## **Adjectival Diminutives in Turkish**

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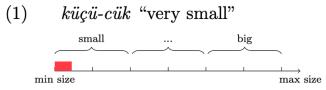
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Turkish uses two adjectival diminutive morphemes: -CIk only combines with a subset of adjectives that are on the low end of a scale while -CE can combine with any scalar adjective.

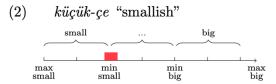
		-CIk	-CE
kısa	short	✓	<b>✓</b>
küçük	small	✓	✓
исих	cheap	*	✓
yakın	close	*	✓

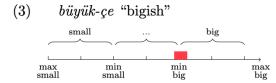
uzun	long	*	✓
büyük	big	*	✓
pahalı	expensive	*	✓
uzak	far	*	✓

Descriptively, -CIk picks out a vague subinterval at the lowest end of an abstract scale. By contrast, -CE picks out a vague interval at the lowest end of a scalar adjective. Unlike -CIk, it does not operate on the entire



scale. Instead, it operates on the subinterval denoted by the adjective.



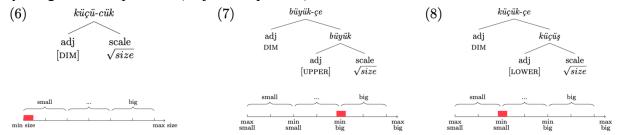


Assuming that gradable adjectives are relations between individuals and degrees on a scale [2,3,4], we propose that -CIk and -CE share the same semantic function DIM, which combines with a scalar element and returns the subset of the lowest intervals on the scale. Adopting DM [1], we assume that some scalar adjectives are constructed in the syntax via a combination of a scalar root and an interval function. This returns a subscale identified by the content of the function as in (4) and (5). The output of the function combining with the scale is also a scale which has its own upper and lower ends. This allows the scalar adjectives to further combine with comparative and superlative operators (and other degree modifiers).



When the DIM function combines directly with the scale root as in (6), it is realized as -CIk and denotes an interval at the lowest end of the scale. When it combines with any other category as in (7) or (8), it is realized as -CE picking out an interval at the lowest end of the subscale denoted

by the gradable expression (AdjP, CompP, etc.).



The unified DIM analysis accounts for a range of differences between -CIk and -CE diminutives. First, the fact that -CIk only appears on adjectives that are on the lower end of a scale (e.g. *small*.) follows automatically. -CIk is realized when DIM combines with the scale root which results in an adjective at the lower end of the scale. On the other hand, -CE is realized after a scalar adjective is created, allowing it to combine with adjectives from either end of a scale. Second, the analysis accounts for the root allomorphy observed with -CIk but not -CE. With -CIk DIM is local enough to trigger root allomorphy while -CE always has an intervening head blocking it.

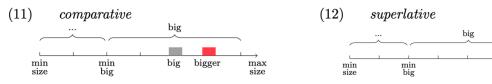
One final set of facts that is accounted for by the proposed analysis comes from comparatives and superlatives. -CIk can appear with superlatives only, whereas -CE can appear with both.

(9) a. en kısa-cık most short-dim "the very shortest" b. \*daha kısa-cık more short-dim

"very shorter"

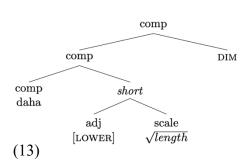
(10) a. en kısa-ca
most short-dim
"the most shortish"
b. daha kısa-ca
more short-dim
"more shortish"

Following standard views of comparatives and scales [2,5], we assume that the comparative operator orders two non-overlapping degree intervals as in (11). Superlative operator combines with an interval and returns the ultimate point at the relevant end of the scale.



In (9-b), the co-occurrence of -CIk and the comparative morpheme leads to a contradiction as -CIk denotes the lowest possible interval on the scale which cannot be further shifted by a comparative operator while (9-a) is fine as the superlative takes the interval denoted by the output of the DIM function and returns the ultimate point in the lower bound. In (10-a), DIM combines with the scalar adjective kisa "short" and returns its lowest bound. The structure of (10-b) needs a little more

attention, though. Intuitively, (10-b) denotes "short-erish" but not "short-ish-er". DIM already returns the lower bound of a scale which cannot be further modified by the comparative operator. This is the reason why (9-b) is ungrammatical. Instead, in (10-b) the adjective first combines with the comparative operator, which shifts the interval, and then the DIM combines with this output to return the lowest interval on the new scale. The structure



biggest

of (10-b) is given in (13). While -CIk shows derivational characteristics (root allomorphy, non-productiveness) -CE displays inflectional behavior (no-root allomorphy or productiveness). Following DM literature, we argue that the distinction follows from whether DIM combines directly with a lexical root or a functional category (AdjP, CompP, etc.).

**Selected references:** [1] Halle, Morris, Alec Marantz. 1993. Distributed morphology and the pieces of inflection. [2] Kennedy, Christopher and Louise McNally. 2005. Scale structure and the semantic typology of gradable predicates. Language 81: 345–381. [3] von Stechow, Arnim. 1984. Comparing semantic theories of comparison. Journal of Semantics 3:1–77. [4] Heim, Irene. 1985. Notes on comparatives and related matters. [5] Schwarzschild, R., & Wilkinson, K. 1999. Interval semantics for scalar predication.

## Partial motivation in kwa diminutive nominals

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#### Abstract

One effect of lexicalization on word-formation is the possibility of having complex words without identifiable bases. Indeed, as Booij (2007: 17) observes, "[a]n important effect of lexicalization of complex words is that one of its constituent words may get lost, whereas the complex word survives". Non-lexical bases in complex words, usually referred to as 'bound roots' or 'cranberry morphs' are cross-linguistically attested (cf. Bolinger 1948; Chomsky 1970; Booij 2007; 2010; Jackendoff & Audring 2020). English, for instance, has many suffixed nouns with roots that do not function as word by themselves, including nouns with the suffix *-ist*, as exemplified in (1).

(1)	<ul> <li>a. social-ist</li> </ul>	'socialist'	d. chem-ist	'chemist'	
	b. Stalin-ist	'Stalinist'	e. bapt-ist	'Baptist'	
	c. aut-ist	'autist'	f. altru-ist	'altruist'	(Booij & Audring 2018: 3)

Kwa languages are replete with several instances of complex words with non-lexical bases (cf. Amfo & Appah 2019; Appah & Amfo 2011). In this study, we focus on (complex) diminutive nominals with non-lexical bases, based on data collected from both primary and secondary sources, from three Kwa (Niger-Congo) languages, namely Akan, Nzema and Esahie: primary data emanates from native speaker elicitation sessions. Diminution in Kwa (Niger-Congo, Kwa) is generally expressed by means of suffixation, via the operators -bá/-wá (Christaller 1875; Dolphyne 1988; Appah/Amfo 2011). Consider the Esahie and Akan examples in (1) and (2), respectively.

## **Esahie**

(1)		<b>Output</b>	<b>Internal Structure</b>	Gloss
	a.	dadeε-ba	[knive-DIM]	'penknive'
	b.	boaen-ba	[sheep-DIM]	'lamb'

### Akan

(2)		<u>Output</u>	<u>Internal Structure</u>	Gloss
	a.	kraman-ba	[dog-DIM]	'puppy'
	b.	kwaye-wa	[forest-DIM]	'(small) forest'(Amfo & Appah 2019: 4)

The diminutive forms in (1) and (2) are semantically transparent forms since the suffix can be delineated from the bases, which are identifiable lexical items in the respective languages. They, however, contrast sharply with those in (3) and (4) below, that have non-lexical bases.

## **Esahie**

(3)		<b>Output</b>	<b>Internal Structure</b>	Gloss
	a.	talu-wa	[???-DIM]	'young lady'
	b.	adɔ-ma	[???-DIM]	'baby'
	c.	kwang-wa	[???-DIM]	'(small) cup'

d.	du-wa	[???-DIM]	'mortar'
e.	aworowo-wa	[???-DIM]	'old lady'

## Akan

(4)		<b>Output</b>	<b>Internal Structure</b>	Gloss
	a.	kuru-wa	[???-DIM]	'(small) cup'
	b.	bento-wa	[???-DIM]	'enema bulb'
	c.	abere-wa	[???-DIM]	'old lady'
	d.	firikyi-wa	[???-DIM]	'(a metallic) musical instrument'
	e.	mpókú-wá	[???-DIM]	'developing breast (of a teenage girl)'

If we consider the data in (3) and (4), we find that, notwithstanding the fact that their bases are non-existent words, their overall semantics is usually not completely arbitrary, since the diminutive suffixes present tend to have attested meanings that are reflected in the meanings of the complex forms. The roots *talu* in *taluwa* 'young lady' (3a), *adə* in *adəma* 'baby' (3b), *abere* in aberewa in (4a), *firikyi* in *firikyiwa* 'musical instrument' (4b) are all meaningless, but identifiable constituents of complex words which terminate in -wa/-ba/-ma and are semantically similar, as they all denote diminutive entities. The meaning of the forms in (3) & (4), therefore, could be said to be PARTIALLY MOTIVATED. For several reasons, such instances of partial motivation cannot be expressed in terms of the classic word-based derivational rules proposed in Aronoff (1976). First, the base is not a lexical item that can be used in word formation. Secondly, the word formation pattern is only marginally productive, so one cannot assume a rule, since such a rule would incorrectly generate new words of this type.

Given the empirical facts enumerated above, we argue that the Kwa data speak in favor of an abstractive (top-down), rather than a constructive (bottom-up) view of morphology and the lexicon, as not all diminutive nominals show the systematic form-meaning correspondence required in the assignment of morphological structure. Such complex (diminutive) nominals with non-lexical bases are challenging for models which assume a bottom-up computation of word structure, where morphological analysis is simply a matter of decomposing complex forms into their respective building-blocks and figuring out the word formation rules that apply. Ultimately, we hope to provide support for the view that complex words may be partially motivated even when they lack a lexical base word (Booij & Audring 2018; Jackendoff & Audring 2020), and that adopting an abstractive model of morphology and the lexicon, as encapsulated in the framework of Construction Morphology (Booij 2010a-c) comes with crucial advantages.

**Keywords**: Kwa, Diminution, Partial Motivation, Construction Morphology

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## Phonological similarity avoidance leads to lexical gaps in Polish double diminutives

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This paper investigates the phonology-morphology interface and draws attention to morphological and lexical effects of similarity avoidance. It provides evidence for phonologically conditioned morphology. In Polish, diminutives are most commonly formed using suffixes -(e)k and -ik/-yk. Double diminutives are productively derived by means of the repeated usage of the suffix -(e)k, as illustrated in (1). The meaning of smallness and endearment is reinforced in double diminutives, as compared with single diminutives.

(1) Noun base Diminutive Double diminutive [dom] [dom-ɛk] [dom-ɛtṣ-ɛk] house house-DIM1 house-DIM1-DIM2

The DIM2 suffix -ek triggers a mutation of the preceding consonant of the DIM1 suffix, which gives rise to a  $[k] \sim [t\xi]$  alternation, e.g.  $[k \circ t - \varepsilon k] > [k \circ t - \varepsilon \xi - \varepsilon k]$ . As a result, in double diminutives the DIM1 suffix is invariably realized as  $[-\varepsilon t\xi - ]$ .

(2) Noun base Diminutive Double diminutive [kɔt] 'cat' [kɔt-ɛk] [kɔt-ɛtṣ-ɛk] [numer] 'number' [numer-ek]

Double diminutives are unattested for bases with the final voiceless velar stop, [k], and rare for bases with the final [g] and [x]. This stands in stark contrast to "first-degree" diminutives with base-final velars, which exhibit a strong preference for *-ek*, rather than *-ik/-yk*. The items in (14) exemplify bases ending in [...k] and their "first-degree" diminutives. The potential but non-occurring double diminutives are also included.

(3) Noun base Diminutive Double diminutive [zuk] 'beetle' [zutş-ɛk] \*[zutş-ɛtş-ɛk] pilnitş-ɛtş-ɛk] \*[pilnitş-ɛtş-ɛk]

As illustrated in (4), the voiced velar stop in base-final position similarly blocks double diminutive formation, although in this case this is a strong tendency, not an absolute prohibition. The third velar consonant, /x/, forms marginally acceptable double diminutives.

(4) Noun base Diminutive Double diminutive [rɔg-u] 'horn' gen.sg. [rɔz-ɛk] \*[rɔz-ɛtş-ɛk] [dax] 'roof' [daş-ɛk] ?[daş-ɛtş-ɛk]

The non-attestation or marginal acceptability of the double diminutives in (3) and (4) is due to the dispreference for similar consonants in adjacent syllables. The acceptability scale for consonant sequences in double diminutives is presented in (5) (the sequence on the left of "<" is less preferable than the sequence on the right). The scale in (5) appears to reflect gradient dispreference for similar sounds, with the tendency being strongest for identical consonants.

(5) Acceptability scale for consonant sequences in double diminutives [ts···ts] < [dz···ts], [z···ts] < [s···ts] < [other consonants···ts]

The scale of preference in (5) specifically targets double diminutives (i.e. it is construction specific), though the dispreference for similar consonants is certainly more general in the lexicon. For example, monomorphemic words with [tş...tş] are rare but attested: *cha-cha* [tṣatṣa] 'cha-cha' and *Czeczen* [tṣɛtṣɛn] 'Chechen'.

Following Frisch et al. (2004), similarity is calculated on the basis of the number of shared natural classes.

Similarity = 
$$\frac{Shared\ natural\ classes}{Shared\ natural\ classes\ +\ Non-shared\ natural\ classes}$$

Drawing on the insight of Hansson (2014), this analysis handles dissimilation by means of Agreement-by-Projection (ABP). On the assumption of ABP, OCP constraints target sequences of identical segments of a particular kind projected on some tier. For example, OCP-Retroflex[+Coronal] penalizes sequences of retroflex coronal consonants. Following Jurgec (2016), OCP constraints penalize the co-occurrence of two specific segments within a domain. I adopt constraint conjunction to represent segmental OCP effects (Alderete 1997). For example, OCP-Retroflex<sub>Stem</sub> targets any two retroflexes in a stem, while OCP-Retroflex&OCP-Continuant&OCP-Voice<sub>Stem</sub> penalizes the occurrence of two identical retroflexes. This analysis enables us to account for OCP effects by invoking formal complexity to represent relative markedness. The results of the similarity calculations (Frisch et al. 2004) are used to provide the ranking values to the conjoined OCP constraints, as in (7). In the evaluation of a double diminutive in (8), OCP interacts with EXISTENCE, which penalizes lexical gaps (Bat-El 2005). In addition, the DIM1 suffix has three allomorphs {[ɛk], [k], [ɛts]}. Morphological schemas (subcategorization frames; Paster 2006) regulate the selection of the appropriate allomorph. For example, [ets]<sub>DIM1</sub>/ DIM2 requires that the allomorph [ets] of the DIM1 suffix be selected before DIM2. Variable outputs, such as [das-εts-εk] ~ ② are generated using the model of Partially Ordered Grammars (Anttila 1997).

# (7) OCP-Retr&Cont&Voice<sub>1</sub> >> OCP-Retr&Cont<sub>0.63</sub> >> OCP-Retr<sub>0.38</sub>

(8) Tableau for a Double Diminutive of [[zuts] \( \ext{Ek} \)\_{Dim}

$[[zutg] \{ [\epsilon k], [k], [\epsilon tg] \} ] + [\epsilon k]$	[ets] <sub>DIM1</sub> / DIM2	OCP-R&C&V <sub>Stem/DD</sub>	EXISTENCE
a. •			*
b. [[[zutş]ɛtş]ɛk] <sub>DD</sub>		*!	
c. [[[zutʂ]ɛk]ɛk] <sub>DD</sub>	*!		

I consider and reject a plausible alternative explanation of the restrictions on the formation of diminutives: identity avoidance formulated in terms of morphosyntactic features, i.e. avoidance of repeated affixes, also called haplology (the Repeated Morph Constraint, Menn and McWhinney 1984). This analysis demonstrates that (i) phonological constraints are construction specific and (ii) morphological computation must have access to the phonological information in fully parsed output candidates.

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## Diminutives at word level and root level: -er in Colloquial Beijing Mandarin Yiyang Guo, University of Cambridge, yg384@cam.ac.uk

**1. Introduction** Diminutivization in Colloquial Beijing Mandarin is conveyed by -er, a bound morpheme that follows a root (e.g., gang-er 'tank-DIM', henceforth er-diminutive). One observation of er-diminutives is their incompatibility with augmentative modifiers (1). However, this is not the full picture. With roots like feng 'crack', er-diminutives can take augmentative modifiers; meanwhile, -er is obligatory (2). With roots like dao 'knife', er-diminutives are licit only if there is diminutive specification provided by other morphemes in the denotation of the root. Here, er-diminutives can take augmentative modifiers; see (3).

- (1) a. {xiao / da} de gang b. {xiao \*da} de gang-er small. big small big tank-DIM MOD tank MOD 'small/big tank' 'small tank' / Intended: 'big tank'
- (2) a. {xiao / da} feng-\*(er) {xiao / da} men-feng-er de de small big crack-DIM small big door-gap-DIM MOD MOD 'small/big crack' 'small/big door gap'
- da} da} {xiao / de dao-(\*er) {xiao / de \*(zhijia)-dao-er (3) a. MOD nail-knife-DIM small. big MOD knife-DIM small. big Intended: 'small/big knife' 'small/big clipper'

I propose a threefold analysis: (i) Semantically, -er has two possible functions, viz. restriction and s-selection. (ii) Syntactically, the two functions are realised at word level and root level, respectively. (iii) The reason why -er can merge with syntactic objects at two levels freely is that -er is an acategorial particle, lacking a formal feature while having a semantic feature.

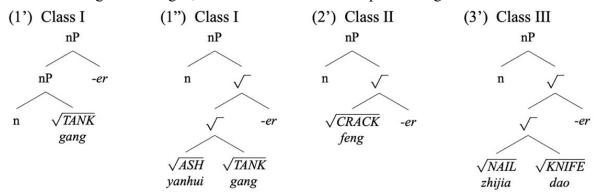
**2. Restriction vs. selection** The three types of *er*-diminutives are distinguished by (i) the cooccurrence of *er*-diminutives and augmentative modifiers; (ii) the necessity of diminutive specification. This pattern is attributed to the two functions of *-er*, restriction and s-selection.

Classes	(i) (AUG modifier)-X-er	(ii) *(DIM specification)-X-er
I. gang ('tank'),	_	_
II. feng ('crack'),	+	_
III. dao ('knife'),	+	+

Restriction is to add diminutivity to the denotation of the root by conjunction. Roots of Class I refer to entities that are neutral to size, such as gang 'tank' (1). -er restricts the denotation of its input to a subset with only the members that have diminutive property. During restriction, the denotation of the root is modified, and the diminutives formed this way cannot be further restricted by augmentative modifiers due to semantic contradiction. S-selection is to pick out the roots with the denotation that already satisfies the presupposition of diminutivization, namely, being construed as small prototypically. During selection, the output of -er remains the same as its input, which allows for further restriction. Roots of Class II denote entities that are inherently small, like feng 'crack' (2) which satisfies the presupposition. -er selects such roots but does not change the meaning of the root; it thus forms diminutives that can be restricted by augmentative modifiers. Roots of Class III is also s-selected by -er, but such roots denote entities that are size-neutral. Therefore, such roots (dao 'knife') call for diminutive specification (zhijia 'nail') to satisfy the presupposition. The compound root zhijia-dao ('nail-knife') has diminutive properties and hence can be s-selected by -er.

- <u>3. Word level vs. root level</u> Following De Belder et al. (2014), I assume that -*er* can operate at two levels and further advance that the function of -*er* is conditioned by its merging site.
- (4) i. **Word-level Op.**: Merging with a word, -er enforces diminutivization as restriction; ii. **Root-level Op.**: Merging with a root, -er implements diminutivization via s-selection. Specifically, if -er operates at **word level**, and it takes a root that denotes size-neutral entities, -er restricts the denotation of the root to a subset that displays smallness. For example, gang-er in (1') denotes small tanks. If -er operates at **root level**, it selects roots that denote entities that are construed as small, which leads to two possibilities. If the denotation of a morpheme

is generally small, like *feng* 'crack' in (2'), the morpheme itself satisfies the presupposition of diminutivization. If the denotation of a morpheme is size-neutral, such as *dao* 'knife' in (3'), it must be restricted by other items with diminutive specification inside the scope of *-er* to a subset, the elements of which have diminutivity. Given this analysis, I predict that with *-er* at word level, the denotation of the root is restricted, and the *er*-diminutive cannot co-occur with any augmentative modifier. With *-er* appears at root level, the root is selected by *-er*, and the lexical meaning is unchanged; the *er*-diminutive is thus open for augmentative modifiers.



The necessity of diminutive specification is conditioned by the meaning of the root.

	(i) Size-neutral	(ii) Small in prototype
Restriction at word level	Class I (gang 'tank',)	/
Selection at root level	Class III (dao 'knife',)	Class II (feng 'crack',)

If the denotation of the root is lexically size-neutral (**Class I** and **Class III**), it can either be restricted by -er at word level (1') or selected by -er at root level after receiving diminutive specification in the compound root (3'). We have seen that roots of Class I can be restricted by -er at word level (1'), which renders the er-diminutive incompatible with augmentative modifiers (1b). Roots of Class I can also be selected by -er at root level if there is diminutive specification, as shown by yanhui-gang-er ('ashtray') in (1") above. My analysis predicts the compatibility of such er-diminutives with augmentative modifiers. If the denotation of the root is small in the prototypical sense (**Class II**), only selection at root level is applicable (2'). To explain such asymmetry between word-level and root-level operations, I further propose that these two operations are subject to the Principle of Economy (5), given which the root-level operation is applied by default unless the word-level operation is motivated. This is empirically supported and can account for the difference among three classes of diminutives.

- (5) **Principle of Economy**: Apply the operation as early as possible in the derivation; do not use the same operation in higher positions unless necessary.
- **4.** -er as an acategorial particle To explain why -er can merge with words and roots freely, I put forth that -er is an acategorial particle: -er lacks a formal feature but has a semantic feature (Biberauer 2017), which results in no syntactic category or c-selective power of -er. Further evidence comes from the fact that -er is unselective to the lexical category of its input, such as the verb in (6a) and the classifier in (6b). Aside from root level and word level, -er can also merge at XP-level due to its acategorial status, as shown by (6c).
- (6) a. wan-er youxi b. yi xiang-er li c. [VP] shou la shou] -er play-DIM game one  $CL_{BOX}$ -DIM pear hand hold hand -DIM 'play games casually' 'a (small sized) box of pears' 'hold hands delightedly'
- **5. Implication** This analysis can be extended to the affectionate use of *-er*. The affectionate *-er* functions as restriction in a peripheral position at word level, which means that *-er* is optional. For example, adding *-er* to *xiannv* ('fairy') gives rise to its affectionate form, *xiannv*(*-er*) ('fairy-DIM'). Another piece of evidence supporting my analysis comes from the fact that *er*-affectionates are incompatible with modifiers that conveys hatred or disgust.

<u>Selected References</u> Biberauer, T. 2017. The final-over-final condition and particles | De Belder, M., N. Faust & N. Lampitelli. 2014. On a low and a high diminutive: Evidence from Italian and Hebrew.

## Nominal diminutive suffixes in the birch bark letters of Novgorod

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As a Slavic language, the Old Novgorod dialect was (probably) diminutive-rich as well. Old Novgorodian was a dialect of the so-called Standard Old Russian; and is known from approximately 1200 birch bark letters written between the 11<sup>th</sup> and 15<sup>th</sup> centuries. As almost every archaeological season result in new finds, and so did the season of 2021, berestologists make every effort to publish accurately and speedily all birch bark letters, so this is a constantly expanding corpus.

The grammar of this dialect was written by Andrey Anatolyevich Zaliznyak (the 1<sup>st</sup> edition was published in 1995, the 2<sup>nd</sup> enlarged edition in 2004). However, nominal diminutive suffixes have received little attention, so much so that in Zaliznyak's monograph and earlier works (such as Yanin – Zaliznyak 1986) only hypocorisms are discussed in detail. A few pages can be found about nominal diminutive suffixes in Kuznetsov 1955 but until then less than 200 birch bark letters were found.

These birch bark letters form a corpus that is particularly suitable for research into nominal diminutive suffixes, as many of them were written by everyday people as private letters, lists, jottings, and the like. Most of these notes were not intended as permanent or official documents, and hence they reflect the everyday spoken language, as is shown by – among others – the frequent use of hypocorisms. In contrast, other contemporary manuscripts written in Old Church Slavonic or Standard Old Russian due to their content and genre – the Bible and other ecclesiastical texts, chronicles, legal documents, etc. – make less use of nominal diminutive suffixes in general.

In my paper I will give an overview of the attested nominal diminutive suffixes in Old Novgorodian (among others:  $-\check{c}ik$ , -k(a), -ica, -bca, -bca, -bko), their distribution and function.

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## Allomorphy Conditions in the Slovene Diminutive System

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Slovene is a diminutive-rich language. Interestingly, not much research has been done on the formal properties of its diminutive suffixes or their allomorphic variations. This paper presents a typological division of Slovene diminutive suffixes based on their formal properties. Adopting the theoretical framework of Distributed Morphology (Halle & Marantz 1993, Halle 1997, Marantz 1997 and subsequent work), nominal diminutive suffixes are classified in terms of the place and manner of attachment in a syntactic tree. Additionally, we consider different conditions for allomorphy present in the Slovene diminutive system. The findings are important as they implicate that even though diminutives are considered a universal semantic concept, this concept does not map onto the same syntactic form even within a single language.

Steriopolo (2009, 2015) and Wiltschko & Steriopolo (2010) show that there is variation in the place and manner of attachment of diminutive suffixes in a syntactic tree cross-linguistically. We demonstrate that Slovene diminutive suffixes also exhibit such variation. When it comes to the locus of merge, we show two building sites for Slovene diminutive suffixes: they can attach either directly to category-free roots or to already categorized nouns. In Slovene, it is often difficult to distinguish between roots and already categorized nouns, since roots can be phonologically identical with category-defining heads determined by zero affixes (e.g. 'gozd' [forest] is a root, but can also be an already categorized noun). To determine the locus, we thus additionally rely on the stress-shifting ability of the suffix in the sense of Marvin (2003): the suffix attaching directly to a root can influence the stress pattern of the base word (e.g. g'ozd > gozd'ič [forest.dim] – the suffix -ič changes the stress pattern indicating attachment to roots; g'ozd > g'ozdek [forest.dim] – the suffix -ek, on the other hand, does not change the stress pattern, indicating it attaches to an already categorized noun).

To determine the manner of attachment, we observe whether the diminutive suffix is able to change the syntactic category, grammatical gender or inflectional class of the base, relying on diagnostics provided by Bachrach & Wagner (2007). If the suffix is able to change (at least) one of those formal properties, we classify it as a head since heads determine the syntactic category and grammatical features of the output (e.g. 'dekle' [girl.nom.sg.neu] > 'dekl-ië' [girl.dim.nom.sg.masc] – the suffix -iĕ changes grammatical gender and inflectional class and is hence classified as a syntactic head). If the suffix cannot change any of these formal properties, we classify it as a modifier since they do not determine the syntactic category or grammatical features of the output (e.g. 'ogledalo' [mirror.nom.sg.neu] > 'ogledal-ce' [mirror.dim.nom.sg.neu]). We determine that Slovene diminutive suffixes can act both as syntactic heads or as syntactic modifiers.

Further investigation into diminutive allomorphs also calls for a re-evaluation of the traditional analysis of two most productive Slovene diminutive suffixes:  $-\check{c}(e)k$  and -(e)k (e.g. 'fant' [boy] > 'fant-ek'; 'balon' [balloon] > 'balon-ček'). These two suffixes are traditionally considered to

be phonetically conditioned allomorphs that occur in complementary distribution: the former attaching to bases ending in sonorants and the latter appearing in all other endings (Vidovič Muha 2018). We argue that the suffix  $-\check{c}(e)k$  is actually not a diminutive suffix itself, but rather a combination of two diminutive suffixes: either the combination of suffixes [-ec + -ek] or [-ce]+ -ek]. The attachment of the second suffix, -ek, causes palatalization to occur in both combinations of suffixes (e.g. 'hleb' [loaf] > 'hleb-ec' > 'hleb-č-ek'; 'cedilo' [strainer] > 'cedil-ce' > 'cedil-č-ek'). We further explore the properties of diminutive suffixes -ec and -ce. While both can attach to neuter bases, one acts as a syntactic head since it is able to change the grammatical gender and inflectional class, and the other acts as a syntactic modifier since no change can be observed (e.g. 'kolo' [wheel.nom.sg.neu] [wheel.dim.nom.sg.masc]; [wheel.nom.sg.neu]> but 'kolo' 'koles-ce' [wheel.dim.nom.sg.neu]). We additionally observe further instances of phonologically conditioned allomorphy in the Slovene diminutive system, as well as some instances of allomorphs driven by style and register or formal properties of the base.

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# Diminutive variation in rural German in Austria: "true" allomorphy or just sociolinguistic variation?

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Allomorphy may be defined as "a situation in which a single lexical item, meaning, function, or morphosyntactic category has two or more different phonological realisations depending on context" (Paster 2014: 219), and this context may involve phonological, morphosyntactic, and/or lexical factors. For morphological theories assuming preferences for biunique relations between meaning and form (e.g., Natural Morphology, see Dressler et al. 1987), allomorphy poses certain problems and is restricted to forms with syntactically, semantically and pragmatically identical features. It appears to be less problematic for a-morphous Word and Paradigm approaches (e.g., Blevins 2016). In the present study, we investigate diminutives in rural German in Austria in the light of both Natural Morphology (NM) and Word and Paradigm Morphology (WPM). We will discuss both suffix and stem allomorphy, as both types of allomorphy may be compared in NM, whereas this dichotomy is not relevant in WPM because it is based on entire wordforms.

German noun diminutives show high formal variation, in both suffix as well as stem allomorphy. There is not only high areal-horizontal variation in different regions, but also high social-vertical variation in different registers (from base dialects to Standard German) within the same region.

Standard German has preserved two diminutive suffixes -chen (the "guttural suffix") and -lein (the "liquid suffix") which can both be traced back to early Germanic but had very different frequencies of usage over time: While -lein was dominant in Early New High German (~1350-1650), -chen became the dominant default Standard German diminutive suffix from the 18<sup>th</sup> century onwards (Lameli 2018). However, there are cases of phonologically conditioned suffix allomorphy in Standard German: -chen suffixes are avoided in stems ending in /ç/ whereas -lein diminutives are avoided in stems ending in /l/. Concerning stem allomorphy, back stem vowels are usually umlauted in the diminutive (e.g., simplex Hund 'dog' – diminutive Hündchen or Hündlein).

In the Bavarian dialects of Austria, -(e)l suffixed diminutives (and in South Bavarian to a minor extent also -le suffixed diminutives) are widely used, partially due to a general Bavarian preference for disyllabic words (e.g., Weiß 2005), partially for reasons of individuation: For example, they may derive count nouns from mass nouns, such as /glo:s/ 'glass (material)'  $\rightarrow$  /gla:sl/ 'glass-DIM (= container), see e.g., Wiltschko (2006). However, they have mostly lost their endearing meaning, which is still present in -erl or -erle diminutives (e.g., Moser 1969). In the Alemannic region, both -le and -li diminutives are reported. Concerning stem allomorphy, we expect also more variation in the dialects than in Standard German.

The aim of this contribution is an in-depth apparent-time analysis of diminutive variation in German in Austria, with a focus on the following questions: Is diminutive variation in Austria in fact only sociolinguistic variation, i.e., do we find different diminutive forms only in different dialects and registers? Does diminutive variation in Austria involve diminutive forms with different semantic or pragmatic meanings (e.g., +/- individuation, +/- endearment)? Or do we find at least some evidence for allomorphy in the strict sense, as defined by Dressler (2015).

Which theory can better account for the variation found, a NM approach based on universal, typological or productivity preferences or a frequency-based WPM approach?

Participants were autochthonous adults of two age groups (18-35, 60+) and two educational backgrounds (+/- high school diploma) from small rural villages located in the five main dialect regions of Austria: Participants' oral diminutive production data were collected from 2016 to 2019 in four settings (elicited translations from Standard German to the local dialect and vice versa, formal interviews, informal peer conversations). To capture diachronic variation, these recent oral data were compared to the written questionnaire data of an older survey collected from 1926 to 1933.

Results show mostly evidence for sociolinguistic variation: Higher frequencies of non-standard diminutives are found in informal conversations, whereas the formal interviews contain fewer diminutives in general, but more Standard diminutive forms. Diachronic change from the early 20<sup>th</sup> to the early 21<sup>st</sup> century was minimal. In contrast to the default Standard suffix -chen, which is particularly frequent in the translation to Standard German, the -(e)l suffix is the nonstandard default suffix used in both naturalistic settings and in the translation to dialect in the entire Bavarian region. -erl or -erle are more frequent in contexts of endearment, an evidence for pragmatic variation. However, all diminutive suffixes may express mitigation or irony. The Alemannic diminutives on -le and -li show some evidence for free phonological allomorphy in the sense of Dressler (2015: 510), but there is a tendency to use -le more in singular and -li more in plural contexts (also as a function of the specific lemma), which would favor a WPM approach. Umlauted diminutive stems are more frequently found with Standard than with dialect suffixes in the Bavarian region, which indicates a preference for morphotactically transparent forms in Bavarian dialects according to NM. In contrast, umlauted stems frequently occur in both Standard and dialect in the Alemannic region. Overall, the WPM approach shows certain advantages over NM because the latter lacks a consistent explanation based on universal or typological preferences or productivity at least for some diminutive forms.

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# Diminutivization, allomophy and the architecture of grammar: phonology before morphology and syntax (workshop introduction)

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Dissecting Morphological Theory 3: Diminutivization, Allomorphy and the Architecture of Grammar is the third of a series of workshops on diminutive morphology and its implications for morphological theory, see https://sites.google.com/view/morphologytheories-diminutives. The workshop brings together scholars working within different theoretical frameworks. Thus, besides the issues outlined in the workshop description, see the call for papers at https://sites.google.com/view/morphologytheories-diminutives/calls-for-papers/dmtd3, address problems that arose during the reviewing of the abstracts (the scientific committee is listed in the call for papers, the workshop organizers thank all its members): Are generative and nongenerative linguists ready to meet? and In the beginning was Syntax versus In the beginning was the Word. I will compare a syntax-first allomorphy analysis with recent research in natural language processing, the so-called deep learning, which is phonology-first. Special attention will be paid to linearization and the notion of complexity. In linguistics, complexity is seen as a property of the data analyzed, there is no uniform definition of what is complex and some linguists even claim that there are "complexities" associated with the different grammatical domains and linguistic subfields. By contrast, in computer science (and NLP research) complexity refers to the analysis (the algorithm used) and the so-called *Big O notation* serves for measuring complexity: how an algorithm slows when data grow.

I will also explain the logic of the workshop schedule, i.e. the order of the papers, and briefly introduce the content of each paper.

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# Exploring allomorphy and gender assignment in Italian diminutives: Alternation patterns and constructional schemas

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Italian diminutives have been extensively investigated within the area of evaluative morphology in both synchronic and diachronic perspective (see, e.g., Grandi 1998; 2011). Most of the studies have focused on their semantic domain (see, e.g., Grandi 2002; 2017) as well as their pragmatic properties in context, starting from the seminal works by Dressler & Merlini Barbaresi (1992; 2011) on morphopragmatics. On the other hand, less attention has been paid to the formal properties shown by both diminutive affixes and the stems to which they are attached, with the exception of studies devoted to the so-called "antesuffixal interfixes" (as defined by Dressler & Merlini Barbaresi 1989; e.g., -ic- in fium-ic-ell-o 'river(M)-INTERFIX-DIM-SG') and a survey on combinatorial patterns among evaluative affixes (e.g., gonn-ell-in-a 'skirt(F)-DIM-DIM-SG') by Merlini Barbaresi (2012). Notably, these studies have been mostly carried out from a qualitative perspective, while a comprehensive quantitative analysis on formal issues (such as allomorphy) is still missing. This study aims at bridging this gap by providing an extensive investigation on Italian diminutives mostly focused on formal features, namely allomorphy and gender assignment.

The study is based on a dataset of about 1,300 base-diminutive pairs extracted from a lexicographic resource, i.e., the *Zingarelli* dictionary (online version 2022). Our dataset contains diminutives displaying different suffixes, from the most frequent ones – namely, -in-, -ell- – to much more marginal strategies – like -uzz-. Furthermore, it also includes lexemes that display a combination of diminutive suffixes and cases that display patterns of stem allomorphy that correspond to Dressler & Merlini Barbaresi's (1989) antesuffixal interfixes.

From these pairs, patterns of formal alternation between the base and the diminutive are automatically extracted using Qumin (Beniamine 2018). This toolkit was originally developed to investigate inflectional morphology, but it has already been fruitfully used also for derivation (Bonami & Strnadová 2019). Diminutives, that have characteristics in common with both prototypical inflection and derivation, appear to be a promising area to be explored with this methodology, especially because they display many allomorphic patterns that can be easily identified in this way. Indeed, this procedure applied to our data yields more than one hundred different patterns: in Table 1, we show the most frequent ones for diminutives in -in-.

Table 1 – Most frequent alternation patterns between diminutives in -in- and their bases

Pattern	Frequency	Example
o <b>⇌</b> ino	160	tappeto
$a \rightleftharpoons ina$	122	cipolla ⇌ cipollina 'onion(DIM)'
$a \rightleftharpoons ino$	107	festa ≠ festino 'party(DIM)'
e ⇌ ino	64	elefante    elefantino 'elephant(DIM)'
e <b>≓</b> fino	27	bastone   ⇒ bastoncino 'stick(DIM)'

The most frequent patterns correspond to what is considered to be the usual formation of diminutives in Italian, i.e., the addition of a suffix -in- that is transparent to the gender of the base: the diminutive is thus assigned to the masculine gender and to inflection class 1 (with SG in -o and PL in -i) if the base is masculine, to the feminine gender and to inflection class 2 (SG in -a, PL in -e) if the base is feminine (according to the classification proposed by D'Achille & Thornton 2003). However, our quantitative data also show that masculine diminutives in -in- that come from (almost exclusively) feminine bases in -a are also quite frequent, suggesting that the relationship between the gender of the diminutive and the one of its base can be better captured with a probabilistic approach. To explore this issue in more

detail, we code the gender of all the nominal bases and diminutives of our sample, investigating the relation between them also for other types of diminutives. Table 2 presents the data for diminutives in -in-, confirming that the switch from feminine to masculine gender in diminutivization is relatively frequent, and showing that the opposite switch from masculine to feminine gender is also attested, although much rarer. Similar quantitative observations will be performed also on other classes of diminutives in our dataset.

Table 2 – Relation between base and derivative gender for diminutives in -in-

Base gender	Diminutive gender	n.
M	M	274
	F	13
F	M	119
	F	154

Besides the quantitative analysis, we will also provide a theoretical account for our data within the framework of Construction Morphology (Booij 2010). We will propose a constructional network that accounts for formal features displayed by Italian diminutives and their interaction with semantic and pragmatic properties. In doing so, we aim at enriching the constructionist literature devoted to allomorphy, by proposing a principled method to infer formally different (sub)schemas from surface data. Our point of departure will be alternation patterns extracted with Qumin, from which a hierarchy can be built bottom-up identifying more abstract schemas that dominate more specific ones.

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# Changes of grammatical gender in nominal diminutives in Slovene

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Keywords: nominal diminutive, word-formation, grammatical gender change, terminologization, Slovene dialects

This paper investigates changes of grammatical gender in Slovenian nominal diminutives with regard to their base nouns. In most cases, grammatical gender of the base is preserved in diminutive version of the noun (Sicherl, Žele 2011: 140). However, there are some exceptions to this rule.

In Slovene, the following suffixes are primarily used to express diminutiveness:

-(e)k,  $-\check{c}(e)k$ , -(e)c,  $-i\check{c}$ , -ic, -et for masculine nominal diminutives,

-ica, -ka, -ca, -ice, -ce, -ke for feminine nominal diminutives,

-ce, -ece, -ko, -iče, -eca, -ca, -ka for neuter nominal diminutives (Vidovič Muha 2011: 40).

In most cases, the gender of the base noun is preserved after the addition of these suffixes: gozd ('forest', masculine noun) +  $ext{e}$  (diminutive suffix to express masculine diminutive)  $\Rightarrow$   $gozd-ext{e}$  ('forest'-DIM, masculine diminutive). In Slovene multiple diminutions are possible as well:  $gozd-ic-ext{e}$ , 'forest'-DIMDIM, masculine diminutive.

However, some suffixes primarily used to form masculine or feminine diminutive nouns also combine with other kinds of bases, especially with neuter nouns, and sometimes also with some other bases. These examples can be divided into following groups:

- 1. Neuter nouns which are changed to masculine nouns after diminution-formation
- 1.1 Diminutives mostly without register and function restrictions. These are some diminutives of nouns naming juvenile animals (Vidovič Muha 2011: 38–39). Multiple diminutions also appear in these cases and the second modifications are more frequently used. The gender change appears after the first modification: *žrebe* ('foal', neuter)  $\Rightarrow$  *žreb-ič* ('foal'-DIM, masculine).
- 1.2 Some diminutives which are marked in terms of register and function. They are used in diminutive form to emphasise small size and (in most cases) also affection and expressiveness (Vidovič Muha 2011: 39). There are two possible ways to form such diminutives: by adding suffixes primarily used to form masculine diminutives or by adding suffixes primarily used to form neuter diminutives to the base (neuter) noun. In these cases, multiple diminutions are not common. Such groups of words are:
  - some neuter nouns denoting body parts: telo ('body', neuter) → teles-ce ('body'-DIM, also a technical term, neuter) or teleš-ček ('body'-DIM, expresivelly, masculine);
  - some neuter nouns denoting foods and drinks: *mleko ('milk', neuter)* → *mlek-ce ('milk'-DIM, old-fashioned, neuter)* or *mlek-ec ('milk'-DIM, childish, masculine)*;
  - some other neuter nouns: kolo ('wheel', neuter)  $\rightarrow$  koles-ce ('wheel'-DIM, also a technical term or colloquial, neuter) or koles-ce ('wheel'-DIM, colloquial, masculine).

In these cases, the masculine diminutives are more commonly used as diminutives of basic nouns while gender-preserving (neuter) diminutives are usually either marked as old-fashioned (*mlek-ce*) or they gain semantic independence and become a technical term (*teles-ce*).

## 2. Feminine nouns which are changed to masculine nouns after diminution-formation

These nouns are also marked in terms of register and function. In these cases, there are also two options for forming diminutives. Gender-preserving variants (feminine diminutives) are more commonly used: punca ('girl', feminine)  $\rightarrow pun\check{c}$ -ka ('girl'-DIM, expressively, feminine) or  $pun\check{c}$ -ek ('girl'-DIM, expressively, masculine).

## 3. Neuter nouns which are changed to feminine nouns after diminution-formation

The phenomenon is limited to some Slovene dialects and is (with some rarely exceptions) not a normative variant in Slovene language: *jabolko ('apple', neuter)*  $\rightarrow$  *jab-ka ('apple'-DIM, in dialect, feminine)*, but also *jabolč-ek ('apple'-DIM, masculine)*.

However, there are some nouns diminutives which may be of all three grammatical genders; the diminutive form of the noun *jajce* (*'egg'*) for example can be either *jajč-ek* (*'egg'-DIM, masculine*), *jajč-ece* (*'egg'-DIM and also 'ovum', a technical term, neuter*) or *jajč-ka* (*'egg'-DIM, in dialect, feminine*). When two or more options are possible, the choice of diminutive form depends also on the speaker's dialect (Škofic 2020).

There are another two important phenomena which are connected with gender-changing diminutives. They concern variations of nouns that have not undergone diminution. These are masculinisation of nouns (neuter nouns act as masculine nouns and are preceded masculine adjectival premodifier) and feminisation of nouns (neuter nouns act as feminine nouns and are preceded feminine adjectival premodifier). They appear in some dialects of Slovene.

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## Diminutives and contextual allomorphy in the Mehri DP

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Mehri (Semitic, Modern South Arabian) has a complex diminutive system in which all nouns can be diminutivized as well as many adjectives, numerals, demonstratives, and possibly adverbs (Johnstone 1973, Watson 2012, Rood 2017, Rubin 2018). Using fieldwork data, this project provides a unified analysis of the diminutive morpheme and its interaction with flavors of nominalizing *n* in the framework of Distributed Morphology (DM; Halle and Marantz 1993, among others).

Most accounts of Mehri diminutives list their different forms as traditional CV Semitic templates (Johnstone 1973, Watson 2012, Rubin 2018). The present project assumes these templates are epiphenomenal following Rood (2017) and adopts the analysis that Mehri diminutives are the result of infixation of  $-\bar{a}$ - followed by independently-motivated morphophonological processing. In this project I extend the analysis in Rood (2017) to comprehensively derive both masculine and feminine diminutive nouns.

I first turn to feminine diminutives. Most feminine nouns in Mehri take a feminine suffix of -Vt (variation of the long vowel is not relevant to the present analysis). Assuming gender is on n (Kramer 2015), I adopt the analysis that -Vt is a Vocabulary Item (VI) listed for n[+FEM]. In these examples the feminine suffix is retained when the noun is diminutivized  $[twSal-\bar{u}t, \text{ worm-F} \rightarrow twS<\bar{a}>l-\bar{u}t, \text{ worm<DIM>-F}; raḥb-ēt, city-F <math>\rightarrow \text{ raḥb}<\bar{a}>\text{n-ōt},$  city<DIM>-F]. However, some singular feminine nouns in Mehri do not have the -Vt suffix. Following standard ordering of Vocabulary Items in DM, in these examples the n[+FEM] is a more highly specified VI conditioned by the Root and would therefore be inserted instead of the default feminine suffix. When the feminine noun is diminutivized in these nouns, however, the new diminutive form will include the default feminine suffix -Vt [farhayn, horse.F  $\rightarrow farh<\bar{a}>n-\bar{u}t$ , horse<DIM>-F; bayt, house.F  $\rightarrow b\bar{u}t<\bar{a}n>-\bar{u}t$ , house<DIM>-F;  $tannb\bar{u}k\bar{u}$ , to-bacco.F  $\rightarrow tannb<\bar{a}>k-\bar{u}t$ , tobacco<DIM>-F]. I propose two possible analyses of this data and argue that the latter, reliant on flavors of n, better accounts for the diminutive system overall.

One possible analysis of this data utilizes locality constraints on root-conditioned contextual allomorphy. Syntactically this approach would adopt the analysis from Rood (2017) that [DIM] is a feature adjoined to categorizing n. The VI for this [DIM] modifier is minimally  $-\bar{a}$ -, and the infixation of this morpheme within the root occurs at PF. In this approach an overt diminutive morpheme apparently blocks the inwardly-sensitive contextual allomorphy of n to the root, forcing the default n[+FEM] to be inserted instead.

This analysis is grounded in cyclicity, relying on the assumption that n, [DIM], and the root are all in the same Spell-Out cycle (which would give further evidence for [DIM] located within the nP projection). The analysis assumes that Linearization of a Spell-Out cycle is complete before Vocabulary Insertion takes place (following Embick (2010)). This, coupled with the basic DM assumption of derivations proceeding from the root outwards (cyclicity) predicts that the DIM exponent would block the strict linear concatenation requirements for contextual allomorphy. In other words, diminutization bleeds root-conditioned contextual allomorphy of n[+FEM].

An alternative analysis, reliant on flavors of n, would include the [DIM] feature on a categorizing n that expones the feminine suffix -Vt. The n-flavor analysis assumes the default, suffixal gender n[+FEM] is a different categorizing head than the n[+FEM] that results in irregular feminine morphology (see Kramer (2015) for similar analysis of regular and irregular "split" plurality in Amharic). I propose that the n[+FEM] that results in irregular feminine marking cannot include a [DIM] feature, thus predicting that all feminine diminutives would contain the feminine suffix -Vt. In this approach the n[+FEM][DIM] results in the exponence of two VIs: -Vt for the [+FEM] feature and  $-\bar{a}$ - for the [DIM] feature (a result of Fission, see, e.g., Halle (1997)).

Both the cyclicity analysis and the *n*-flavor analysis accounts for the feminine diminutive data. Next I turn to masculine diminutives to differentiate the two and argue that the *n*-flavor analysis makes the correct predictions for the masculine data.

There is no masculine suffix on singular nouns parallel to the feminine suffix -Vt. However, when masculine nouns are diminutivized, suffixal  $-\bar{a}n$  is often added:  $[\bar{s}ar\bar{e}d, \text{light.M} \rightarrow \bar{s}ar < \bar{a} > d-\bar{a}n$ , light<DIM>-DIM[-FEM];  $j\bar{u}fn$ , eyelid.M  $\rightarrow jf < \bar{a} > n-\bar{a}n$ , eyelid<DIM>-DIM[-FEM.] This suffix is not found on all masculine diminutive nouns  $[masj\bar{i}d, \text{mosque.M} \rightarrow ms < \bar{a} > jid$ , mosque<DIM>.M;  $msm\bar{o}r$ , nail.M  $\rightarrow ms < \bar{a} > m\bar{e}r$ , nail<DIM>.M]. The differentiation between whether the n[-FEM] is Spelled-Out as null or  $-\bar{a}n$  is apparently not motivated by phonological or semantic properties, and thus I propose it is root-conditioned allomorphy on the n[-FEM][DIM]. In the cyclicity analysis above, the n[-FEM] would not be available for root-conditioned allomorphy because the [DIM] morpheme would bleed the strict linear concatenation requirements for allomorphy of n. Therefore root-conditioned contextual allomorphy of n must remain available to account for the masculine data, and only the n-flavor proposal allows for this allomorphy.

I have introduced novel data from fieldwork that results in a puzzle regarding the [DIM] feature and nominalizing n. I proposed two possible solutions, only one of which can account for both the feminine and masculine data. This n-flavor solution brings up empirical questions for future work, including the interaction of gender and number in diminutives as well as the apparent [DIM] infixation in other syntactic categories.

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# Diminutives and other ka-words in informal colloquial Russian: a framework for comparison between Slavic and Baltic languages

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Diminutives make a largest part of the vast range of Russian nominal derivatives with the same or homophonous suffixes that frequently and productively occur in the informal speech. Since most of these suffixes are historically derived from the Church Slavonic -δκ/-δκ, these derivatives end with -k or -ka, thus, creating multiple morphonological benefits for their declension and speech processing: 1) similar codas of word forms facilitating their speech perception; 2) the absence of stress shift in their declension paradigm (at least, for the masculine diminutives); 3) the increased phonological salience of their inflectional endings (compared to the simplicia); 4) the rhyming of similar case forms; 5) the shift to the productive declension classes (Olmsted 1994, Kempe et al. 2007, Voeikova 2020). Thus, the increasing frequency of ka-words is partly morphonologically determined. Most important groups of ka-words are diminutives (myš-ka 'mouse-Dim', kot-ik 'cat-Dim'), informal hypocoristics (Slav-ka 'Slava-Inf', Svet-ka 'Sveta-Inf'), univerbations (vstreč-ka 'opposite side of the road', plat-ka 'toll road'), truncated "allegro" variants of nouns (amort-ik 'amortisator-Trunc', deb-ik 'debil-Trunc), feminitives (avtor-ka 'author-Fem', general-ka 'general-Fem'). They are limited to the informal colloquial speech and mostly denounced by language purists; however, their number and diversity increases. The similar situation with *ka*-words is attested in Bulgarian and Polish. Diminutives (e.g., kartošečka 'potato-Dim' or detka 'child-Dim') are the most frequent of all four groups. As shown by Manova (2015: 216-217) the combinability of different diminutive suffixes is rather similar in the East Slavic Russian and in West Slavic Polish. This seems not to be the case for all derivation patterns, e.g., Russian feminitives seem to be less regular than the Polish or Bulgarian ones. According to Sosnowski and Satoła-Staśkowiak (2019: 12) feminitives in Polish are also not so expanded as in Slovak or Czech, however they also use ka-suffixation (Bańko 2019). The regularity of all ka-words is a matter of future comparison between the Slavic languages on the basis of corpus investigation. Although they seem to be very frequent in colloquial speech, their share to all noun forms in the oral corpus of Russian does not exceed 1%.

Hypocoristics from personal names are often used in informal communication with friends and family members. Adding -ka to hypocoristics make them sound familiar if not dismissively (e.g.  $Lenka \leftarrow Lena$  (Elena) or Vovka  $\leftarrow Vova$  (Vladimir), whereas more complex suffixes like - $o\check{c}k$ /- $e\check{c}k$  rather express sympathy, adoration or irony, compare  $Leno\check{c}ka$  or  $Vovo\check{c}ka$ . All in all, we found 19735 hypocoristic tokens ending in -ka with both pejorative and complimentary functions in the oral subcorpus of Russian National Corpus (RNC).

Feminitives are the least frequent group in our extraction. This has to do with the different regularity of certain derivatives in West and East Slavic languages. Although in the soviet time women used to practice traditionally masculine professions driving tractors, ships and even spaceships they never insisted on using special feminine nominations for them. Fufaeva (2020: 272-278) points to the fact that some professions in Russian do not yet have feminine equivalents. Sometimes the latter may only be formed from one of the synonyms, e.g., the word of French origin *šofer* 'driver' has no feminitive in Russian; the possible variants \**šoferša* and \**šoferka* both sound clumsy, whereas the Russian synonym *voditel* 'can easily be transformed into feminine *voditel* 'nica with the help of the regular derivation model. The morphonological restrictions for such forms are object of serious investigation in future.

Truncated forms in -ka are not yet really described. All of them are informal variants of official nominations used in the professional or in the conversation between friends. Among the newest we can cite Erm-ik 'the Hermitage', var-ik 'variant', čel-ik 'čelovek', nar-ik 'drug addict'. The

benefit of those words is their shape: most of them are bisyllabic and shorter than their simplicia.

All informal variants differ by the syntactic function of their suffixes: thus, the suffixes of the diminutives, feminitives, hypocoristica and truncated forms are modifiers, whereas those of univerbations are heads according to the distinction made by Steriopolo (2009). Diminutives and some feminitives are used in child directed speech and in the speech of children, whereas other ka-forms are characteristics of the adult communication.

Slavic languages differ in the form and number of diminutive suffixes. The set of such suffixes in Bulgarian presented in Manova (2015) shows that, unlike their Russian equivalents, the Bulgarian diminutive suffixes are not phonologically homogeneous. Thus, their use might be determined by other than pure morphonological reasons. The Lithuanian diminutive suffixes are also heterogeneous and up to six of them may be attached to one and the same base (Dabašinskienė 2009). Several diminutives can be formed from one and the same simplex, whereas in Russian diminutives mostly prefer one derivation pattern. The research questions for comparative studies are the following:

- 1) Whether other Slavic and Baltic languages use the whole set of informal derivatives and whether they have similar suffixes with the diminutives;
- 2) Whether the set of such suffixes is morphonologically similar to the one of diminutive formation:
- 3) Whether the morphonological similarity (if any) of informal suffixes correlates with unclear pronunciation of the oral variety of language;
- 4) Whether the feminitives in the given languages are regularly formed;
- 5) Which derivatives are used in child directed speech and in the speech of little children? The quantitative data on Russian ka-words and the algorithm of further calculations is provided.

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