Russian baby diminutives:
Heading toward an analysis*

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Abstract

The Russian suffix *-onok* has two functions. First, it can be a size diminutive in nouns denoting baby animals. Second, it can be an evaluative with a dismissive/affectionate flavor. Various grammatical properties of this suffix differ between the two uses: gender, declension class, and interaction with suppletive alternations, both as target and trigger. We explore a reductionist account of these differences, on the assumption that there is a single vocabulary item that may realize either a head or a non-head morpheme. In doing so, we attempt to spell out theoretical assumptions that would be needed to reduce the observed grammatical differences to this structural distinction, and to situate our account with relation to other current approaches to diminutives.

1   Introduction

The Russian suffix *-onok* has two functions: a size diminutive (often to refer to baby animals) and as an evaluative with a dismissive/affectionate flavor. These functions go with different grammatical properties: gender and suppletion (shown in (1)). Gender-wise, baby diminutives are consistently masculine, regardless of the gender of the base noun (see (1a)). Suppletion-wise, the baby diminutive undergoes suppletion to *-at* in the plural, and conditions suppletion of roots such as 'horse' (see (1b)). On the other hand, none of these properties hold when *-onok* appears in its guise as an evaluative suffix. The evaluative retains the gender of the singular stem (1c–d), fails to undergo suppletion to *-at* in the plural ((1a-b) vs. (1c–d)), and does not condition suppletion on roots (1b–c). These differences might be reason to treat the two *-onok* suffixes as distinct homophonous morphemes. One reason not to is that the two uses of the *onok* morph not only share diminutive meaning, but also share idiosyncratic morphophonology, suggesting that they are the same element at some level of representation. Another reason is that there are several nouns whose evaluatives variably show affixal suppletion in the plural (such as (1e)), reinforcing a tight connection between the two exponents.

(1)   Gender and suppletion in *-onok* nouns, in brief

	BASE	GDR	GLOSS	SINGULAR	GDR	PL.	
a.	krɨs-a	F	'rat'	krɨsʲ-onok	M	krɨs-at-a	'baby rat'
b.	loṣadʲ	F	'horse'	ʑerebʲ-onok *loṣadʲ-onok	M	ʑerebʲ-at-a *ʑerʲeb-onk-i	'foal'
c.	loṣadʲ	F	'horse'	loṣadʲ-onk-a	F	loṣadʲ-onk-i	'horse (eval.)'
d.	muʐ-ik	M	'dude'	muʐ-itɕ-onk-a	M	muʐ-itɕ-onk-i	'dude (eval.)'
e.	brʲuk-i	N/A	'trousers'	—	N/A	brʲutɕ-onk-i/-at-a	'trousers (eval.)'

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Our goal is to explore a reductionist account, where the variation in gender, suppletive possibilities, and meaning are reflexes of a single structural difference between the two senses, as opposed to synchronically homophonous affixes whose properties are merely stipulated.

We suggest that the most promising analysis is one that treats the two functions as representing a single element (a *vocabulary item* in the terminology of Halle and Marantz (1993), equivalently an *exponent, morph* or *pronunciation*) that may be inserted as a head or non-head (modifier/adjunct), in the sense of Williams (1981) and (with different terminology) Lieber (1980); Selkirk (1982) and subsequent work. This parallels treatments of other size/attributive diminutives, including in Russian, in Wiltschko and Steriopolo (2007); Steriopolo (2008, 2014), although curiously with the opposite linking of function to structure.

The key difference is that an affix that is a head determines the features (grammatical category, gender, etc.) of its mother node, while an affix that is a non-head does not—the features of the mother node are determined by the affix's sister, as schematized in (2). Throughout, we will use a dashed line to indicate a modifier, i.e., non-head, affix; the arrows reflect the source of the features at the root node, recalling the implementation of headedness/labeling as percolation in Lieber (1980).

(2) a. x-as-head b. x-as-modifier

$$
\begin{array}{cc}
x & y \\
\diagup\diagdown & \diagup\diagdown \\
y \quad x & y \quad x \\
\mid & \mid \\
y & y
\end{array}
$$
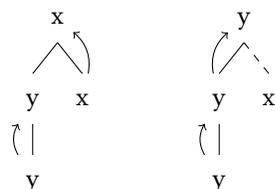
Whether a given affix is a head or modifier is not always independently predictable. Many derivational suffixes are heads. For example, setting aside expressives, nominalizing suffixes normally determine both gender and declension class. Any Russian noun derived with *-ost^j* '-ness', such as [glúp-ost^j] 'silliness', is feminine and Class III. Any noun derived with *-nik*, as in [spút-nik] 'sputnik, fellow traveller', is masculine, Class Ia.

Diminutives, though, are known to vary in this property across languages (Lieber 1980 contrasts German and Spanish) and even within a single language (see Wiltschko and Steriopolo 2007; Steriopolo 2008). The German diminutive *-chen* is a head—regardless of the gender of the base noun, diminutives are always neuter, exemplifying the pattern in (2a):[1]

(3) German diminutives: systematically neuter

|	BASE	GENDER	GLOSS	DIMINUTIVE	GENDER
a.	Wein	M	'wine'	Wein-chen	N
b.	Feder	F	'feather'	Feder-chen	N
c.	Kind	N	'child'	Kind-chen	N

By contrast, Italian diminutives inherit the gender of the base to which they attach, thus Scalise 1988 identifies them as non-heads in the sense of (2b):

(4) Italian diminutives: base gender preserved

	BASE	GENDER	GLOSS	DIMINUTIVE	GENDER
a.	ragazzo	M	'boy'	ragazz-in-o	M
b.	albero	M	'tree'	alber-in-o	M
c.	persona	F	'person'	person-c-in-a	F
d.	mamma	F	'Mama'	mamm-in-a	F

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[1]We transcribe Russian examples in IPA throughout, since phonological properties are a component of our argument. Examples from other languages, such as German and Italian, are given in conventional orthography, as the phonology is not crucial.

The difference between German and Italian thus corresponds neatly to the head versus non-head distinction in terms of the labeling of the higher node for gender features (Italian diminutives are also transparent to category features):[2]

(5)   a.   German *-chen* is a head   b.   Italian *-in* is a modifier
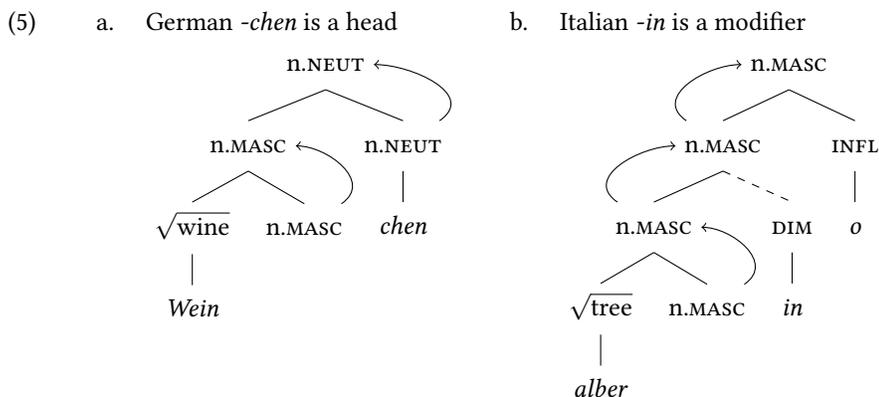
In this paper, we argue that the co-varying grammatical properties of *-onok* track the head versus non-head distinction. The status of baby-*onok* as the exponent of a head is straightforward (§2). The second part of the argument (§3) is more complex for a number of reasons. Some of the properties that vary, like suppletion, are not yet a part of the discussion of head versus non-head affixes—in light of the variation seen in Russian, we will suggest how they might fit within a larger theory, and how they may be related to questions surrounding category-neutral roots, and associated category-defining heads. Another property that comes up in the discussion repeatedly is declension class. While the evaluative diminutives in (1c–d) retain the gender of the base to which they attach, they sometimes change the declension class. Steriopolo (2008) in her discussion of Russian evaluatives treats change in declension class as a diagnostic of head status. We argue that declension class is not the same type of feature as gender and should not, and cannot, be treated as the kind of feature that is part of the percolation/algorithm in structures like (5).

We make this argument both on empirical grounds, revisiting earlier work on the head-modifier distinction, and on theoretical grounds within the general Distributed Morphology (DM) framework, where we argue that declension class is a property of vocabulary items (exponents, pronunciations) and not of the abstract morphosyntactic nodes that they realize. Making this distinction invites us to be more explicit about what it means for 'an affix' to have flexibility in attachment. It is theoretically inaccurate to say that *-onok*, as a pronunciation, 'combines' with anything—it is neither a head nor a modifier; rather, if we are right, it may serve as an exponent of an abstract morpheme that may be a head or a modifier. We offer some thoughts on this theoretical distinction, and in particular, how it may relate to the failure of suppletion in the evaluative use of *-onok*. The proposal hinges on the assumption that merging as a modifier is possible for morphemes that undergo 'bleaching' of semantic and grammatical features; the various properties of evaluative *-onok* follow from this. Finally, we consider the alternative of treating the two guises of *-onok* cartographically (§4) and conclude that it is not viable, since no plausible structure captures both the morphotactics and the suppletion possibilities.

We want to clarify that we do not intend to propose a unified theory of all diminutive affixes. The scope of the proposal is confined to the Russian *-onok* suffix, which happens to be a particularly clear and striking example of the morphological differences we are interested in. Even within Russian, however, there are other evaluative suffixes that we would not wish to analyze as 'bleached' versions of homophonous head suffixes (see §5.2). For some pairs of phonologically similar affixes that pattern as heads vs. modifiers, it is entirely reasonable to treat them as synchronically unrelated homophones.

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[2]These representations incorporate the assumptions that roots lack syntactic category (Borer 2003, inter alia) and gender features (Acquaviva, 2008b; Kramer, 2015), and that these are provided by a categorizing affix, a null little *n* in the instances at hand. We return to this point and some other properties of Italian diminutives in §3.2, as they become relevant to our discussion of Russian *-onok*. For the purposes of labeling, we treat inflectional affixes as not contributing features.

2   Baby-Diminutive *-onok* spells out a head

2.1   Baby-diminutive basics

We start by illustrating the baby diminutive function of *-onok*. Nouns formed with this suffix normally refer to offspring (often animals, in which sense it is quite productive) or small/young humans (e.g., [batrák] 'worker (archaic)' ∼ [batratɕ-ónok] 'little kid worker', [dʲjávol] 'devil' ∼ [dʲjavolʲ-ónok] 'little devil'), as illustrated in (6). One immediately noteworthy point is that the plural form of this suffix is suppletive: [-at] in place of *onok* (the final *-a* is the plural nominative marker; as we show in the full paradigm in (16), suppletion is conditioned throughout the plural, not just in the nominatives shown here).

(6)   Russian baby diminutive: on masculines (all decl. class I, nominatives)

	bare N	Gdr	Gloss	BABY-DIM SG	Gdr	BABY-DIM PL	
a.	kót	M	'cat'	kotʲ-ónok	M	kotʲ-át-a	'kitten'
b.	úʐ	M	'adder'	uʐ-ónok	M	uʐ-át-a	'baby adder'
c.	slón	M	'elephant'	slonʲ-ónok	M	slonʲ-át-a	'baby eleph.'
d.	osʲól	M	'donkey'	oslʲ-ónok	M	oslʲ-át-a	'baby donkey'
e.	vólk	M	'wolf'	voltɕ-ónok	M	voltɕ-át-a	'wolf cub'
f.	paúk	M	'spider'	pautɕ-ónok	M	pautɕ-át-a	'baby spider'
g.	dʲjávol	M	'devil'	dʲjavolʲ-ónok	M	dʲjavolʲ-át-a	'little devil'
h.	batrák	M	'worker'	batratɕ-ónok	M	batratɕ-át-a	'kid worker/ worker's kid'

Various phonological properties of the suffix are illustrated in these examples. It is noteworthy that all of these phonological properties apply whether the suffix is used as a baby diminutive or an evaluative, an argument in favor of considering the two uses to constitute a single morph.

- **Mutation**: regardless of its function, the affix triggers mutation on many stem-final consonants. Most non-dorsal velarized consonants become palatalized: [kot] 'cat' ∼ [kotʲ-onok] 'kitten'. Most dorsals mutate into stridents, /k, g, x/→[tɕ, ʐ, ʂ], as in [pauk] ∼ [pautɕ-onok] 'baby spider'.[3]

- **Stress**: [-ónok] is a dominant auto-stressing affix (see Melvold 1989, i.a.); this means that regardless of the stress location and type of the stem, nouns derived with [-ónok] bear stress on the suffix. This is also true of the [-át] allomorph.

- **Vowel deletion**: The suffix triggers and undergoes vowel ("yer") deletion (Lightner 1965 et seq.): [osʲól] 'donkey'∼[osel̶ʲ-ónok] 'baby donkey NOM.SG'∼[oslʲ-ónɵk-a] 'baby donkey GEN.SG'.

Regardless of the gender and declension class that the base has, all the *-onok* words trigger masculine agreement and are in the consonant-final declension Class Ia in the singular (see (7); declensions are discussed in more detail in §2.2.3 and §3.2):

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[3]The analysis of mutation is a thorny problem in Russian phonology, and we will not solve it here. Note that both *-onok* and *-at* cause the same exact mutations and are both auto-stressing. That both affixes cause the same mutations is not unusual—several other suffixes (e.g., adjectival formatives) cause similar changes. Suffixes do vary in the details of changes they cause; thus, the alternations triggered by verbal suffixes differ from those of diminutives, and even diminutives vary (for example, the diminutive *-ok* causes mutation on velars (as in [bɨk∼bɨtɕ-ók] 'bull (+dim)'), but not on labials (e.g., [dub∼dub-ók] 'oak (+dim)', [gólubʲ∼golub-ók] 'pigeon (+dim)'.) Moreover, both the targets and the undergoers for the various mutations are lexically specific; cf. [medvédʲ]∼[medveʐ-ónok] 'bear (+baby.dim)' vs. [lébedʲ]∼[lebedʲ-ónok] 'swan (+baby.dim)'. This lexical specificity be analyzed in terms of readjustment rules where both the undergoer and the trigger bear diacritic features. Each suffix can potentially bear multiple diacritics that go with separate rules: thus, both *-onok* and *-at* would be indexed for velar mutation, non-velar palatalization, etc. But *-ok* would be indexed for velar mutation only. Note that while *-onok* and *-at* share readjustment rule diacritics, they belong to different declension classes, as we show later—thus, their morpho-phonological diacritics overlap but are not identical.

(7) Attaches to feminines, and indeclinables

	Base stem	Gender	Decl. Class	Gloss	Baby Dim (MASC)	Gloss
a.	galk-a	F	II	'jackdaw'	galtɕ-onok/-ata	'baby jackdaw'
b.	vɨdr-a	F	II	'otter'	vɨdr^j-onok/-ata	'baby otter'
c.	krɨs-a	F	II	'rat'	krɨs^j-onok/ata	'baby rat'
d.	lʲaguʂ-k-a	F	II	'frog'	lʲaguʂ-onok/-ata	'baby frog'
e.	mɨʂ	F	III	'mouse'	mɨʂ-onok/-ata	'baby mouse'
f.	rɨsʲ	F	III	'lynx'	rɨsʲ-onok/ata	'baby lynx'
g.	kenguru	common	indecl.	'kangaroo'	kengur^j-onok/-ata	'joey'

The suffix also forms, idiosyncratically, the names for some mushroom species. Although these are lexicalized and are not a small or young version of the corresponding stem, we include these here, since they behave for all grammatical purposes as if they were baby-diminutives. Lexicalized diminutives, with meanings not transparently related to the base (or where there is no longer a synchronic base) are of course well known from many languages (Dressler and Barbaresi, 1994; De Belder et al., 2014). Here too we see the masculine gender and suppletive plural regardless of the gender of the base.

(8) Mushrooms

	Base	Gender	Decl	Gloss	Baby Dim (MASC, Ia)	Gloss
a.	masl-o	N	Ib	'butter, oil'	masl^j-onok/-ata	'Suillus' (mushr. sp.)
b.	n/a	–	–	–	op^j-onok/-ata	'Armillaria' (mushroom sp.)

The systematic overriding of the base noun's gender is the hallmark characteristic of a head (Williams 1981; Selkirk 1982), and is directly parallel to German diminutives in *-chen*, which are neuter, regardless of the gender of the base to which they attach. On the assumption that gender, for nouns, is a property of the category-determining element 'little *n*' (Kramer, 2015), we may identify a particular *n* head with a lexical entry as in (9).

(9) Lexical Entry for -ONOK
     -ONOK; [X ___] *n*, Masc.; meaning: young of X (DIMINUTIVE).

Following one of the key tenets of DM, we assume that the morpheme that enters into morphosyntactic composition is abstract, lacking phonological form—as in other realizational frameworks, the features constituting such abstract morphemes receive pronunciation via rules of exponence (vocabulary insertion). Since -ONOK undergoes suppletion, the single abstract morpheme must be associated with two exponents, plural [-at] and singular [-onok] (Certain parts of this rule, such as '...' and the "Ib" diacritic on *-at*, are explained in the next section):

(10) VI rules for -ONOK
      ONOK, n ↔ -at$_{Ib}$ / ___] ...PL
      ONOK ↔ -onok

The following trees illustrate the derivation of the nouns meaning 'duck' and 'duckling' in singular and plural (nominative case). We assume that all nouns in Russian end in an inflectional desinence, sometimes Ø, that is an exponent of case and number. The choice of exponent is a function of declension class, which is intimately related to gender, but in a non-trivial fashion (see §2.2.3). Russian has three genders in the singular (masculine, feminine, neuter), but gender distinctions are neutralized in the plural. Example (11c) shows the masculine gender of the suffix overriding the gender associated with the root, and example (11d) shows the suppletive [at] exponent of ONOK triggered by the plural inflection. A subset of feminine nouns in Russian, like *ut-k-a* 'duck', have a feminine suffix *-k*, but animal names of this form lose this suffix in the baby-diminutive. We treat this as an alternation of *n*
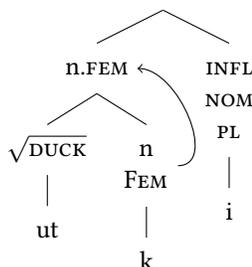
heads, which are otherwise often zero.[4]
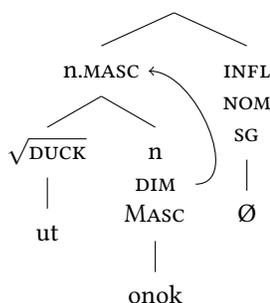
(11) Baby *-onok* : 'duck', 'duckling'
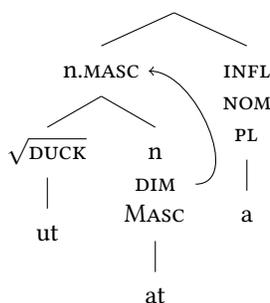
a. ut-k-a 'duck' [NOM.SG.FEM]
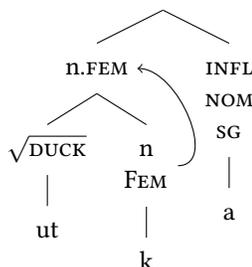
b. ut-k-i 'ducks' [NOM.PL]

c. ut^j-onok 'duckling' [NOM.SG.MASC]

d. ut^j-at-a 'ducklings' [NOM.PL]

This provides the basic account of baby-diminutive *-onok* as a head, like German *-chen*.

2.2 Baby-diminutives in more detail

We discuss three additional issues before turning to comparison with evaluative *-onok*: the evidence that the head version of the suffix can merge directly with roots (§2.2.1), the conditioning of suffix suppletion across intervening material (§2.2.2), and declension class differences between the allomorphs of head *-onok* (§2.2.3).

2.2.1 Baby-diminutives in more detail: proximity to roots

In the example just considered, we noted that the diminutive suffix replaces the feminine nominalizer that the root [ut-] 'duck' otherwise requires. We take it that this is another indication that *-onok* is, as we have suggested, a category-introducing suffix in its own right, and thus we might expect it to combine with bare roots. Indeed, many baby *-onok* diminutives lack free-standing bases (see (12)). Some of the roots appear in other Russian words, while others are cranberries. For example, [op^j-onok] in (12d) (which was mentioned above in §2.1) is etymologically [o-p^jon-ok] 'around-stump-N,' or 'a mushroom that grows around stumps' (Vasmer 1958). But for contemporary Russian speakers, it appears to have

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[4]We do not intend here to adjudicate between views where gender is a property of roots and views where roots are gender-neutral and nouns acquire gender when the root combines with a categorizing *n* head, though we have opted for the latter in our representations. Advocates of this perspective typically invoke licensing conditions on roots (see Acquaviva, 2008b and for a more developed approach Kramer, 2015). An issue this raises is how to ensure that any given animal-name root is only licensed with one particular *n* when it refers to an adult animal, while allowing practically any animal-naming root to combine with the masculine *-onok*. For example, combinations of the root [ut-] 'duck' with other-gender *n*s is undefined: *[ut-Ø] (intended masc.), *[ut-o]. So far as we can see, licensing proposals do not provide a ready means to capture this systematicity, in the way that specifying gender on roots would.

been reanalyzed as [√opʲ-onok]: the plural is [opʲata] rather than [opʲonki].[5]

(12)   Root baby diminutives (no free-standing nouns)

	Baby DIM.SG/PL	Gloss	Root in other words?
a.	ẓerebʲ-onok/ata	'foal'	ẓerebʲ-it-sa 'to foal'
b.	telʲ-onok/ata	'calf'	tel-ets 'Taurus (astrol.)', tʲol-k-a 'heifer'
c.	kutʲ-onok/ata	'puppy'	no, etymology obscure (acc. to Vasmer)
d.	opʲ-onok/ata	'Armillaria'	no (reanalyzed from *o-pʲon-ok*, 'stump mshr.')
e.	ççurʲ-onok/ata	'baby pike'	ççuk-a 'pike'
f.	porosʲ-onok/ata	'piglet'	porosʲ-it-sa 'to farrow'
g.	jagnʲ-onok/ata	'baby lamb'	jagnʲ-it-sa 'to lamb'

Some, but not all, of these stand in apparent suppletive pairings with notionally corresponding animal names. For example, (12b) is the regular form for the meaning 'calf', there is no baby-diminutive formed on the base [korov]: *[korov-ʲónok] 'baby cow' (as we show in the next section, [korov-ʲonk-a] is fine for an adult cow).[6]

Structurally, if -ONOK is a nominalizer that may (but need not) be root-attached, then it is in the configuration to trigger root suppletion under any current treatment (see Bobaljik, 2012; Moskal and Smith, 2016 among others) of the locality conditions between target and trigger of suppletion:
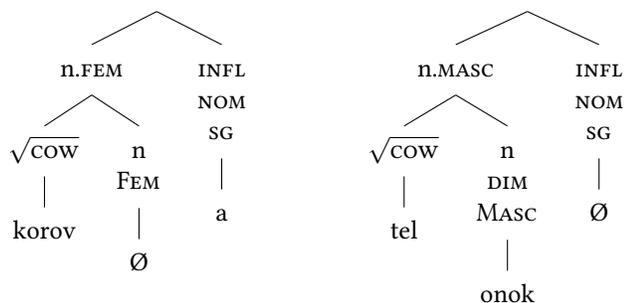
(13)   VI rules for root 'cow':
$\sqrt{\text{COW}} \leftrightarrow$ tel- / ___] n.DIM
$\sqrt{\text{COW}} \leftrightarrow$ korov- /

(14)   Root suppletion with baby *-onok*

a. korov-a 'cow' [NOM.SG.FEM]   b. telʲ-onok 'calf' [NOM.SG.MASC]

Treating the suppleting diminutive as a little *n* that may combine directly with a root may shed light on the mushroom names noted in (8). Various authors have suggested that the domain of idiosyncratic interpretation is typically the root plus the first category-defining node above the root (Marantz, 1996; Arad, 2003). These lack the compositional semantics associated with the baby-diminutive, but conform to the characterization of the structure that allows non-compositional meanings in the works cited.

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[5]A search of the Russian National Corpus (RNC) turns up 56 hits for [opʲata], and 38 for [opʲonki]. About a third of the latter are scanning errors (where <опенки> appears in the context where <оценки> 'assessments' is expected); quite a few of the remaining ones are in older texts from the 19th century.

[6]See Faltýnková and Ziková (2019) for a nanosyntactic treatment of the related suppletive alternation in Czech. One might take issue with our treatment of these special roots as suppletive, for example, from the perspective of the venerable debate about whether root suppletion is limited to inflectional triggers (see Corbett, 2007 for discussion). For animal names at least, the derivation of a baby-term in [-onok/-ata] is extremely productive, and a lexically listed root blocks the corresponding transparently derived form, thus these meet the definition of suppletion in, e.g., Mel'čuk (1994, 358).

2.2.2   Baby-diminutives in more detail: *-at* suppletion without linear adjacency

Structural locality of suppletion also plays a role where the diminutive head is the target, rather than the trigger of suppletion. In (10) we state the alternation such that the PLURAL feature on the inflectional node is the trigger for the suppletive [at] allomorph. As shown in (15), linear adjacency is not required between ONOK and PL. The productive (evaluative) diminutive *-(o)k* may intervene:[7]

(15)   Plural does not have to be string-adjacent to *-onok* to condition suppletion to *-at*

medveẓ-onok	'baby bear'	medveẓ-<u>at</u>-a	'baby bears'
bear-ONOK		bear-ONOK-PL	
medveẓ-onotɕ-ek	'baby bear (dim)'	medveẓ-<u>at</u>-k-i	'baby bears (dim)'
bear-ONOK-DIM		bear-ONOK-DIM-PL	

These examples are easily multiplied. Anything that has an *-ata* plural can have an *-atki* plural (or even [-át-otɕ-k-i], with *-ok* doubled).

Technically, we have represented this in our statement of the context for the [at] allomorph in (10), where we intend the context: / ___] ...PL to be read as 'c-commanded by PL'. We intend the context to be further restricted by a general condition on the locality of suppletive triggers, for which there are various competing current proposals (see Moskal and Smith, 2016 for an overview). Our use of ellipses is meant to allow for intervening material, that is, to signal that we do not take linear adjacency (contra Embick, 2010) to be a part of that general theory. A range of examples of apparently non-adjacent suppletion triggers have been adduced in Kastner and Moskal (2018); Ganenkov (2019); Božič (2019); Choi and Harley (2019).[8]

Another aspect of suppletion to *-at* is that it comes with a subtle change in declension class, as we show next. In (16) and (17) are full paradigms for *-onok* derivatives formed from masculines and feminines. The singular *-onok* forms are garden-variety, animate Class Ia masculines (the default class for masculines), regardless of the gender and class of the base noun. Thus [ʂakál] and [ʂakalʲ-ónok] decline identically in the singular. But the paradigm in (16) shows that the declension class of *-at* derivatives in the plural is slightly different from that of most masculines; the differences are in the Nom Pl and Gen/Acc Pl cells. Whereas [ʂakál] in the plural takes the totally regular endings for Class Ia, diminutive [ʂakalʲ-át-a] has a nominative plural in unstressed [a] and takes the zero Genitive/Accusative plural. (If these forms were to be further suffixed with *-ok*, the NOM.PL would be [-at-k-i], and the GEN.PL would be [-at-ok-Ø], following the pattern expected after [-ok].)

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[7]Russian has many diminutives, as noted earlier, and we do not assume that they are all allomorphs of the same morpheme. Some of them, including unstressed [-ok], have been reported to alternate between evaluative and head use (Steriopolo (2014)), but as Steriopolo observes, head [-ok] is a feminine-forming nominalizer, not a baby diminutive.

[8]Although (15) shows clearly that the diminutive may occur between the target and trigger of suppletion, it is apparently not always able to do so. Two (arguable) instances of nominal root suppletion for number in Russian do not show suppletion across the diminutive, as noted in part in Moskal, 2015. The word for 'person' (arguably) suppletes in the plural (ia), and the word for 'year' suppletes in the genitive plural (of quantification only) (ic). While both form diminutives, the diminutive plurals do not show root suppletion:

(i)   Diminutive -(e)k blocks root suppletion

a.	tɕelovek	'person'	lʲudʲ-i	'person-PL'
b.	tɕelovetɕ-ek	'person-DIM'	tɕelovetɕ-k-i / *lʲudʲ-(ɕi)k-i	'person-DIM-PL'
c.	god	'year'	lʲet-Ø	'year-GEN.PL'
d.	god-ik	'year-DIM'	god-ik-ov / *lʲet-ik-ov	'year-DIM-GEN.PL'

Theories of the locality of suppletion in which the category-defining node *n* plays a role in delineating the domain of suppletion could potentially draw the right cut between (i) and (15), though we do not pursue the matter further here.

(16)   A full declension paradigm for a baby diminutive and its masculine base, 'jackal'

	Sg	Pl	Sg	Pl
Nom	şakál	şakál-ɨ	şakal^j-ónok	şakal^j-át-a
Gen	şakál-a	şakál-ov	şakal^j-ónk-a	şakal^j-át
Dat	şakál-u	şakál-am	şakal^j-ónk-u	şakal^j-át-am
Acc	şakál-a	şakál-ov	şakal^j-ónk-a	şakal^j-át
Inst	şakál-om	şakál-ami	şakal^j-ónk-om	şakal^j-át-ami
Obl	şakál-e	şakál-ax	şakal^j-ónk-e	şakal^j-át-ax

(17)   A full declension paradigm for a baby diminutive and its feminine base, 'lynx'.

	Sg	Pl	Sg	Pl
Nom	rís^j	rís^j-i	rɨs^j-ónok	rɨs^j-át-a
Gen	rís^j-i	rís^j-ej	rɨs^j-ónk-a	rɨs^j-át
Dat	rís^j-i	rís^j-am	rɨs^j-ónk-u	rɨs^j-át-am
Acc	rís^j	rís^j-ej	rɨs^j-ónk-a	rɨs^j-át
Inst	rís^j-ju	rís^j-ami	rɨs^j-ónk-om	rɨs^j-át-ami
Obl	rís^j-i	rís^j-ax	rɨs^j-ónk-e	rɨs^j-át-ax

   Understanding the importance of these declension class differences, which will be relevant again in our analysis of the evaluative *-onok*, requires a digression regarding the relation of declension class and gender, both in Russian and in general.

2.2.3 Declension class and gender in Russian—an aside

Although the distinction between gender and declension class is sometimes overlooked, and it is easy to find reference to things such as the Russian 'feminine declension' or the claim that nouns decline for gender, number and case, it is well established that the gender and declension class are distinct, though related (e.g., Corbett 1982; Halle 1994). The gender of a noun is diagnosed by the agreement/concord controlled by that noun (on remote targets including adjectives, participles, and pronouns). Russian distinguishes masculine, feminine, and neuter genders in the singular, though neuter is only distinct from the masculine in the nominative. Gender distinctions are collapsed in the plural. The pronominal paradigm illustrates (see also (23) for noun endings):

(18)   Russian gender, exemplified on pronouns

	MASC.SG	FEM.SG	NEUT.SG	PL.
NOM	on	ona	ono	oni
GEN	jevo	jejo	jevo	ix
DAT	jemu	jej	jemu	im
ACC	jevo	jejo	jevo	ix
INST	im	jej	im	imi
OBL	n^{j}om	nej	n^{j}om	nimi

   While gender determines agreement, declension class determines how case and number are expressed within the noun. There are three broad declension classes, although many finer sub-classes are needed to capture all the details (Zaliznjak 1977). For inanimates, there is a tight (but not perfect) correlation between gender and declension class, but for animates (humans and animals), the situation is more complex. For class II in particular, the gender of an animate noun is determined by its 'real world' gender (sex, or notional gender).[9]

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[9]On the distinction between sex and notional gender, see e.g., McConnell-Ginet (2014) and work cited there.

(19) Class I (broadly construed, as in Timberlake 2004) includes both masculines and neuters, although many animate nouns in it have common gender—they can refer to male or female individuals and, at least in the nominative, control gender agreement according to the gender of their referent (e.g., [doktor] 'doctor' can trigger masculine or feminine agreement; see Pesetsky 2013, Matushansky 2013). There are no strictly feminine nouns in class I. Class I has two large subclasses: Class Ia has a zero ending in the nominative singular—all class Ia inanimate nouns are masculine. Class Ib comprises primarily neuters, distinguished by taking the nominative singular desinence [e] or [o].

(20) Class II includes both feminines and masculines, including words such as [ʐenǫǫina] 'woman' and [muǫǫina] 'man'. However all nouns in this class denoting inanimates are feminine.

(21) Class III is the smallest, and is unique in being populated by nouns of just one gender, feminine (e.g., [loʂadʲ] 'horse').

(22) Indeclinables: these nouns have the same form regardless of case—for example, [menʲu] 'menu (neut)', [kofe] 'coffee (masc)', [ledi] 'lady (fem)', [kenguru] 'kangaroo (common)'. Gender varies within indeclinables, and the class is mostly loanwords.

A last point (to which we return in §3.3) is that while gender is completely neutralized in the plural, declension classes are still partly distinguished in the nominative and genitive plural (see Garde, 1998). Class Ib is distinguished by normally taking a nominative plural in [a], while most Class Ia nouns and all Class II and III nouns have a nominative plural in [i∼ɨ]. There is a group of Class Ia nouns which have a nominative plural in [á] (e.g., [glaz-á] 'eyes'), but according to the careful study in Garde (1998) all such nouns have desinence stress in the plural. On the other hand, Ib plural [a] is usually unstressed (e.g., [vin-ó] 'wine (neuter, Ib)' vs. [vín-a] (pl))—much as the baby plural [-a] is unstressed. In the genitive plural, the split in the regular declensions groups Class Ib and II, normally marked by a zero ending in the genitive plural, as against Class Ia and Class III which typically have [-ej] or [-ov] (although there are exceptions); this is shown in table (23).

(23) Major declensions of Russian nouns

		Ia		Ib		II		III	
		anim	inan	anim	inan	anim	inan	anim	inan
Sg	Nom	-Ø		-o/-e		-a		-Ø	
	Acc	-a	-Ø	-o/-e		-u		-Ø	
	Gen	-a				-i			
	Dat	-u				-e		-i	
	Inst	-om				-oj		-ju	
	Loc	-e				-e		-i	
Pl	Nom	-i/-á		-a		-i			
	Acc	-i/-á	-ov/-ej	-Ø	-a	-Ø	-i	-ej	-i
	Gen	-ov/-ej		-Ø		-Ø		-ej	
	Dat	-am							
	Inst	-ami							
	Loc	-ax							

We may now return to the declension of the baby diminutives. The importance of the plural nominative and genitive/accusative forms is that this combination of forms is exclusive to Class Ib - only class Ib nouns may have a nominative plural in unstressed [-a].[10]

The difference in declension class between the singular and plural forms of the baby-diminutives is consistent with the view that declension class is associated with exponents, rather than with the underlying abstract morphemes. For the *-at* allomorph, belonging to class Ib is not predictable from

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[10]The class Ib endings here are understandable on historical grounds: prior to the suppletive *-onok*∼*-at* alternation, these nouns were all neuters. The baby-diminutive-forming suffix is reconstructed as *-ent* (Trubachev 1960); morpho-phonological changes left this as just [ę] in the nominative (and accusative) singular, and [ęt] elsewhere. This declension is quite parallel to the class 1b *en*-stems, such as contemporary [imʲa]∼ [imen-a] 'name (+pl)'; the stem-final nasal vowel gave rise to an [-en/ʲa] alternation. Thanks to Michael Flier for discussion.

its phonology or from gender (which is neutralized in the plural). Moreover, its declension class is not shared with the corresponding singular *-onok*, which is Class Ia. For this reason, we have added the diacritic subscript *Ib* to the exponent [at] in (10)—declension class is not a morphosyntactic feature, part of the abstract combinatorics that feed agreement/concord and percolation, but is instead a part of the morphophonological system. For the default exponent *-onok* no diacritic is needed, since class Ia is the default declension class for masculine gender. The decision not to add a redundant diacritic here will play a role in our analysis in §3.3.

2.3   Loose ends: devilish details

The remaining residual details are a few lexical exceptions within the *-at* pattern, and its appearance in adjectival contexts.

2.3.1   Puppies and baby devils

For the sake of completeness, we note that there is a small group of baby *-onok* forms that is anomalous: [ɕɕenók] 'puppy', and two words for devils: [besʲónok, tɕertʲónok]. These nouns are anomalous in that the [-en] is retained in the plural: [ɕɕenʲáta] (not *[ɕɕata]), [besʲen-át-a, tɕertʲen-át-a]:[11]

(24)   Puppy: anomalous phonology and doublets

a.	ɕɕenók	'puppy (NOM.SG)'	
b.	ɕɕenká	'puppy (GEN.SG)'	
c.	ɕɕenkí	'puppies (NOM.PL.)'	RNC: 317 hits
d.	ɕɕenʲáta	'puppies (NOM.PL.)'	RNC: 107 hits
e.	ɕɕenʲ-ít-sa	'to whelp, have puppies'	

The plural [ɕɕenkí] is what we would expect if /ɕɕen-/ is the root, with the diminutive suffix /-ók/. The verbal form [ɕɕenʲ-ít-sa] 'to whelp' (cf. [jagnʲitsa] 'to lamb', [z̦erebʲitsa] 'to foal' in (12)) supports treating [en] as part of the root. But then the *-ata* plural is unexpected given the singular. One explanation for it is that it is based on a misanalysis of the NOM.SG as [ɕɕ-enók]. (Even this misanalysis requires positing an allomorph of the baby diminutive with final stress, which does not occur elsewhere.) If [ɕɕenʲ-ata] is the plural, we would expect the singular *[ɕɕenʲ-onok] (which does occur in the RNC three times, in what look like jokey or metalinguistic contexts). No matter which way we look at it, the form seems anomalous.

2.3.2   Adjectival *-at*

In addition to the plural, *-at* systematically appears in adjective formation. Just as in nouns, it is employed in 'baby' contexts. As shown in (25), the distribution of *-at* is systematic: for all these animal examples, the adult adjectival stems vary in their morphology, but the baby ones always have *-atɕ*, a mutated form of [-at]. The *-onok* allomorph cannot appear in these contexts (thus, *[telʲonotɕij] 'calf (adj)').

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[11]Garde (1998, 173) gives these as a complete list of the forms where [-at] replaces [ok] alone, rather than [onok]. The form [ɕɕenók], which is far more frequent in usage than [kutʲonok] 'puppy' (1545 hits in the Russian National Corpus for nom.sg vs. 30), is also unique among [onok]~[ata] pairs in having stress on [ók] (and correspondingly orthographic *e* rather than *ë* in the first syllable). Note also that the expected forms [tɕertʲata], [besʲata] 'little devils' do exist but are less frequent than the [-en]-extended plurals.

(25)   Baby adjectives formed with *-at(ɕ)*

		Nom.Sg	Gloss	Nom.Pl.	Adj (citation, masc.sg)
a.	adult	korova	'cow'	korov-ɨ	korov-ij
	baby	telʲ-onok	'calf'	telʲ-at-a	telʲ-atɕ-ij
b.	adult	loṣadʲ	'horse'	loṣad-i	loṣad-in-ɨj
	baby	ẓerebʲ-onok	'foal'	ẓerebʲ-at-a	ẓerebʲ-atɕ-ij
c.	adult	svinʲj-a	'pig'	svinʲj-i	svin-sk-ij, svin-oj, svinʲ-atɕ-ij
	baby	porosʲ-onok	'piglet'	porosʲ-at-a	porosʲ-atɕ-ij
d.	adult	kur-its-a	'hen'	kur-ɨ	kur-in-ij
	baby	tsɨplʲ-onok	'chick'	tsɨplʲ-at-a	tsɨplʲ-atɕ-ij
e.	adult	sobak-a	'dog'	sobak-i	sobatɕ-ij
	baby	ɕɕenok	'puppy'	ɕɕenʲ-at-a	ɕɕenʲ-atɕ-ij

The contexts where *-at*/*-atɕ* appears do not form an obvious natural class; there is no plurality in the adjectival context, nor adjectiveness in the nominal plural environment. The reason for this pattern is actually historical: since *-at* is the historical default/only allomorph, the *-onok* suppletive allomorph was not extended to these contexts. To account for this distribution, we formulate another rule for ONOK allomorphy where [-at] is the exponent of little *n* conditioned externally by the adjectival head *a*, which is null in these contexts.[12]

(26)   ONOK, n ↔ -at / ___]*a*

In adjectives such as [telʲatɕij] 'calf (adj)', the ONOK morpheme externally conditions allomorphy of the root √cow, and the adjectival head conditions the allomorphy of little *n* (here, ONOK). The two environments where the *-at* allomorph of ONOK appears are not analytically related; while it might be tempting to set *-at* as the default allomorph, with *-onok* being the special singular allomorph, we will show in the next section that this is not viable, since *-onok* does appear in singulars when it is used as an evaluative.

2.4   Section summary

To summarize, when *-onok* functions as a baby diminutive, it (i) assigns its own gender (and declension class), (ii) exhibits suppletive allomorphy in the plural, (iii) is able to attach to bare roots, (iv) may trigger suppletion of these roots, and (v) may have non-compositional meaning with certain roots (the mushrooms). Property (i) points to treating *-onok* as a morphosyntactic head, and we have argued that the other properties are also connected in one way or another to the head status of the underlying morpheme.

3   As an evaluative

3.1   The basics

Examples of *-onok* in its function as an evaluative diminutive, with an affectionate or dismissive flavor, are given in (27):

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[12]This historical explanation predicts that the *-atɕ* allomorph should be most robust in adjectives that are long-established and refer to culturally important animals, and indeed, the pattern does not appear to be extended robustly to animals such as 'jackal', 'kangaroo', 'chimpanzee', etc. This seems to rule out an account whereby the existence of an *-at* plural somehow enables the derivation of an *-atɕij* adjective, as in theories with rules of referral (Zwicky 1985; Stump 1993, etc.) We do not want to read too much into the absence of *-atɕ* adjectives for 'jackal', etc., since the baby diminutives for those animals have a low type frequency (some are hapax legomena, expected given the high productivity of this affix), and not finding corresponding adjectives in a corpus is not necessarily surprising.

(27)   Evaluative -onok

	Base	Gdr/Decl	Gloss	with -onok (Sg/Pl)	Gdr/Decl
a.	izb-á	F (II)	'log house'	izbʲ-ónk-a/ónk-i	F (II)
b.	sestr-á	F (II)	'sister'	sestrʲ-ónk-a/ónk-i	F (II)
c.	klʲátɕ-a	F (II)	'nag (horse)'	klʲatɕ-ónk-a/ónk-i	F (II)
d.	koróv-a	F (II)	'cow'	korovʲ-ónk-a/ónk-i	F (II)
e.	lávk-a	F (II)	'bench'	lavtɕ-ónk-a/ónk-i	F (II)
f.	rabót-a	F (II)	'job'	rabot-ónk-a/ónk-i	F (II)
g.	rubáx-a	F (II)	'shirt'	rubaʂ-ónk-a/ónk-i	F (II)
h.	sobák-a	F (II)	'dog'	sobatɕ-ónk-a/ónk-i	F (II)
i.	lóʂadʲ-Ø	F (III)	'horse'	loʂadʲ-ónk-a/ónk-i	F (II)
j.	tsérkovʲ-Ø	F (III)	'church'	tserkvʲ-ónk-a/ónk-i	F (II)
k.	malʲ-tɕ-ik-Ø	M (I)	'boy (dim-dim)'	malʲ-tɕ-ónk-a/ónk-i	M (II)
l.	muʐ-ik-Ø	M (I)	'man, dude'	muʐ-itɕ-ónk-a/ónk-i	M (II)
m.	star-ik-Ø	M (I)	'old man'	starʲ-itɕ-ónk-a/ónk-i	M (II)

These are evaluative and not size or age diminutives: [sestrʲonka] 'sister (eval.)' does not have to be a younger sister. Likewise, the -onok suffixed versions of 'horse', 'dog', and 'cow' in (27) may refer to adult animals. The evaluative function is further illustrated by the many inanimate forms such as 'log house', 'church', 'work', and 'newspaper' [gazetʲ-ónk-a] (fr. [gazeta]), which are incompatible with a baby meaning.

Two contrasts between evaluatives and baby diminutives should stand out from this list: First, unlike the baby diminutive forms with -onok, the evaluative -onok does not show suppletion in the plural: *[izbʲata], *[sestrʲata], *[rubaʂata]. The -ata plural is indeed impossible for all of the examples given in this section.[13] In addition, all of the examples in (27) are in declension class II (-a final Nom.Sg) rather than declension class Ia (see §2.2.3). Somewhat more subtly, all of the forms in (27) preserve the gender (though not the declension class) of the base to which they attach. Note that the final three forms are Masculine, despite being members of Class II. Finally, the evaluative -onok does not trigger root suppletion, even for roots that undergo suppletion in the baby-diminutive:

(28)   Diminutives of [lóʂadʲ] 'horse'

		Sg.	Pl.	
a.	Baby	ʐerebʲ-ónok	ʐerebʲ-át-a	'foal(s)'
b.	Evaluative	lóʂadʲ-ónk-a	lóʂadʲ-ónk-i	'horsey/horsies'

We concluded the previous section by noting that baby-diminutive -onok (i) assigns a fixed gender, (ii) exhibits suppletive allomorphy in the plural, (iii) is able to attach to bare roots, and (iv) may trigger suppletion of these roots. Evaluative -onok differs in all four of these properties. Our task here, then, is to see whether we can reduce these covarying differences to a single, structural difference: attachment as a head versus an adjunct.

Before delving into a morass of detail, let us take a brief moment to sketch what it might mean for there to be a single morpheme that can be merged as a head or a non-head, as opposed to having two homophonous morphemes, perhaps historically related: onok-1 and onok-2.

Recall that we have posited the following lexical entry for the abstract morpheme -onok (repeated from (9)):

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[13]This is based on the intuitions of the native speaker co-author and on a search of the RNC. We did not find hits for any feminines with -ata. For the masculines, [staritɕata] 'old men (baby.dim)' and [muʐɨtsata] 'dudes (baby dim)' have one hit each, the former in a 'poetic license' context alongside other star-derived expressives referring to old men. 'Boys' does occur with ata, [malʲitɕata] (14 RNC hits), though so does [malʲitɕonok]. Neither is surprising, since a boy is a baby human. See §5.1 for a discussion of other, more clearly evaluative ata cases and a possible analysis.

(29) Lexical Entry for -ᴏɴᴏᴋ
    -ᴏɴᴏᴋ; [X ___] *n*, Masc.; meaning: young of X (ᴅɪᴍɪɴᴜᴛɪᴠᴇ).

This morpheme is then subject to the following competing rules of exponence:

(30) VI rules for -ᴏɴᴏᴋ
    ᴏɴᴏᴋ, n ↔ -at$_{Ib}$ / ___] ...ᴘʟ ᴏɴᴏᴋ ↔ -at /___]$_a$ ᴏɴᴏᴋ ↔ -onok

Now, it is clear that the evaluative *-onok* discussed in this section lacks the particular meaning of a baby animal (or young person). Let us make the assumption that the extension of a size diminutive to an affective evaluative is implemented as what is sometimes known as 'semantic bleaching': the use of this morpheme as an affective evaluative is made possible by ignoring its lexical semantic content, leaving only the evaluative component ᴅɪᴍɪɴᴜᴛɪᴠᴇ. Let us assume in addition that this 'bleaching' extends not only to the semantics but also to grammatical features, leaving a morpheme whose only property is a conventionalized vague affective import.

(31) Lexical Entry for -ᴏɴᴏᴋ as affective evaluative
    -ᴏɴᴏᴋ; ~~[X ___] *n*, Masc.; meaning: young of X~~ (ᴅɪᴍɪɴᴜᴛɪᴠᴇ).
    =
    -ᴏɴᴏᴋ; (ᴅɪᴍɪɴᴜᴛɪᴠᴇ).

We speculate that this grammatical bleaching is involved in affective use of other elements that contribute no lexical semantics, but have only a pragmatic/affective value: words such as *damn, fucking*, and perhaps expressions such as *the hell* which clearly have not only lost their literal meaning, but also violate distributional expectations one might have in light of their apparent morphosyntactic category. See Potts (2007) for a theory of expressives that treats them as having no 'normal' semantic contribution, and making instead a semantic contribution in a separate dimension.

We contend that a consequence of bleaching is that the derived morpheme in (31) can only be merged as a non-head. In the version of the node labeling algorithm proposed in Lieber (1980, 1992), the difference between a head and a non-head is not stipulated as such, but is a consequence of whether an affix has grammatical features. An affix with grammatical features will project those features (is thus a 'head' in Williams's sense) and an affix with no features will fail to project. If that is the right formal intuition, then we need not stipulate the head versus non-head difference, but even that follows as a consequence of the proposed bleaching relation that derives the affective version of the morpheme.

We do not consider bleaching to be a morphological operation in the course of a derivation on a par with Impoverishment or Vocabulary Insertion. Rather, we are using it here more in the sense of a relation between two entries in the lexicon: given a lexical entry X, with some set of grammatical properties and a meaning that includes an affective component, an entry X′ may be inferred with only the affective meaning of X and lacking its grammatical properties. An alternative way of conceiving of this, without generative operations over lexical entries, might be to borrow a page from work such as Lowenstamm (2015); De Belder (2011); De Belder and Craenenbroeck (2015); Creemers et al. (2018). These works suggest that derivational affixes are also roots.[14] Without committing to that view wholesale, we may take from that body of work the idea that (some) affixes are actually internally complex, consisting of a lexical element and a separate element that introduces category and other grammatical features. Just as (on one view) *cat* is bi-morphemic: [[$\sqrt{\text{cat}}$] - *n*], so too can we think of *-onok* as having a root-like lexical element and a categorial element [[-onok] - *n*$_{\text{Masc}}$]. Approaches in this vein include licensing conditions on roots, and typically hold that root meanings are defined in the context of the grammatical node (Marantz, 1996; Harley, 2014). From this perspective, then, what we are calling "bleaching" is the use/insertion of a lexical node in the absence of its corresponding licensor. One consequence of this perspective on bleaching is that it is all-or-nothing as regards grammatical properties, to the extent that these are represented on functional elements such as *n*: when *-onok* is used without

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[14]We would like to thank Alec Marantz for suggesting this approach.

n, no morphosyntactic information such as gender is contributed—this is the non-head behaviour we have documented above. We do not pursue the nature of bleaching here any further, though we note that many evaluatives are quite possibly historically derived through something like bleaching, whose endpoint is two unrelated homophonous entries (see §5.2 for possible examples) or evaluatives that no longer have "non-bleached" head counterparts. The difficulty in extending our analysis to some of the cases lies in identifying the precise source of evaluative meanings: in the case of the baby diminutive vs. evaluative uses of *-onok*, there is a clear core diminutive meaning that is preserved between the bleached and non-bleached entries, but this is not always the case for evaluatives, such as the *-iɕɕ* suffixes discussed in §5.2.

We turn now to our main goal—an investigation of the degree to which the observed empirical differences can be made to follow from the representational difference between the two senses of ONOK.

3.2   Gender and Declension class again

We begin with transparency for grammatical features. When gender alone is considered, the difference between baby *onok* and evaluative *onok* neatly tracks the behavior of German versus Italian, our paradigm example of the difference between a head and a modifier. However, declension class is different from gender and category. As illustrated in (27), all evaluative *-onok* diminutive nouns are declension class II (nominative singular in *-a*) regardless of the declension class of the root. Steriopolo (2008) et seq. treats declension class on a par with gender, and includes non-transparency to declension class, like non-transparency to gender, as a diagnostic of head status. In the present case, this would leave us with a paradox, since evaluative *onok* is transparent to gender, but contributes its own declension class.[15] We have already argued in §3.2 that declension class should not be treated in the same manner as gender features. Here, we show that the fact that *-onok* evaluatives are consistently declension class II does not pose a hurdle to treating this instance of *-onok* as a modifier. To see this requires a digression once again to Italian diminutives.

Italian nouns typically end in a vowel, which is often informally described as expressing gender and number (case is not distinguished on nouns in Italian). The basic final vowels are: fem.sg: *-a*, masc.sg: *-o*, fem.pl: *-e*, masc.pl: *-i*. Like Russian, though, the relation of the final vowels to gender is indirect, mediated by a pared down declension class system. Many Italian nouns are lexically specified to occur with a final vowel distinct from the default vowel for their gender and number (or Ø). Examples include *il duca* 'the duke' (MASC); *il verme* 'the worm' (MASC,SG); *la mano* 'the hand' (FEM), among many others. As Dressler and Barbaresi (1994, 94–95) note, although Italian diminutives generally preserve the gender of the base they attach to, they systematically fail to preserve declension class, and always revert to the default declension class (vowel) for the gender (and number, not shown) that they inherit:

(32)   Default declension class in Italian diminutives

	Sg	Dim	
a. Masc-regular	top-o	top-in-o	'mouse'
b. Fem-regular	mamm-a	mamm-in-a	'Mama'
c. Masc-irreg	duc-a	duch-in-o	'duke'
d. Masc-irreg	cinem-a	cinem-in-o	'cinema'
e. Masc-irreg	verm-e	verm-ett-o	'worm'
f. Masc-irreg	film	film-in-o	'film'
g. Masc-irreg	gnu	gnu-in-o	'gnu'
h. Fem-irreg	man-o	man-in-a	'hand'
i. Fem-irreg	tribù	tribù-in-a	'tribe'

The preservation of the base nouns' gender suggests that the diminutive suffix is not lexically specified for gender features. It is for precisely this reason that Scalise (1988, 233-235) treats the diminutive suffixes in Italian as nonheads rather than heads. And as Dressler and Barbaresi (1994) note, the change

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[15]Compare, for example, the brief discussion of evaluative *-enʲk*, which introduces declension class but is transparent to category, and which is left as an unresolved paradox in Steriopolo (2008, 174).
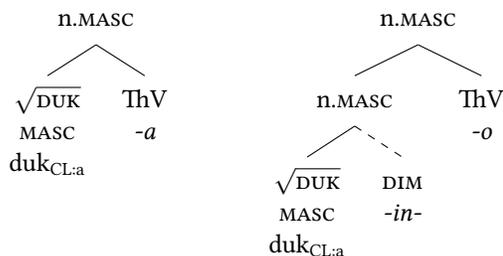
in declension class, though seeming to be a head-like property, is not the introduction of new information, but instead a loss of the idiosyncratic declension class information associated with a given stem. In other words, the facts in (32) do not require that the diminutive be specified for declension class. Instead, we need only assume that the diminutive disrupts the relationship between the final vowel and the root.

In discussing the [at] suppletion in §3.2, we noted that declension class is tied to individual allomorphs/exponents, rather than to the underlying abstract morphemes (see Harley and Blanco 2013 on suppletive root alternants in different inflectional classes in Hiaki). In the baby diminutives, [at] and [onok] belong to different declension classes, although they are suppletive allomorphs of the same underlying morpheme. Declension class is not part of the morphosyntactic combinatorics, but rather a part of the morphophonological system, associated with particular exponents. Below, we suggest for Russian that declension class can also be assigned by feature-filling rules.

We take it that, as a morphophonological feature, declension class diacritics are visible under linear adjacency. For example, the Italian root [duk-] is lexically specified to take the *-a* theme, despite being masculine (see (33a)). But in the corresponding diminutives, the Theme Vowel is not adjacent to the root, and the root's morpho-phonological idiosyncrasies are thus inaccessible: the default theme vowel for the gender is inserted: masc *-o*, as in (33b). It would not be right to say that *-in* itself is specified as marked for either the *-a* class or the *-o* class, since its derivatives can be either.

(33)   Italian diminutives

a. *(il) duca* 'the duke'   b. *(il) duchino* 'the dukeling'

n.MASC

√DUK   ThV
MASC   *-a*
duk$_{CL:a}$

n.MASC

n.MASC   ThV
√DUK   DIM   *-o*
MASC   *-in-*
duk$_{CL:a}$

In other words, the message to be taken from Dressler and Barbaresi (1994) was that declension class, unlike gender and syntactic category, is not the type of information that 'percolates' through non-head-morphemes in word-structure trees. Nor should we expect it to, once one draws the distinction between abstract morphemes and the phonological exponents of those morphemes. The labeling algorithms, such as those in Lieber 1980; Williams 1981; Selkirk 1982, which distinguish between a head and a non-head, are algorithms that determine the morpho-syntactic features of the topmost node, as a function of its daughters. These algorithms manipulate morpho-syntactic features and, in a framework like DM, precede vocabulary insertion. But declension class is a property of vocabulary items or exponents, not of the underlying abstract morphemes. Thus such features should not be subject to feature percolation (or equivalent operations). The Italian facts confirm the theoretical distinction.

Returning to Russian, we see that Russian is like Italian in that the evaluative diminutive is transparent to gender, but not declension class, but unlike the Italian facts just described, the Russian evaluative *onok* diminutives do not take the default declension class for the gender they inherit. Instead, they are always Class II, as shown in the paradigms in (34) and (35). In both cases, the declension classes of the base nouns (III for [losad^j] 'horse', Ia for [muʐik] 'man, dude') are replaced with II, even as their genders are retained.

(34)   A full paradigm for [loṣadʲ] 'horse' and its *-onok* expressive form

	Sg	Pl	Sg	Pl
Nom	lóṣadʲ	lóṣadʲ-i	loṣadʲ-ónk-a	loṣadʲ-ónk-i
Gen	lóṣadʲ-i	loṣadʲ-éj	loṣadʲ-ónk-i	loṣadʲ-ónok
Dat	lóṣadʲ-i	loṣadʲ-ám	loṣadʲ-ónk-e	loṣadʲ-ónk-am
Acc	lóṣadʲ	loṣadʲ-éj	loṣadʲ-ónk-u	loṣadʲ-ónok
Inst	lóṣadʲ-ju	loṣadʲ-ámi	loṣadʲ-ónk-oj	loṣadʲ-ónk-ami
Obl	lóṣadʲ-i	loṣadʲ-áx	loṣadʲ-ónk-e	loṣadʲ-ónk-ax

(35)   A full paradigm for [muẓik] 'man' and its *-onok* expressive form

	Sg	Pl	Sg	Pl
Nom	muẓík	muẓik-í	muẓitɕ-ónk-a	muẓitɕ-ónk-i
Gen	muẓik-á	muẓik-óv	muẓitɕ-ónk-i	muẓitɕ-ónok
Dat	muẓik-ú	muẓik-ám	muẓitɕ-ónk-e	muẓitɕ-ónk-am
Acc	muẓik-á	muẓik-óv	muẓitɕ-ónk-u	muẓitɕ-ónok
Inst	muẓik-óm	muẓik-ámi	muẓitɕ-ónk-oj	muẓitɕ-ónk-ami
Obl	muẓik-é	muẓik-áx	muẓitɕ-ónk-e	muẓitɕ-ónk-ax

In sum, the assumption that declension class diacritics are associated with exponents (rather than the abstract morphemes that vocabulary items are exponents of) underlies three empirical observations:

- Declension class does not percolate in Italian—the diminutives 'revert' to the default declension class for their gender, because they are not lexically specified for declension class.

- Declension class does not percolate in Russian—*onok* evaluatives have the same gender as their base, but do not inherit the declension class of their base.

- Declension class may differ between suppletive exponents of the same underlying morpheme.

The evidence we have discussed so far is thus consistent with treating the difference between baby and evaluative *-onok* as reflecting head versus non-head derivations, respectively. While we have made progress, we have now introduced a new issue: recall that our aim here is to posit a single morph *onok*, which may be the exponent of either a head or an adjunct, and understand the differing behavior entirely in terms of that structural distinction. The problem we now face is that *onok*, as a vocabulary item, is associated with different declension classes depending on what it is an exponent of. Explaining the pattern in (34)-(35) in these terms requires that *onok*, when it is an exponent of the evaluative non-head suffix, be specified as declension Class II, but we have argued in §2.2.3 that *onok*, when it is an exponent of the baby-diminutive *n* head, is unspecified for declension class and surfaces with the default declension class for masculine gender, namely Ia.

Nevertheless, we believe we see a way out of this dilemma, which moreover sheds some light on the range of nouns for which *-onok* evaluatives are available. We offer now a proposal whereby the vocabulary item *onok* is inherently unspecified for declension class (as in (10)), and attempt to account for the source of the Class II pattern in its evaluative guise.

3.3   Gender and Declension in Expressives: redundancy rules

We noted in §1 that most derivational suffixes in Russian (such as [-ostʲ] '-ness') contribute specific gender and declension class when they derive nouns. Evaluative suffixes have more varied behavior with respect to both gender and declension class. As noted by researchers such as Steriopolo (2014), some evaluatives appear to alternate between declension classes as a function of gender (see §5.2 for one possible example).

What complicates the analysis of declension classes in expressives is that they are selective, both phonologically and morphosyntactically (Polivanova 1967; Hippisley 1996; Gouskova et al. 2015). For example, feminines are diminutivized with *-ok* and *-otɕk*, among others. Masculines are diminutivized with *-ok, -tɕik, -ik* depending on stress and segmental content. Since declension class and gender are

correlated, it can be hard to tell which aspect of the nominal morphology is targeted by selection, and what the direction of this relationship is in some cases. Moreover, Russian suffixes exhibit a fair amount of homophony, at least superficially—there are several morphemes that look like *-ets* orthographically, for example, but appear to have diverged in terms of stress properties, meaning, and distribution (see §5.2 and (Zaliznjak, 1985) pp. 82–86 for discussion).

However, one generalization, due to Steriopolo (2017), is going to be important in our analysis: the vast majority of evaluative suffixes in Russian belong to Class II. Steriopolo's list is in (36) (converted to IPA). The example in (37) demonstrates the Class II generalization for *-uk*, one of the derogatory evaluatives. Regardless of the declension class of the base, the derived evaluative is Class II:

(36)   Steriopolo's list of evaluative suffixes

Affectionate	*-anʲ, -aʂ, -on, -ulʲ, -unʲ, -ur, -usʲ, -uʂ*
Derogatory	*-ag, -ak, -al, -ar, -ax, -il, -in, -ob, -ot,-ox, -ug, -uk, -ux*

(37)   Expressives of attitude: declension class and gender with [-uk]

tvarʲ	'beast, animal'	F	III	tvarʲ-uk-a	'beast (derog.)'	F/common	II
gad	'bastard, snake'	M	Ia	gadʲ-uk-a	'viper, bastard'	F/common	II
zl-o	'evil (noun)'	N	Ib	zlʲ-uk-a	'angry, vicious person'	F/common	II
zmej-a	'snake'	F	II	zmej-uk-a	'snake (derog)'	F/common	II

This is true even when the evaluatives are derived from things other than nouns (e.g., *za-vir-ux-a* 'liar (eval)' could not have gotten its declension class from any "base noun", unlike *-onok* evaluatives). In addition, the majority of hypocoristics are class II, regardless of gender and the declension class of the source names.

(38)   Hypocoristics are Class II and retain source name's gender

	Name	Decl. Class	Hypocoristic	Decl. Class	Gender
a.	aleksándr	I	sánʲ-a	II	M
b.	kuzʲmá	II	kúzʲ-a	II	M
c.	galína	II	gálʲ-a	II	F
d.	lʲubovʲ	III	lʲúb-a	II	F

Steriopolo's generalization seems to point to an overarching (but not absolute) generalization about Russian which we state as a redundancy rule:

(39)   Eval → Class II (Redundancy Rule)

The rule is meant to assign a Class II diacritic to any vocabulary item that spells out an Evaluative node.[16] As a redundancy rule, we take it to be feature-filling, but not feature-changing. Lexical exceptions, i.e., expressive affixes that are not class II, are therefore tolerated, since they may simply be specified with a particular declension class. But the overarching generalization will fill in class II for an expressive evaluative that does not have a lexical specification.

This approach in terms of a redundancy rule might allow us to explain an apparent skew in the distribution of *-onok* expressives. While, unlike baby diminutives, these expressives are not fully productive, there does appear to be a striking gap: there are no inanimate masculines with this suffix.[17] There are well attested *-onok* expressives from feminine, class II bases, and a handful from feminine class III bases (itself a non-productive class). There are also exactly three attested *-onok* expressives

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[16]Another possibility is that the declension class is just a property of an arbitrary list of affixes that includes many evaluatives. Learners can extract generalizations about such lists based on gender—or lack thereof. If there is a sufficient number of genderless suffixes in the Class II set, learners could extend Class II diacritics to evaluatives that are not already in the list through grammar inference: genderless affixes are assigned to Class II if they are not already specified for another declension class. See Kramer (2015) for related discussion.

[17]We discuss pluralia tantum evaluatives such as [stiʂonki] 'poems' in §5.1; these are inanimate and have what could be Ia 'bases' ([stix] 'poem'). But crucially, these evaluatives cannot be singular, in line with the generalization made here.

from masculine (class Ia) nouns, repeated here, all animate. These three are clearly evaluative in their senses, and like other evaluatives fail to supplete in the plural: the plural of [muʐitɕonka] is [muʐitɕ-onk-i] not *[muʐitɕ-at-a].
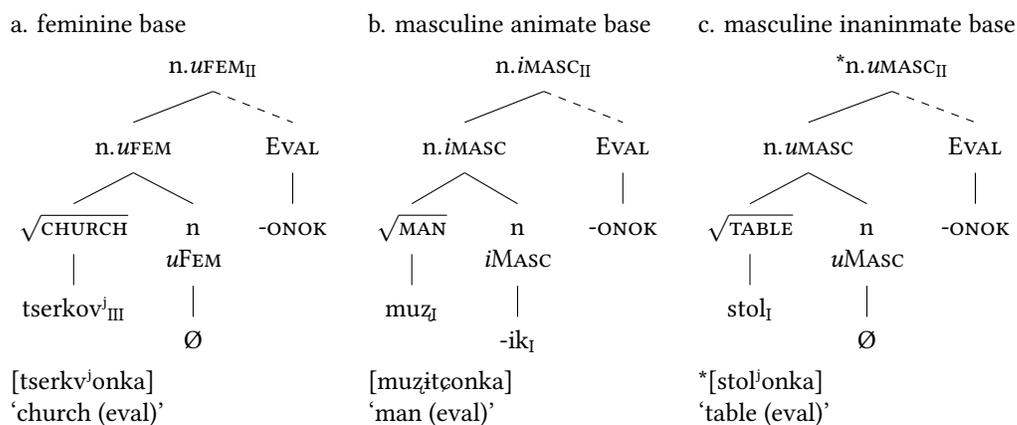
(40)   Masculine bases for evaluative *-onok*

	Base +Nom.sg		Gloss		Expressive dim.		cf.	
a.	malʲ-tɕ-ik-Ø	M	small-dim-dim	'boy'	malʲ-tɕ-onk-a	M	mal	'small'
b.	muʐ-ik-Ø	M	man-n	'man, dude'	muʐ-itɕ-onk-a	M	muʐ	'man, husband'
c.	star-ik-Ø	M	old-n	'old man'	starʲ-itɕ-onk-a	M	star	'old'

What is striking is that these are all animate. For feminines, both animate and inanimate *onok* expressives are well attested, but there are no neuters or inanimate masculines that participate in this derivation. We suggest that our account sheds light on this skew. In discussing the relation between gender and declension class in §2.2.3, we noted that exactly this distribution famously characterizes Class II: it includes feminines of any animacy, and masculine animates, but has no inanimate masculines and no neuters.

Thus, evaluative adjuncts are transparent to gender features but get assigned Class II declension by a redundancy rule. This means that only feminine and animate masculine nouns will be able to participate in the derivation of *-onok* expressives, while remaining faithful to exceptionless generalizations about gender and declension class in the language. The following derivations illustrate this aspect of our analysis. We use the notation *u*Gender versus *i*Gender to distinguish uninterpretable/grammatical from interpretable/notional gender, as a device to indicate the animacy constrast: while animates can have either interpretable or uninterpretable gender, inanimates can only have uninterpretable gender.

(41)   Percolation, gender, declension class

a. feminine base
b. masculine animate base
c. masculine inaninmate base

[tserkvʲonka] 'church (eval)'
[muʐitɕonka] 'man (eval)'
*[stolʲonka] 'table (eval)'

In (41a), evaluative *-onok* is adjoined to a feminine, class III base [tserkovʲ] 'church'. This noun is inanimate, but an identical structure could be given for [loṣadʲ] 'horse', which is animate but *u*Fem regardless of the notional gender of the animal. As detailed above, the feminine feature percolates to the topmost node, but declension class does not. The topmost node is assigned declension Class II by the redundancy rule in (39). This, of course, is fine, since Class II is the default declension class for feminines.

For similar reasons, (41c) is ungrammatical. The topmost node is again assigned Class II by the redundancy rule in (39), but this yields an inanimate masculine noun in Class II declension, which is not tolerated. This may be modeled as a constraint, or as an irresolvable conflict between two rules, namely the redundancy rule, and the rule assigning inanimate masculines to class I. Either way *u*Masc$_{II}$ is an illegitimate representation in Russian and these forms are thus excluded.

Finally, the three exceptional masculine evaluatives are correctly permitted.[18] Declension class II is assigned by redundancy rule to the topmost node in (41b), but because masculine gender here is

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[18]While Class II evaluatives are common, there are also Ib variants in the RNC: [muʐitɕonko], [staritɕonko], [malʲtɕonko]. This

notional, rather than grammatical, the output is consistent with the independent generalizations of the language: animate masculines may freely be of declension class II. We must assume that the *n* node dominating *muž-ik* in (41c) has only an *i*Masc feature, and does not have a redundant *u*Masc feature in addition. If animate nouns have both *i*- and *u*Gender features (as in Smith 2015, Wurmbrand 2016 with antecedents in other frameworks, notably Wechsler and Zlatić 2000), then *u*Gender may remain unspecified. Alternatively, perhaps there is a more general condition that a given node may have only one valued gender feature, which may be either a *u*Feature or an *i*Feature.

The redundancy rule in (39) provides an independently motivated source for the declension class of these nouns, and it removes the remaining hurdle to a reductionist account of *-onok*: while it remains true that evaluative *-onok*, unlike baby *-onok*, combines only with feminine and/or animate bases, we now achieve this without a lexical stipulation about selection. The effect of selection is now derived from the need to avoid a clash between the demands of the redundancy rule in (39) and whatever other assignment of declension class would arise via percolation of gender features through the transparent adjunct evaluative. All and only the attested combinations satisfy these constraints.

This approach requires only that *adjunct* evaluatives show this curious selection-like effect. Since heads contribute grammatical features, a head evaluative may attach to any type of stem and will block percolation of inanimate gender features without running afoul of (39):[19]

(42)   Percolation, gender, declension class with evaluative head *-uk* (for the forms in (37))

a. feminine base   b. masculine base   c. neuter base
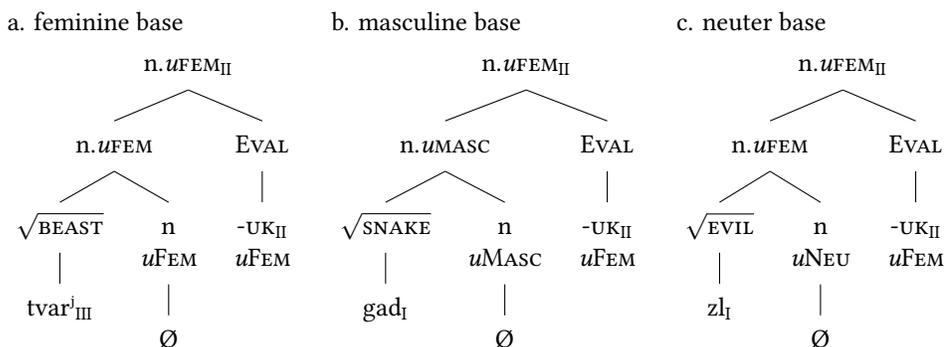
Similarly, since baby-diminutives are not strictly expressives, they are not subject to the redundancy rule in (39), and take the default declension class for their gender. Like English terms for baby animals (*kitten, cub*), the contexts of their use often invite an expressive flavor (cuteness), this is not a part of the core meaning of the expressions, while for expressives, an evaluative meaning is the only meaning they convey.

3.4   Suppletion: Locality, Heads, and Adjuncts

Before closing this section we return to the one other point of difference between the two functions of *-onok*, namely, their systematically different behavior with respect to suppletion. As far as we know, no existing discussions of the head/modifier distinction among affixes discusses suppletion at all, and no theory of suppletion known to us makes clear predictions in this regard. This section will therefore be somewhat tentative, but we wish, at a minimum, to offer the conjecture that this may be a previously unrecognized difference between heads and adjuncts. We speculate here on how this may be captured,

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suggests that the redundancy rule is variable (although we only found variation in case forms where /-o/ and /-a/ both reduce to [ə]). More generally, a number of Russian evaluatives have varied between decl. classes Ib and II for a while; even Lomonosov (1755, §243) comments on this variation. In Lomonosov's time, variation affected both declension class and gender (as diagnosed by adjective agreement in his examples); in Modern Russian, notional animate masculine evaluatives trigger masculine agreement, regardless of declension class.

[19]We have assigned these all grammatical feminine gender. When used to refer to people, notional gender of course overrides this, following the general pattern for Class II noted in §2.2.3. We have also assumed for concreteness that [zlʲ-uk-a] 'evil person' is derived from the nominal [zl-o] 'evil' rather than from the adjectival root, though nothing of substance hinges on that expository choice.

but leave verification (and deeper explanation) of this conjecture for future work.

   We consider here suppletion of the affix itself [-onok]∼[-at] and suppletion of the root triggered by the affix [korova]∼[telʲ-onok] 'cow/calf'. Under our bleaching account, evaluative *-onok* fails to undergo suppletion in the plural since the rules of exponence, repeated here, make reference to the category feature *n* in the context of the plural allomorph:

(43)   VI rules for -ONOK

   ONOK, n ↔ -at / PL

   ONOK ↔ -onok

   Since *n* is deleted by bleaching, only the default exponent *-onok* can serve as a pronunciation of the non-head version of this morpheme. This allows us to describe the context of suppletion as restricted to the head position. Whether this rises to the status of an explanation depends on what other possibilities the theory allows. Does the theory predict the possibility of (a) symmetrical suppletion in both head and non-head contexts, or (b) suppletion only in the non-head context—a mirror image of the actual situation? The symmetrical scenario can be easily generated by omitting *n* from the rule in (43). On the other hand, the mirror-image scenario would be hard to generate if the evaluative version of *-onok* is derived by the deletion of all grammatical features. In such a case, there is no way to single out the evaluative environment in terms of grammatical features in a rule of vocabulary insertion.[20] These assumptions lead to the expectation that grammatically-conditioned suppletive alternations in such multifunctional affixes may be across-the-board, or in the head version only (as in Russian), but not limited only to the evaluative.

   Similarly, when it comes to root suppletion, the inability of evaluative ONOK to trigger it could be due to its lacking all grammatical features. Again, this depends on other moving pieces in the theory. Bobaljik (2000) contends that root suppletion, as a special case of outwards-sensitive allomorphy, may only be triggered by morphosyntactic features (gender, tense, etc.). If root suppletion could instead also be triggered by morpho-phonological features, suppletion of roots could be generated for both head and non-head contexts—but even this scenario disallows suppletion limited only to the bleached evaluative.

   There may, however, be a more interesting reason why a non-head morpheme, like evaluative *-onok*, fails to govern root suppletion within the theory we are developing here: it could be blocked from doing so by intervening category heads. Recall that we assume that roots are uncategorized and require a categorizing head for interpretation. In §2.2.1, we suggested that baby-diminutive *-onok*, as a little *n* head, may combine directly with a root. We used this property to account for (i) root suppletion, (ii) the existence of bound roots such as [opʲ-onok] 'mushroom sp.', and (iii) lexicalized baby diminutives, such as [maslʲ-onok] 'mushroom sp.', where the root+diminutive combination has a non-compositional meaning, not related to the independent meaning of the root ([masl-o] 'oil, butter'—the mushrooms are slimy but they are not babies).

   Evaluative *-onok* differs on all of these counts. For example, it does not trigger root suppletion, even for roots that undergo suppletion in the baby-diminutive (recall (49)). No bound roots occur only in evaluative *onka* form. In general, the evaluative does not appear to combine with bare roots— its bases are obligatorily morphologically complex. They must include a nominalizer that determines their gender. This nominalizer is sometimes null (as in [loṣadʲonka] 'horse (eval)') but is often overt, as shown in (44). (Some other examples with overt suffixes in evaluative *onok* bases were already given in (27.))

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[20]If this is the right way to think about evaluatives, then we would have to amend our feature-filling rule in (39) so that it supplies the Class II feature to otherwise contentless nodes; this might be the right way to unify hypocoristics and evaluatives (which do not otherwise share any obvious overt morphology or features).

(44)   Overtly morphologically complex bases for expressive *-onok*

|	Base +Nom.sg	Gloss		Eval. dim.	cf.	
a.	star-ux-a	old-EXPR/N	'old woman'	star-uṣ-onk-a	star	'old'
b.	izb-uṣ-k-a	log.house-EXP-F	'log house'	izb-uṣ-onk-a	izb-a	'log house'
c.	dev-k-a	girl-EXP	'girl'	dev-tɕ-onk-a	dev-a	'maiden'
d.	ṣlʲap-k-a	hat-DIM	'hat'	ṣlʲap-tɕ-onk-a	ṣlʲap-a	'hat'
e.	trub-k-a	pipe-DIM	'pipe'	trub-tɕ-onk-a	trub-a	'pipe'

The evaluative *-onok* here occurs outside other suffixes, including nominalizers and diminutives such as *-ok* (which are usually analyzed as adjuncts—see Wiltschko and Steriopolo 2007; Steriopolo 2008).[21]

If evaluative *-onok* only combines with a categorized structure, we can derive the differences in root-proximity effects, including the minimal contrast in serving as a trigger for root suppletion, as in (45). The structures in (46) show this:

(45)   Diminutives of [lóṣadʲ] 'horse'

		Sg.	Pl.	
a.	Baby	ʐerebʲ-ónok	ʐerebʲ-át-a	'foal(s)'
b.	Evaluative	lóṣadʲ-ónk-a	lóṣadʲ-ónk-i	'horsey/horsies'

(46)   Baby and evaluative horse diminutives

a. Baby diminutive   b. Evaluative diminutive   c. *Uncategorized root
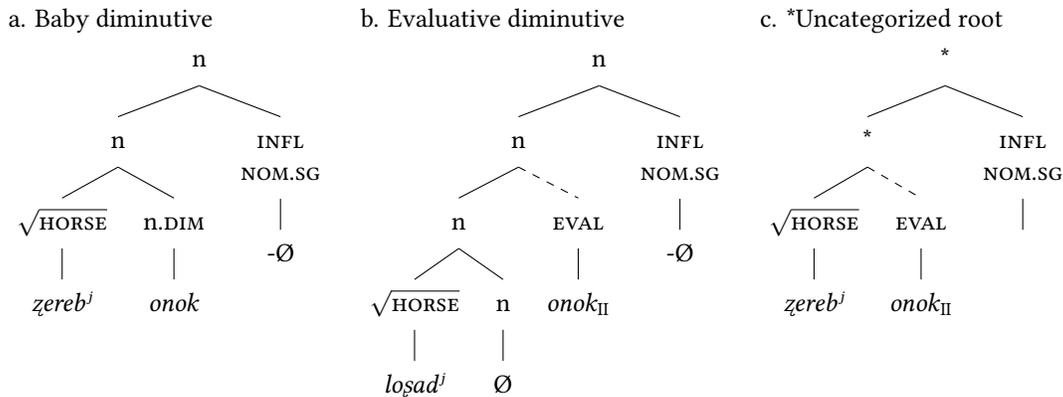
If we assume category-defining heads are cyclic in the sense of defining spell-out domains, and that the target and trigger of suppletion must be in the same cycle, then we would have a more principled explanation of the suppletion asymmetry. Since adjuncts do not provide a category for roots, and must therefore occur outside a category-defining head, they will be too remote from the root to trigger root suppletion. While appealing, making this work would, however, require addressing the various arguments in the literature to the effect that the locality domain for suppletion can extend across the first category-defining head.[22]

In sum, we conclude that our account is also amenable to treating the difference in suppletion (both as target and trigger) between the two uses of *-onok* as a function of the head versus non-head distinction.

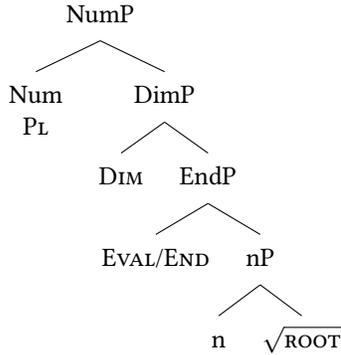# 4   Suppletion and locality, some alternatives

The topic of suppletion provides us an opportunity as well to consider what might be a salient alternative to the account we have proposed here. It has been noted that diminutives in some languages

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come in high/compositional and low/lexicalized varieties, possibly corresponding to different positions in the structure (De Belder et al., 2014). Similarly, Cinque (2015) has proposed a cartographic account of evaluative affixes, and argued that size diminutives universally occupy a higher position than evaluative diminutives (Cinque's labels are Dim and End[earment], respectively), even when the two are homophonous:

(47)   Cinque's account (not ours)

```
              NumP
             /    \
          Num      DimP
          Pl       /   \
                 Dim    EndP
                        /   \
                  Eval/End   nP
                             / \
                            n  √ROOT
```

We note at the outset that this appears to be directly contradicted by Russian baby diminutives. As we noted above in (15), repeated here, all Russian baby-diminutives can be further modified by an evaluative diminutive which occurs peripheral to the size (i.e., baby) diminutive. This is unambiguous in the plural, where the suppletive [-at] is the plural allomorph only for the size diminutive, so there is no question of which affix is correlated with which meaning.[23] We also noted that this pattern is quite productive.

(48)   Order of size (baby) and evaluative diminutives in Russian is Dim-Eval

medvez̧-onok	'baby bear'	medvez̧-at-a	'baby bears'
bear-BABY		bear-BABY-PL	
medvez̧-onotç-ek	'baby bear (dim)'	medvez̧-at-k-i	'baby bears (dim)'
bear-BABY-EVAL		bear-BABY-EVAL-PL	

If we suspend, for a moment, our empirical objection to Cinque's proposal, we could ask whether a simple structural account, where size and evaluative diminutives are both heads, but in different positions, might provide an alternative account of the the data under consideration. For root suppletion, we appealed to locality in (46)—one might reverse the hierarchical order of morphemes in Cinque's tree and argue that evaluatives, being demonstrably more peripheral to the root than size diminutives (when they cooccur), are simply too far away to trigger suppletion.

The problem with a cartographic locality account is, as we have noted above, that the suppletion difference applies to -ONOK both as target and trigger. Not only does baby diminutive -onok trigger root suppletion in examples such as the following, it also undergoes suppletion in the context of the plural in the same words, while evaluative -onok does neither.

(49)   Diminutives of [lóṣadʲ] 'horse'

		Sg.	Pl.	
a.	Baby	z̧erebʲ-ónok	z̧erebʲ-át-a	'foal(s)'
b.	Evaluative	lóṣadʲ-ónk-a	lóṣadʲ-ónk-i	'horsey/horsies'

Our conclusion therefore is that jiggling with locality will not help—no plausible functional sequence will have the result that the size diminutive is simultaneously higher than the evaluative (and

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[23]Cinque quotes an observation by Voeykova (1998) that whenever diminutives are stacked, it is the first that takes on the evaluative function, and the second one–the size function. As we have seen already, the productive type of example in (48) is a clear counterexample. One complicating factor that we have already pointed out is that the line between size and evaluative function for some suffixes is rather blurry.

thus closer to the plural) and lower than the evaluative (closer to the root). What the facts appear to show instead is that heads are available to participate as both trigger and target of suppletive alternations, while adjuncts are not. Our proposal capitalizes on this difference, though it remains to be seen whether this will generalize to other phenomena.

5   Remnants

5.1   Variable suppletion in pluralia tantum and a few other evaluatives

In §1, we anticipated another argument in favor of a single-morpheme analysis of evaluative and baby diminutives: in a limited set of cases, *-onok* and *-at* freely vary. This variation is noted in descriptive sources such as Shvedova (1980, §428), who characterizes the context as pluralia tantum. Shvedova cites 'poems' and 'money'; we found additional examples shown in (50). The numbers in the two rightmost columns of (50) show corpus counts for the evaluative plurals; as these numbers make clear, the [-onki] plurals are more popular than the [-ata] ones throughout, though some of the differences are small. In addition to these RNC hits, we found internet hits for several *-ata* pluralia tantum that follow the 'trousers' pattern, [dẓinsɨ]~[dzinsʲata] 'jeans (eval.)', and [bridẓɨ]~[bridẓata] 'capri pants' (both loanwords from English).

(50)   Pluralia tantum evaluatives

	Base (pl)	Sɢ?	Gender	Gloss	Eval.	RNC *-onk*	RNC *-at*
a.	glaz-á	gláz	M	'eyes'	glazʲ-ónk-i/-at-a	225	1
b.	vólos-ɨ	vólos	M	'hair'	volosʲ-ónk-i/-at-a	85	3
c.	stix-í	stíx	M	'poems'	stiṣ-ónk-i/-at-a	30	22
d.	dénʲg-i	(denʲg-a)	F	'money'	denʲẓ-ónk-i/-at-a	260	81
e.	brʲúk-i	—	N/A	'trousers'	brʲutɕ-ónk-i/-at-a	7	2

Not all of these these nouns are obligatorily plural (the singular of 'money' is archaic and marked, but 'trousers' and other pants really do lack a singular). But, regardless of the existence of singulars, these *-onki* evaluatives systematically lack singular forms. Thus, for 'stix', neither *[stiṣónka] nor *[stiṣónok] are attested singulars.

These patterns raise several questions. First, why do these evaluatives only occur in the plural, given that some of the nouns can occur in the singular? Second, we suggested in §3.3 that the evaluative *onok* is not productive on inanimate masculines; do the examples in (50) constitute an exception? Finally, why is the *-at* allomorph possible in these evaluative contexts, when normally it occurs only in baby diminutives and corresponding baby adjectives?

Our account already offers an answer for the first question: *[stiṣonka] 'poem (eval.)' is out for the same reason that inanimate masculines such as *[stolʲonka] 'table (eval.)' are out (recall (41)). There is a conflict between the masculine feature of 'table' and the Class II declension class assigned to the evaluative by the redundancy rule. For pluralia tantum that effectively lack singulars, such as the pants nouns, speakers are presumably unable to ascribe gender to the singulars altogether, and the selectivity of evaluative *-onok* degrades obscure feminines such as 'money'.

On the second question, the well-formedness of pluralia tantum evaluatives is due to a property of Russian that we mentioned in §2.1: all gender distinctions are neutralized in the plural. The usual analysis of this neutralization is Impoverishment (Bonet 1991 et seq.), an operation deleting features before morpheme realization rules apply. If gender features are literally absent in the plural, then there cannot be a conflict between the masculine gender of, say, *glaz* 'eye' and *-onok*. No gender features are communicated to the evaluative; it simply receives its Class II specification by the redundancy rule, and this Class II feature determines the realization of the plural as [-i]. This correctly derives contrast between [glaz-á] 'eyes', with its special Ia plural suffix, and [glazʲ-onk-i], with Class II.

The question of variable suppletion is harder to answer, but we speculate[24] that this pattern is lexical: roots such as *stix* 'poem' can be nominalized by merging optionally either with a little *n* or with ᴏɴᴏᴋ,

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[24] Another possibility, suggested by the discussion in §3.4, is that the rule for head *onok* is losing ground to a more generic rule where the suppletive allomorph *-at* is conditioned not just for the head context but more generally. Why this should affect pluralia

and in that configuration, ᴏɴᴏᴋ receives a special, lexically idiosyncratic interpretation not unlike our mushroom examples (except that here it is the affix and not the root that gets a special interpretation). Since pluralia tantum are already lexically idiosyncratic in favoring or requiring plurality (see, e.g., Acquaviva 2008a, §2.4), it is not a stretch to suggest that they are special in this way, too. This account requires setting up a rule for interpreting {ᴏɴᴏᴋ, *n*} as evaluative in the context of a handful of roots such as 'money' and 'poems'. An argument in support of this treatment comes from a handful of other *ata* plurals that are evaluative rather than baby diminutives: [dev-tɕ-at-a] 'girls' and [rebʲ-at-a] 'guys' (see (51)). 'Girls' follows a pattern very much like the pluralia tantum examples above, except that it has a singular evaluative. As it is a feminine Class II, this is expected; (51a) is unsurprising. The [rebʲata] example is an even more clear case: while [rebʲonok] exists, and means 'child, baby' in Russian (suggesting *onok* here is a baby dim.), the usual plural of 'child' involves root suppletion, [deti]; the singular form of that root is now archaic and stylistically marked. But the plural of [reb-] has a special interpretation: it does not mean 'children', and therefore both the root and the ᴏɴᴏᴋ suffix require special interpretation provisions.[25]

(51)   Guys and gals: special evaluative *ata* plurals

a.	devtɕónk-a	'girl (eval)'	devtɕónki	'girls (eval)'
b.	*devtɕónok	—	devtɕáta	'girls (eval)'
c.	ditʲá	'child (archaic)'	déti	'children'
d.	rebʲónok	'child'	rebʲáta	'guys (eval)'

A prediction of this approach to *ata* evaluatives is that merely being a plurale tantum is not enough to combine with the allomorph, and this seems to be confirmed. Nouns such as [gúb-ɨ] 'lips' (sg. [gub-á], Fem. Cl. II) combine with evaluative *onok*, both in the singular and in the plural: [gubʲonka], [gubʲonki] are attested in the RNC. There are no hits for *[gubʲata], however. Similarly, [zúb-ɨ] 'teeth' (sg. [zub], Masc. Cl. Ia) has an evaluative plural [zubʲonki], but no corresponding singular (as predicted by our account) and no *ata* form. This leads to the conclusion that the existence of *ata* evaluatives is not a feature of pluralia tantum (as suggested by Shvedova 1980) but rather a lexical property of certain nouns, which include a couple of pluralia tantum and the mushrooms noted at the outset.

5.2   Other doublets

Russian has several other suffixes that alternate between evaluative and head-like function, as noted by Steriopolo (2014). Steriopolo observes that *-iɕɕ* can serve as an evaluative augmentative/derogatory or a nominalizing suffix. Evaluatives with *-iɕɕ* are for the most part transparently derived from stand-alone nouns, whose gender they match (including inanimates: see (52b,d,g)). Declension-wise, *-iɕɕ* evaluatives are II if feminine, and Ib otherwise:

(52)   Augmentative/evaluative *-iɕɕ* patterns as an adjunct/modifier

	Base N	Gender	Decl.	Augmentative	Gender	Decl.	
a.	medvédʲ	M	Ia	medvédiɕɕe	M	Ib	'bear'
b.	gólos	M	Ia	golosíɕɕe	M	Ib	'voice'
c.	durák	M	Ia	durátɕiɕɕe	M	Ib	'fool (male)'
d.	vinó	N	Ib	viníɕɕe	N	Ib	'wine'
e.	straʂílo	common	Ib	straʂíliɕɕe	common	Ib	'monster'
f.	sobáka	F	II	sobatɕiɕɕa	F	II	'dog'
g.	pɨ́lʲ	F	III	pɨlíɕɕa	F	II	'dust'
h.	dúra	F	II	dúriɕɕa, duríɕɕa	F	II	'fool (female)'

---

tantum but not nouns such as 'skirt' and 'horse' (whose plural evaluatives are always *onok*, not *at*) is not entirely explained in this story, however.

[25] As it happens, [det-/dit-] also occurs with *at*, but in the singular: [ditʲatko] and [ditʲatʲa], both stylistically marked evaluatives of 'child'. These forms are likely fossilized from before the *onok* suppletion pattern developed and are anomalous in several ways, so we will not attempt to analyze them.

On the other hand, the nominalizer/head *-iɕɕ* attaches to constituents that may be morphologically complex but are not usually stand-alone words, and the meanings of the resulting nouns are not always transparent. When standalone nouns do exist (as in 'shooting range' and 'shooting' in (53i)), it is clear that the morpheme assigns its own neuter gender, and its declension class is consistently Ib:

(53) Nominalizer *-iɕɕ* patterns as a head (all derived nouns are neuter Ib)

	-iɕɕe Noun	Gloss	Base N?	Gloss
a.	kládbiɕɕe	'cemetery'	klad-b-	
b.	sokróviɕɕe	'treasure'	so-kr-ov-	
c.	posmésiɕɕe	'ridicule'	po-sméx	'laughter (M Ia)'
d.	túloviɕɕe	'body, trunk'	tul-ov-	
e.	tɕistíliɕɕe	'purgatory'	tɕist-il-	
f.	xraníliɕɕe	'warehouse'	xran-il-	
g.	pobóiɕɕe	'battle'	po-bój	'beating (M Ia)'
h.	zréliɕɕe	'spectacle'	zr-el-	
i.	strélʲbiɕɕe	'shooting range'	strelʲ-b-á	'shooting (F II)'

Steriopolo stops short of claiming that these pieces are morphemes that alternate between head and modifier positions. Could our account be extended to teating *-iɕɕ* as a morph with two attachment sites, or are there are two morphemes here? We suspect they are distinct morphemes.

Superficially, this looks like the same type of alternation (modulo suppletion, which *-iɕɕ* does not exhibit). If we were to extend the account of *-onok*, it would go like this: *-iɕɕ* expresses a nominalizing head, just like *-onok*, but is marked as declension class Ib and neuter. It also has an alternate, bleached function, which is missing the little *n* and neuter gender. The challenge for this account is to explain where the augmentative meaning comes from—in our bleached entry for evaluative онок, the diminutive sense was retained from the more contentful baby diminutive nominalizer entry, but this would not work in an obvious way for *-iɕɕ*. (The same is true for the other cases Steriopolo discusses, such as *-ok* and *-ets*; the evaluatives do not share any meaning elements with their nominalizer counterparts.)

Our account of declension class changes would also not extend cleanly to *-iɕɕ*. We might expect it to get declension class II by the default rule when it is used evaluatively, but it only patterns as II when it is feminine, and does not depend on animacy (the examples in (52) are a mix of animates and inanimates, in each gender). IF we say that the morpheme gets its declension class Ib through a default rule for its neuter gender, then we have no explanation for why notional masculines such as [duratɕ-íɕɕ-e] 'fool (male)' are declension class Ib. But to claim that the suffix is specified as Ib, preventing any default rules from filling in its declension class feature, is contradicted by the many class II feminines ending in [-iɕɕ-a]. If this is all the same suffix, the gender/declension class relationship does not work as it does for *-onok*.

But there is a reason to doubt that a reductionist account is even suitable for *-iɕɕ*: it is not clear that the evaluative and nominalizing uses are the same phonological entities, as the stress properties are inconsistent across the examples. In most transparent uses of nominalizing *-íɕɕ*, the suffix patterns as recessive-unaccented (using the classification of Melvold 1989). But when used as an evaluative, it sometimes patterns as dominant-accented, meaning it is stressed and causes even lexically accented stems to lose their stresses (one example is [píĺʲ] (accented stem) vs. [pɨl-íɕɕ-a] (stress on suffix). Some of the other suffixes discussed as possible head/modifier alternators by Steriopolo are even more inconsistent; thus, diminutive and nominalizing *-ets/-ts* are treated as distinct affixes by Zaliznjak (1985) in his stress type classification, with the diminutive being consistently pre-stressing and other functions being inconsistent (pp. 82 and 86). [26] (By comparison, our *-onok* is consistent with respect to stress and other phonological properties, as discussed in §2.1.)

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[26] Marvin (2002) and Bachrach and Wagner (2007) explore the intriguing possibility that stress differences could be due to the head/adjunct distinction or similar structural differences, but this analysis cannot be extended to the Russian examples because the patterns are the exact opposite of what would be expected from structural/cyclicity considerations: the adjunct diminutive *-ok* is stress-dominant in masculines, whereas the head feminine suffix is recessive and systematically unstressed. See Gouskova and Linzen (2015) for more discussion.

In short, we suspect that the homophonous suffixes were once etymologically the same but diverged over time into distinct morphemes, occasionally homophonous but demonstrably distinct in their morphophonology. It is notable that their behaviors are consistent with the adjunct vs. head distinction that we have been exploiting in our analysis, but this is just the nature of the distinction.

6   Conclusion

We have attempted to analyze the baby diminutive and evaluative functions *-onok* as two faces of the same morpheme. This morpheme is distinguished by being able to serve as either a nominalizing head or as an evaluative adjunct. Our analysis aimed to get most of the action from old morphological assumptions about heads: in particular, the assumption that heads come with their own features rather than passing on the features of structures they dominate. We suggested that merging as an adjunct for such a morpheme entails being bleached of its grammatical features and some of its semantic content. This explains why evaluative *-onok* acts as though it lacks features such as gender and is unable to condition suppletion of roots.

The question we are left with is whether this account will generalize to other cases where apparent homophones pattern in dual ways. In morphology, the head/non-head distinction has figured most prominently in the discussion of diminutives and expressives, possibly because they are so salient in being 'transparent' for gender features in some languages, and in this stand out from other so-called derivational morphemes. Future work might clarify what it would mean for elements occupying other, non-nominal head positions to merge as adjuncts, and how much mileage can be gotten out of recasting certain homophonous morphemes in the terms we have laid out.

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