are syntactic heads (95a). Size suffixes, on the other hand, do not change grammatical gender, which means that they are syntactic modifiers (95b).

These findings are summarized in Table 13.

**Table 13** Change in the grammatical gender

	Change in grammatical gender
EXPR <sub>attitude</sub>	<b>→</b>
EXPR <sub>size</sub>	*

## 4 Change in inflectional class

I apply Diagnostic III (change in inflectional class). I show that attitude suffixes change inflectional class and thus, they behave like syntactic heads (96a). In contrast, size suffixes do not change inflectional class and thus, they behave like syntactic modifiers (96b).

In §4.1, I analyze attitude suffixes; in §4.2, I analyze size suffixes; and in §4.3, I present the conclusions.