Ora Matushansky, SFL (CNRS/Université Paris-8/UPL)
email: ora.matushansky@cnrs.fr
homepage: http://www.trees-and-lambdas.info/matushansky/

ALLOSEMY AND SUFFIXAL COMPLEXES
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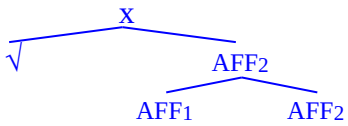
1. AFFIXAL COMPLEXES AND COMPLEX AFFIXES

An **affixal complex** (pretheoretical notion) is a combination of independently motivated affixes with a set meaning, which may not seem to arise from the combination of the meanings of the composing affixes

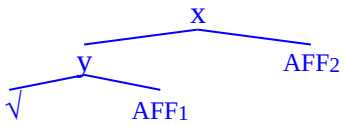
An affixal complex that is a constituent can be called **a complex affix**
Circumfixes would therefore not seem to be complex affixes

Empirical question: **are there complex affixes?**

(1) a. **affixal constituent**



b. **iterative affixation**



This talk: two Russian complex suffixes:
- the deverbal adjectivizer *-tel^{j}-ĭn-* argues for the existence of complex suffixes and for bleaching inside such structures
- the baby-diminutive *-^{j}onok-* might be a complex suffix *-^{j}ĭn-ŭk-* even synchronically

The transcriptions below closely follow Russian orthography and do not indicate: (a) palatalization before front vowels (/*Ci*/ → [*C^{j}i*], /*Ce*/ → [*C^{j}e*]), (b) various vowel reduction phenomena in unstressed syllables, (c) voicing assimilation and final devoicing. Stress is marked by an acute accent on the vowel. The yers (abstract high lax unrounded vowels) are represented as /ĭ/ (front, IPA [ɪ]) and /ŭ/ (back, IPA [ʊ]). The letters *ч* (IPA [*t͡ɕ*]), *щ* (IPA [ɕː]), *ж* (IPA [ʐ]), *щ* (IPA [ɕɕ]), and *ц* (IPA [t͡s]) are traditionally rendered as *č*, *š*, *ž*, *šč*, and *c*.

2. DEVERBAL ADJECTIVIZATION: THE COMPLEX SUFFIX -*TEL^{J}-ĬN*-

Adjectives in (2) can be argued to contain two independently motivated productive suffixes: the actor nominalizer *-tel^{j}-* (8)-(9) and the general adjectivizer *-ĭn-* (3)-(4):
Evidence for a (front) yer in both *-ĭn-* and *-tel-ĭn-* adjectives comes from their short forms, where the suffixal yer is lowered (vocalized) before the yer of the MSG ending

(2) a. *starát^{j}s^{j}a* 'to try hard' → *starát-tel^{j}n-ɨj* 'assiduous' (short form, MSG: *starátel**e**n*)
b. *prostít^{j}* 'to forgive' → *prostí-tel^{j}n-ɨj* 'forgivable' (short form, MSG: *prostítel**e**n*)

The suffix *-ĭn-* is a "pure categorizer": no lexical meaning beyond adjective formation:

(3) a. *pɨl^{j}* 'dust'
b. *pɨ́l^{j}-n-ɨj* 'dust-ADJ-MSG'

(4) a. *komp^{j}úter* 'computer'
b. *komp^{j}úter-n-ɨj* 'computer-ADJ-MSG'

However, simple iterative composition would give the wrong result: the intermediate noun may be absent or have the wrong meaning:

(5) a. *starát^{j}s^{j}a* 'to try' → *starátel^{j}* 'prospector' ↛ *starát-tel^{j}n-ɨj* 'assiduous'
b. *poznavát^{j}* 'cognize.IMPFV.INF' → **poznavátel^{j}* → *poznavátel^{j}nɨj* 'cognitive'

Itkin and Leont'eva (2019), traditional grammar books: the simplex suffix *-tel^{j}n-*

Haspelmath (1995), citing Kiparsky (1975): *affix telescoping*: formation of a simple suffix out of a suffixal complex (so historically, a complex underlying structure)

I will argue for a synchronic underlying complex affix *-tel^{j}-ĭn-*

2.1. The A0A argument for a suffixal complex

458/696 -*telʲn*- adjectives in Zaliznjak (2010) have no intermediate -*telʲ*- noun (A0A pattern):

(6) a. *sravnítʲ* 'to compare' → **sravnítelʲ* → *sravnítelʲnɨj* 'comparative'
b. *poznavátʲ* 'cognize.IMPFV.INF' → **poznavátelʲ* → *poznavátelʲnɨj* 'cognitive'

DM (Halle (1973), Marantz (2023)): [–lexical insertion] (needed anyway, e.g., for **admissal*)

2.2. The ABA argument for a suffixal complex

The intermediate -*telʲ*- noun exists but does not serve as the semantic base for the adjective (the ABA pattern):

(7) a. *predoxranítʲ* 'to protect, preserve' → *predoxranítelʲ* 'electrical fuse, safety device' → *predoxranítelʲnɨj* 'preservative, preventive, protective'

b. *nosítʲ* 'to carry, wear, bear' → *nosítelʲ* 'carrier' (rocket carrier, information bearer) → *nosítelʲnɨj* 'wearable, transportable'

The meaning contributed by the suffix -*telʲ*- (actor or instrument) is not included in the meaning of the -*telʲn*- adjective

Let's see this step by step

2.2.1. The agentive suffix -*telʲ*-: EA only

The agentive suffix -*telʲ*- **strictly obeys the External Argument Generalization** of Levin and Rappaport Hovav (1988) and Rappaport Hovav and Levin (1992):
Out of the 730 -*telʲ*- nouns in Zaliznjak (2010) 275 are inanimate, 455 are animate

- agents/experiencers (8) and instruments (9)
- no patients, themes, locatives, etc. (unlike the English *-er*; no *diner* (restaurant) or *sleeper* (car) with -*telʲ*-)

(8) a. *lʲubí-tʲ* 'love-INF'
b. *lʲubí-telʲ* 'an amateur'

(9) a. *vɨklʲučá-tʲ* 'turn off.IMPFV-INF'
b. *vɨklʲučá-telʲ* 'a light switch'

Idiomatic -*telʲ*- nouns are very few (e.g., *nastojátelʲ* 'abbot' ← *nastojátʲ* 'to insist, persist') and they are all animate

Two types of -*telʲ*- nouns: [+animate] (agents, experiencers) and [–animate] (instruments)

We can disregard the extra complications presented by animacy (see Matushansky (2023b) for the proposal) and concentrate on the EA restriction

2.2.2. Non-agentive -*telʲn*- adjectives

A lot of -*telʲn*- adjectives have non-agentive semantics:

(10) a. *plávatelʲnɨj [bassejn]* 'swimming [pool]' (*plávatʲ* 'swim.INF', **plavatelʲ*)
b. *poznavátelʲnɨj* 'cognitive' (*poznavátʲ* 'cognize.IMPFV.INF', **poznavátelʲ*)
c. *želátelʲnɨj* 'desirable' (*želátʲ* 'desire.IMPFV.INF', **želátelʲ*)

Itkin and Leont'eva (2019): any actant of the verb (except the indirect object) can be the external argument of the adjective, as can the event itself (see also Zvezdova and Gou (2013)):
Is this evidence that datives are introduced by Appl^0, which is higher than the subject?

(11) a. *nastupatelʲnaja operacija* 'offensive operation' (operation identical to an attack)
b. *obʲazatelʲnoe upražnenie* 'obligatory exercise' (exercise obliged to be done)

The [– lexical insertion] assumption would not help here: **the missing -*telʲ*- nouns would still be agentive because of the EA restriction**

The adjective is semantically linked to the verb rather than to the intermediate noun

(12) a. *predoxranítʲ* 'to protect, preserve' → *predoxranítelʲ* 'electrical fuse, safety device' → *predoxranítelʲnɨj* 'preservative, preventive, protective'

b. *nosítʲ* 'to carry, wear, bear' → *nosítelʲ* 'carrier' (rocket carrier, information bearer) → *nosítelʲnɨj* 'wearable, transportable'

This would only be possible if the suffix -*telʲ*- were semantically vacuous

2.3. Bleaching

If -*telʲ*- can be semantically null, the adjective would remain deverbal but its connection to the event would be arbitrary (as expected, since the suffix -*ĭn*- is also semantically null)

Bleaching should still retain categorial information because the suffix -*ĭn*- cannot combine with thematic verbal stems (section 5.2)

In the suffixal complex -*telʲn*- the inner suffix (-*telʲ*-) overcomes the selectional restrictions of the suffix -*ĭn*- (Stump's and Haspelmath's *counterpotentiation*)

This argument says nothing about the structure of the suffixal complex, only about the role of the inner suffix

Contextual allosemy is not dependent on the existence of complex suffixes: the bleaching of the inner suffix could be conditioned by the stem (inward sensitivity) and by the outer suffix (outward sensitivity)

But complex suffixes should be available

- They are already assumed to exist (fused tense and agreement nodes, fused tense and thematic nodes) in syntax
- They are not ruled out by any principles

It would be simpler to postulate bleaching only inside the complex suffix and discuss whether the potential ambiguity due to the choice of the structure is a good thing, but simplicity is not a very good argument here

2.4. Intermediate summary

The actor suffix -*telʲ*- can produce:

- agents: incompatible with the suffix -*ĭn*-; can be explained away by the assumption that animate -*telʲ*- nouns involve the additional feature [+animate]
- instruments: the core INITIATOR meaning (=external argument); the lack of animacy in nouns is pragmatic in the absence of the [+animate] feature
- entities linked to the event: semantic zero, unavailable outside -*telʲn*- adjectives

The last option arises because an affix can be bleached of its lexical meaning

By analogy with allomorphy, if the structural conditions for allosemy are met, the appropriate alloseme must be used (or the appropriate semantic readjustment rule must apply)

No ambiguity is predicted (potentially untestable: the vacuous alloseme has a broader meaning)

2.5. The complex feminitive -*nic*-$_{\mathbf{F}}$

The suffixal complex -*nic*- forms feminitives for -*tel^{j}*- nouns:

(13) *učítel^{j}/učítel/nica* 'a teacher', *vodítel^{j}/vodítel/nica* 'a driver', *voítel^{j}/voítel/nica* 'a warrior', *rodítel^{j}/rodítel/nica* 'a parent'

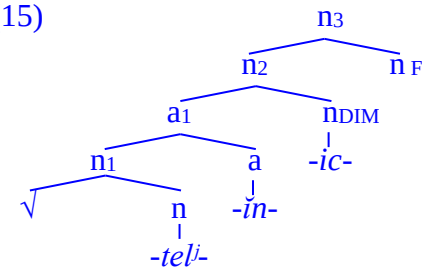
The suffixal complex -*nic*- is the feminine variant of the agentive/nominalizing suffix -*nik*-:

(14) a. *animéšnik/animéšnica* 'animé lover.M/F'
b. *otstupít^{j}* 'to renounce' → *otstúpnik/otstúpnica* 'renegade'

It is a suffixal complex:
- the adjectivizing suffix -*ǐn*- (**shared with the adjectivizer -*tel^{j}n*-**)
- the diminutive/nominalizing suffix -*ik*-
- [feminine] (possibly with suprasegmental accentual feature, Matushansky (2023a))
- [animate] (probably fused with [feminine])

How are these feminitives formed? Suppose only iterative suffixation is available:

(15)



How is -*tel^{j}*- interpreted in this structure?

The interpretation of feminine [tel^{j}nic] nouns should depend on the interpretation of the corresponding [tel^{j}n] adjective

And [tel^{j}n] adjectives come in two varieties: the agentive ones and the underspecified ones

It becomes a pure accident that all [-tel^{j}nic] nouns denote female counterparts of [-tel^{j}] nouns

We know that the suffix -*ǐn*- can affect the interpretation of -*tel^{j}*-, so it should do so even when followed by the feminitive -*ic*-
And the feminitive -*ic*- is never unpaired: among the 1062 animate feminine nouns in [ica] in Zaliznjak (2010) the only non-paired ones I have found are diminutives and animal and insect names

2.6. Derivatives in -*tel^{j}*-: summary

When deriving nouns the suffix -*tel^{j}*- obeys the EA restriction

When embedded inside -*tel^{j}n*- adjectives, the suffix -*tel^{j}*- can be semantically vacuous

The assumption that this allosemy happens inside a complex suffix simplifies the description

Without this assumption it seems impossible to account for -*tel^{j}*- feminitives in -*nic*-
Possible objection: can -*nic*- not contain -*ǐn*- synchronically? Answer: yes, it can. But this is rather unintuitive and misses a number of empirical generalizations (see Matushansky (2023b))

The existence of complex suffixes provides novel insights into other suffixal complexes, both synchronically and diachronically
Trigger warning: the next section will not be conclusive!

3. THE BABY-DIMINUTIVE SUFFIXAL COMPLEX

Gouskova and Bobaljik (2022): the suffix *-ʲonok* can be both a head and a modifier
G&B transcribe the suffix as *-onok-* and note that it palatalizes the preceding consonant, sometimes with mutation

It is a head when forming baby diminutives (from all genders and declension classes into the same masculine default):

(16) a. ris^{j}
lynx III.NOM$_{FSG}$
rat

b. ris^{j}-onok/ris^{j}-ata
lynx-ONOK.NOM$_{MSG}$/-ONOK.NOM$_{PL}$
baby lynx/baby lynxes

(17) a. zver^{j}
animal I.NOM$_{FSG}$
animal

b. zver^{j}-onok/zver^{j}-ata
animal-ONOK.NOM$_{MSG}$/-ONOK.NOM$_{PL}$
baby animal/baby animals

(18) a. kris-a
rat II-NOM$_{FSG}$
rat

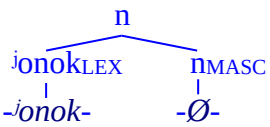
b. kris^{j}-onok/ata
rat-ONOK.NOM$_{MSG}$/-ONOK.NOM$_{PL}$
baby rat/baby rats

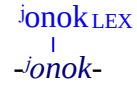
It is a modifier when forming evaluative diminutives:

(19) a. lošad^{j}
horse III.NOM$_{FSG}$
horse

b. lošad^{j}-onk-a/lošad^{j}-onk-i/*lošad^{j}-at-a
horse-ONOK-NOM$_{FSG}$/-ONOK-NOM$_{PL}$
nag/nags

Gouskova and Bobaljik (2022) treat this suffix as a syntactic complex, consisting of the lexical part (*-ʲonok-*) and the null nominalizer, when it is a baby diminutive, and as just the lexical part otherwise:

(20) a.


b.


History: the lexical part is a suffixal complex, consisting of an **adjectivizer** (underlyingly *-ĭn-*) and a diminutive/**nominalizing** suffix (underlyingly *-ŭk-*)

Is it complex synchronically?

The diminutive in it seems obvious. The adjectivizer is less evident

3.1. The failure of yer lowering

Russian has two abstract lax high vowels, /ĭ/ (front, IPA [ɪ]) and /ŭ/ (back, IPA [ʊ]), which turn into [e] and [o] respectively if followed by a yer:

(21) a. *os^{j}ól/oslá* 'donkey.NOM/GEN' (root *-osĭl-*)
b. *pos^{j}ól/poslá* 'ambassador.NOM/GEN' (root *-posŭl-*)

This type of yer vocalization is known as **yer lowering**

The adjectivizer *-ĭn-* contains a front yer (diagnosed by vowel/zero alternation):

(22) a. *béden/bedná* 'poor.M/F' (nominal stem *-bed-* + adjectival suffix *-ĭn-*) yer
b. *ukráden/ukrádena* 'stolen.M/F' (verbal stem *-u.krad-* + PPP suffix *-en-*) no yer

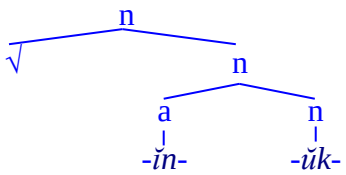
However, there is no yer lowering in the root of baby diminutives:

(23) a. *os^{j}ól/oslá* 'donkey.NOM/GEN' (root *-osĭl-*)
b. *osl^{j}ónok* 'baby donkey'

If the underlying representation of the adjectivizer is *-ĭn-*, why does the root yer fail to lower?

Suppose (as necessary for the G&B story to work) that the two suffixes form a constituent:

(24)



The first cycle is the complex suffix… and yer lowering applies inside it: it lowers the yer of the adjectivizer:

(25) [[osĭl-[**ĭn-ŭk**]$_1$]$_2$-ŭ]$_3$
[[osĭl-**en-ŭk**]$_2$-ŭ]$_3$ cycle 1: YER LOWERING

In the second cycle the complex suffix combines with the stem:

(26) [[os**ĭl-en**ŭk]$_2$-ŭ]$_3$
[[os**ĭl-en**ŭk]$_2$-ŭ]$_3$ nothing happens

Because the complex suffix no longer begins with a yer, the stem yer will not be lowered
Further changes, such as yer lowering in the suffix *-ŭk-* (triggered by the yer of the nominative ending *-ŭ-*), e2o change and palatalization, will yield the surface form [osl^{j}ónok]

The lack of yer lowering in the stem is expected with the constituency in (24)

The baby diminutive can still involve a complex suffix

3.2. The *-ĭn-*/*-a-* alternation and the plural

The plural form of baby diminutives is suppletive:

(27) a. rɨs^{j}-**onok**
lynx-ONOK.NOM$_{MSG}$
baby lynx

b. rɨs^{j}-**ata**
lynx-ONOK.NOM$_{PL}$
baby lynxes

(28) a. zver^{j}-**onok**
animal-ONOK.NOM$_{MSG}$
baby animal

b. zver^{j}-**ata**
animal-ONOK.NOM$_{PL}$
baby animals

(29) a. krɨs-^{j}**onok**
rat-ONOK.NOM$_{MSG}$
baby rat

b. krɨs^{j}-**ata**
rat-ONOK.NOM$_{PL}$
baby rats

There is no apparent link between the singular (*-^{j}onok-*) and the plural (*-^{j}at-*) forms of the baby diminutive

Unless its underlying representation contains *-ĭn-*

Historically, the pre-consonantal VN combination in Russian underwent nasalization:

(30) a. [iN]$_\sigma$ → [ĩ] → [a] front vowel
b. [oN]$_\sigma$ → [õ] → [u] back vowel

The [iN]/[a] and [oN]/[u] alternations are attested in modern Russian:
The representations below are somewhat misleading where it comes to the first-conjugation present-tense suffix (whose underlying representation is *-e-*, but it undergoes the same e2o change as the baby donkey [osl^{j}ónok])

(31) active present participle suffix *-nšč-*:

a. *lʲub-i-t* 'love-PRES-3SG': *lʲubašč**i**j* 'loving.MSG' front vowel before nasal: [a]
b. *poj-o-t* 'love-PRES-3SG': *pojušč**i**j* 'loving.MSG' back vowel before nasal: [u]

(32) ahematic verbal stem *-mĭn-* 'knead' (and a few others)

a. *razo.mnʲ-o-t* 'mash-PRES-3SG' pre-vocalic
b. *razmʲa-tʲ* 'mash-INF' pre-consonantal
c. *razminatʲ* 'mash.IMPFV.INF' after tensing, pre-vocalic

If baby diminutives are derived by a complex suffix (*-ĭn-ŭk-* in the singular, *-ĭn-t-* in the plural), **the surface *-ʲat-* arises from the same process**

How is it advantageous? There is still allomorphy/suppletion: *-t-* is an allomorph of *-ŭk-* in the context of the adjectivizing *-ĭn-* and the plural (cf. (13) in Gouskova and Bobaljik (2022)):

(33) DIM2 ↔ t / *-ĭn-* __]… PL
DIM2 ↔ ŭk

What is the advantage of decomposing *-ʲonok-*?

Well, the underlying suffix *-ĭn-* explains why the plural is palatalizing, but this is a very minor advantage

Moreover, this would be a rather special allomorph of *-ĭn-*: it has to trigger allomorphy of the following suffix in the plural (*-ŭk-* → *-t-*)
The diminutive adjectival suffixal complex *-enʲk-* (*-ĭn-ĭk-*) doesn't do this, but is it the same/linked?

Suppose we can show that there is a rather special allomorph of *-ĭn-*?

3.3. The animal adjectivizer *-in-*

The same nouns (animal names) that form baby diminutives also form adjectives in *-in-*:
On the homophonous possessive suffix *-in-* see section 5.1.1 below

(34) a. *gusʲ/gusʲá* 'goose.NOM/GEN'
b. *gusʲónok* 'baby goose'
c. *gusʲínʲj* 'related to geese.MSG'

The adjectivizer *-in-* is not attested elsewhere
Zaliznjak (1977:371-372): 33 adjectives in *-in-ʲj-*, of which 2 are not derived from animal names (*gostínʲj* 'related to guests', only used in the set expression *Gostinʲj Dvor* 'arcade' or as the substantivized feminine noun *gostinaja* 'living room', and *topolínʲj* from *tópolʲ* 'poplar')

Both the "animal" suffix *-in-* and the baby diminutive *-ʲonok-* are accented (auto-stressed, in G&B's terms) and dominant

(35) a. *lósosʲ/losósʲ* 'salmon' → *lososínʲj* 'salmon (attr.)', ??*lososʲónok* 'baby salmon'
b. *múxa* 'fly' → *mušínʲj* 'fly (attr.), ??*mušónok* 'baby fly'

Not all animal names form adjectives in *-in-* (there might be blocking, see section 5.1)

But all animal names that form adjectives in *-in-* also form baby diminutives in *-ʲonok-*

The correlation between the "animal" *-in-* and the baby diminutive *-ʲonok-* suggests a common core, supported by their accentuation

The adjectival *-in-* has to have a restriction on its use limiting it to animal kinds. This restriction, if viewed as a presupposition, could account for the offspring semantics of baby diminutives

The "animal" -*in*- is a [+ATR] variant of the general adjectivizer -*ĭn*-. Some reason should be given for the ATR alternation, because -*in*- cannot give rise to the surface [ʲon] (while -*ĭn*- can)
Another potential case of yer tensing in one and the same suffix passing from noun (surface [k]/[ok]) to adjective (surface [ič]): *dvojka* 'a two'/*dvoičnyj* 'binary (in numeration systems)', *desʲatka* 'a ten'/*desʲatičnɨj* 'decimal', etc. (And I would argue for -*ĭk*- as the underlying representation in both cases on independent grounds)

The connection could be purely historical, of course, but even so it is revealing

3.4. Decomposition of -*ʲonok*-: summary

The benefits of decomposing -*ʲonok*- are relatively minor:
- it contains the identifiable diminutive suffix -*ŭk*-
- it shares a presupposition and prosody with the adjectivizer -*in*-, which is minimally phonologically different from the adjectivizer -*ĭn*-
- the same kind of tensing is attested in denominal adjectives (but is restricted)
- decomposition allows less suppletion and more allomorphy

But it raises an interesting question: the meaning of the complex suffix (if it is one) appears to be more complex than the composition of its parts. Can this meaning be derived if we assume that the "animal" -*in*- in -*ʲonok*- loses its semantics but keeps its presupposition?
If it combines with -*ŭk*-, do we get "a small thing that is an animal kind"? Intriguing…

If -*ʲonok*- is a suffixal complex, it is a constituent, as required by G&B

If it was so historically, we might have a formal path for Haspelmath's *affix telescoping*

4. Conclusion and further questions

Main goal: investigate the usefulness of complex suffixes for Russian morphosyntax

Tentative conclusion: it could be worthwhile:
- the adjectivizing suffixal complex -*telʲn*- is more efficiently accounted for
- feminization of -*telʲ*- nouns seems impossible to achieve with iterative suffixation
- the baby diminutive suffix -*ʲonok*-/-*ʲat*- might still be linked to its historical sources

A lot of questions remain:

- Does the evaluative modifier -*ʲonok*- have the same internal structure and the same parts? Could the lack of plural allomorphy be linked to a different structure?
- What does it mean for a morpheme to become semantically vacuous? What is lost and what remains? Is gender/animacy information retained? Are presuppositions?
- What is bleaching? Is it an operation (semantic deletion) or the choice of the null alloseme? If the latter, how do null allosemes arise? If the former (by analogy with phonology), how does it relate to impoverishment?
- Complex affix formation is unlikely to be mandatory, so structural ambiguity (and a lot of lexical gaps) is expected. Is there evidence for or against?
- Circumfixes would seem very likely candidates for affixal complexes, but they are unlikely to be complex affixes. While they do give rise to meanings distinct from the combination of their parts, does semantic bleaching occur in them? Is there a need for complex affixes once we have accounted for circumfixes by other means?

There are also potential connections to work treating certain affixes as roots (De Belder (2011), Lowenstamm (2015), etc., see Gouskova ([to appear]) for references and discussion) or to affix decomposition (Gouskova and Bobaljik (2022))

5. APPENDICES

5.1. Further notes on "animal" adjectives

5.1.1. The possessive -*in*-

Animate *a*-declension nouns non-productively form possessives with the suffix -*in*-:
The suffix primarily attaches to proper names and kinship terms, a few other nouns are possible

(36) a. *sestrá/sestrú* 'sister.NOM/ACC'/*séstrin* 'the sister's'
b. *učílka* 'teacher.F.PEJ' → *učílkin* 'the teacher's'
c. *učítelʲnica* 'teacher.F' → %*učítelʲnicɨn* 'the teacher's'
d. *Anečka* 'Annie' → *Anečkin* 'Annie's'

This is not the "animal" -*in*-:
- it is an individual possessive formed from a definite referential NP
- it is pre-accenting (36a) and not accentually dominant (36d)
- the declension class of resulting adjectives is different (cf. Halle and Matushansky (2006))

However, most *a*-declension animal names do not form adjectives with -*in*- (even though they can form baby diminutives)

(37) a. *kozá* 'goat' → *kózij*, *akúla* 'shark' → *akúlij*, *čerepáxa* 'turtle' → *čerepášij*, *sobáka* 'dog' → *sobáčij*, etc.
b. *útka* 'duck' → *utínɨj* (cf. *útkin* 'the duck's'), *lʲagúška* 'frog' → *lʲagušínɨj* (cf. *lʲagúškin* 'the frog's')
c. *múxa* 'fly' (*múška*) → *mušínɨj*, *mɨšʲ* 'mouse' (*mɨ́ška*) → *mɨšínɨj*

This might be blocking, worth investigating

5.1.2. The adjectival -*ǐj*-

A-declension animal names form adjectives with the suffix -*ǐj*- (37a)

As do C-declension nouns ending in [n]:

(38) *pavlínij*, from *pavlín* 'peacock', *fazánij* (*fazán* 'pheasant'), *selezénij* (*sélezenʲ* 'drake'), etc.

If the underlying representation of the "animal" suffix is -*ǐn*-, a gemination-based rationale is likely
This suffix forms adjectives with a mixed declension (cf. Halle and Matushansky (2006))

5.1.3. -*in*- and -*ʲonok*- derivational link

The connection between the surface -*in*- in adjectives and the surface -*ʲon*- in baby diminutives can be linked to the underlying representation as -*ǐn*-:
The alternation between the surface [e] in unstressed syllables and the surface [o] with a palatalized preceding consonant ([ʲo]) under stress is allophonic (Lightner (1969), Boyd (1997)).

(39) [[[√-ĭn]$_1$-ŭk]$_2$-ŭ]$_3$
↓ cycle 2: YER LOWERING
[[√-ĕn-ŭk]$_2$-ŭ]$_3$
↓ cycle 2: e2o change
[[√-ʲon-ŭk]$_2$-ŭ]$_3$
↓ cycle 3: YER LOWERING
[√-ʲón-ok-ŭ]$_3$
↓ post-cyclic YER DELETION
√-ʲónok

Conversely, in adjectival formation the long-form suffix *-oj-* (turning into [ɨj] in the masculine in unstressed syllables) triggers a readjustment tensing rule:

(40) [[[√-ĭn]$_1$-oj]$_2$-ŭ]$_3$
↓ cycle 2: morphologically triggered TENSING
[[[√-in]$_1$-oj]$_2$-ŭ]$_3$
↓ post-cyclic YER DELETION, Ɨ-FORMATION
√-ʲínɨj

Accentual dominance might explain yer tensing in the adjectival use, but would somehow have to be preserved in the complex suffix

5.2. The thematic suffix

The thematic suffix appears to change the combinatorial possibilities of a verbal stem

The deverbal suffix *-telʲ-* can only combine with thematic verbal stems

Agapova (1974) via Zvezdova and Gou (2013): the exceptional suffixal complex *-i-telʲ-*:

(41) a. *vlastʲ* 'power' → *vlastítelʲ* ruler' (**vlastitʲ*, *vlástvovatʲ* 'to rule')
b. *blʲustí* 'to guard' → *blʲustítelʲ* 'guardian' (**blʲustitʲ*)

Itkin (2007:168): the thematic suffix may exceptionally change or be inserted

For the suffix *-telʲ-* the missing intermediate verb is usually formed by the thematic suffix *-i-*
Sometimes the stem is nominal, sometimes athematic; theme replacement can be reduced to either

Lychyk (1995) notes that there are some denominal *telʲ*-formations that contain intermediate verbal morphology without there being the corresponding verb, e.g., *doždevatelʲ* 'water sprinkler' ← *doždʲ* 'rain' (**doždevatʲ*)

Conversely, **the adjectivizing suffix *-ĭn-* cannot combine with thematic verbal stems**
Matushansky (2021): also the deverbal agentive nominalizer *-un-*, but this one is not relevant here

The **passive past participle suffix *-en-*** is historically identical to *-ĭn-* (and might still be *-ĭn-* in the underlying representation, which would explain why it is unaccentable per Matushansky ([to appear])) but never surfaces as such (its vowel never alternates, it is either zero or [e]):

(42) a. čit- a- n- a ← čit-a-ĭn/ĕn-a + hiatus resolution?
read TH PPP FSG

b. kup l- ĕn- a ← kup-i-ĕn-a + glide formation
buy TH PPP FSG

Either thematic verbs do not form adjectives with *-ĭn-* (surface [en]/[n]) or when they do, they form a passive past participle

Vinogradov (1952:346-347): there exist a few deverbal *-ĭn-* adjectives (*bérežnɨj* 'careful' (*berečʲ* 'to protect'), *prijátnɨj* 'pleasant' (*prijátʲ* 'to accept (arch.)'), *grebnój* 'rowing' (*grestí* 'to row'), etc.)

These are all based on athematic verbs

Matushansky (2021): the addition of the thematic suffix is not vacuous:

(43) a. *smol-it^{j}* 'to coat with tar' → *smol-i-l^{j}ščik*, *smol^{j}-ščik* 'a tarring professional'
b. *nos-it^{j}* 'to carry' → *perenos-čik* 'a porter', *nos-i-l^{j}ščik* 'a porter, carrier'

(44) a. *okuč-nik* 'hiller' ← *okuč-i-t^{j}* 'to earth up'
b. *budi-l^{j}-nik* 'alarm clock' ← *bud-i-t^{j}* 'to wake up'

(45) a. *torgov-ec* 'merchant' ← *torgov-a-t^{j}* 'to trade'
b. *skita-l-ec* 'wanderer' ← *skit-a-t^{j}-s^{j}a* 'to wander'

(46) a. *davilka* 'a press' ← *dav-i-t^{j}* 'to press'
b. *davka* 'a crush, jam'

In the presence of a thematic suffix to combine with suffixes *-ščik-*, *-nik-*, *-k-* and *-ič-* the stem must be augmented

The resulting meanings are the same

The inner suffix in these cases does not contribute any meaning but might undo whatever it is that the thematic suffix does

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