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ON THE COMPLEXITY OF BECOMING FEMININE IN RUSSIAN

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1. INTRO: TWO WORDS ABOUT RUSSIAN PHONOLOGY

The two words are: "velars" and "yers"

1.1. Vowel-zero alternations in the Russian feminitive/diminutive suffixes

Slavic **yers are abstract high lax vowels** that are dropped when not changed into something else

They are **lowered** when there is a yer in the next syllable

So when you see a surface **[o] alternating with zero**, this is an underlying **back yer** /ŭ/:

(1) a. *górod* 'city': *gorod-ók* 'city-DIM.NOM' → *gorod-k-á* 'city-DIM-GEN' suffix *-ŭk-*
b. *mašína* 'car': *mašín-k-a* 'car-DIM-NOM' → *mašín-ok* 'car-DIM-PL.GEN' suffix *-ŭk-*

And when you see a surface **[e] alternating with zero**, this is an underlying **front yer** /ĭ/:

(2) a. *kupéc* 'merchant.NOM' → *kupc-á* 'merchant-GEN' suffix *-ĭc-*
b. *vér-en* 'faith-ful-M.NOM' → *ver-n-á* 'faith-ful-F.NOM' suffix *-ĭn-*

The back one can turn into the front one after a palatalized consonant:

(3) a. *púlʲ-k-a* 'bullet-DIM-NOM' → *púlʲ-ek* 'bullet-DIM.PL.GEN' suffix *-ŭk-*
b. *péšk-a* 'pawn-NOM' → *péšek* 'pawn.PL.GEN' suffix *-ŭk-*

The underlying [ŭ] and [ĭ] can also be **tensed** and surface as [ɨ] and [i], respectively (evidence from verbal morphology)

1.2. Velar allophony

Russian has velar mutation (aka velar palatalization), cf. *electric/electricity*, *sage/sagacity*):

- an underlying [k] can also surface as [c] or [č]
- an underlying [g] can also surface as [ž]
- an underlying [x] can also surface as [š]

A surface **[č] or [c]** at the morpheme boundary is nearly always an underlying [k], which entails that the vowel following it is underlyingly either [– back] ([i] or [e]) or a yer ([ĭ], [ŭ])

Highly relevant illustration: the suffix *-ŭk-*, which can both trigger and undergo velar mutation:

(4) a. *suk* 'bough': *suč-ók* 'bough-DIM.NOM' → *suč-k-á* 'bough-DIM-GEN'
b. *suč-ók* 'bough-DIM.NOM' → *suč-ó-č-ek* 'bough-DIM-DIM.NOM'

The vowel-zero alternation shows that the suffix begins with a yer. The lack of palatalization, as in (2a), shows that this is a back yer ([ŭ])

Acknowledgements: Many thanks to Olga Steriopolo, who got me started on this project.

The transcriptions below closely follow Russian orthography and do not indicate: (a) palatalization before front vowels (/*Ci*/ → [*Cʲi*], /*Ce*/ → [*Cʲe*]), (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], see Padgett and Żygis 2007), *ш* (IPA [ʂ]), *ж* (IPA [ʐ]), *щ* (IPA [ɕɕ], *ц* (IPA [t͡s]) are traditionally rendered as *č*, *š*, *ž*, *šč*, and *c*.

1.3. Post-accentuation

The suffix *-ŭk-* also illustrates post-accentuation: stress falls on the syllable after it if there is one and on the suffix itself otherwise (unless the stem introduces its own accent):

(5) a. *kupéc* 'merchant.NOM' → *kupc-i* 'merchant-PL'
b. *suč-ók* 'bough-DIM.NOM' → *suč-k-í* 'bough-DIM-PL'

We use the plural because it is identical across declension classes

Caveat: **the accentual properties of a suffix can only be checked with unaccented stems**

1.4. The 11th commandment of a Slavic morphologist

> 11. Thou shalt not do Slavic morphology in the ignorance of Slavic phonology

As we will see, the phonology of Russian diminutives and feminitives is highly revealing

2. MAIN PUZZLE: THE RUSSIAN FEMININE STRESS

Halle 1973: in nouns derived by the suffixes *-nik-* and *-ŭk-* the feminine undergoes **stress shift** to the left (for *-ŭk-* also independently noted by Beard 1987):

(6) masculine nouns with *-ŭk-* (unaccented stems only): Halle 1973

a. *pastúx* 'shepherd': *pastuškí* 'shepherds.DIM.M'
pastúški 'shepherdesses.F'

b. *kórob* 'bast box': *korobkí* 'small bast boxes.M'
kóroki 'boxes.F'

c. *kazák* 'Cossack': *kazačkí* 'errand boys.M'
kazáčki 'Cossack women.F'

(7) masculine nouns with *-nik-* (unaccented stems only): Halle 1973

a. *provodnikí* 'conductors', *balovnikí* 'spoiled children', *bludnikí* 'fornicators', *učenikí* 'students', *vɨpusknikí* 'graduates'

b. *provodnícɨ* 'conductors', *balovnícɨ* 'spoiled girls', *bludnícɨ* 'fornicators', *učenícɨ* 'students', *vɨpuskncɨ* 'graduates'

In the feminine nouns stress is retracted one syllable to the left
No explanation, just the hypothesis that these feminine nouns undergo metatony (stress retraction)

> The fact that two different suffixes exhibit this change is grounds for investigation

Potential confound: the feminine suffix *-nic-* forms the feminitive to the agentive suffix *-nik-*, but the masculine suffix *-ŭk-* and the feminine suffix *-ŭk-* form diminutives and feminitives (respectively) of the same nouns

The stress-shift generalization extends to other substitutive feminitives

2.1. Further gendered suffixal pairs

In the **suffixal pair *-ĭc-*/*-ic-*** as well the masculine variant is post-accenting and the feminine one, accented:

(8) a. *pevcí* 'singers' (sg: *pevéc*)/*pevíci* 'female singers'
b. *vdovcí* 'widowers' (sg: *vdovéc*)/*vdovíci* 'widows'

In this suffixal pair the consonant remains the same and the vowel changes

The **suffixal pair -*ščik*-/-*ščic*-** triggers the same stress alternation (in derivatives where stress is not on the lexical stem, the latter is by far the preferred variant):
This suffix also has an allomorph -*čik*-, which is used after dental-final stems and is never post-accenting, so the stress in its feminine variant -*čic*- cannot be checked

(9) a. *kranovščikí*/*kranovščící* 'construction crane operators.M/F'
b. *časovščikí*/*časovščící* 'watchmakers.M/F'

Hart 2015: stress patterns in Russian nouns ending in [ik] and [ica] support Crosswhite et al. 2003:379: "final stress in consonant-final words, penultimate stress in vowel-final words"
Does not distinguish post-accentuation and final stress

2.2. The potential complexity of -*nik*- and -*ščik*-

Though the animate -*ščik*- and -*nik*- are in complementary distribution (one exception: *sovétčik* 'advisor', *sovétnik* 'councilor'), they are not each other's allomorphs

Both -*nik*- and -*nic*- can also derive inanimates:

(10) a. *slóvnik* 'glossary' (cf. *slóvo* 'word'), *plavník* 'fin' (cf. *plávatʲ* 'to swim')
b. *bolʲnícа* 'hospital' (cf.*bolʲ* 'pain'), *pérečnica* 'pepper box' (cf. *pérec* 'pepper')

The rare inanimate -*ščik*- nouns denote instruments (e.g., *trálʲščik* 'trawler')

Both, however, are usually viewed as internally complex

Usual view (e.g., Kiparsky 1975 via Haspelmath 1995, Itkin 2007:169): **-*nik*-** historically arise from suffix stacking (the passive past participle -*ǐn*- and the nominalizer -*ik*-)

Traditional view (Kiparsky 1975): **-*ščik*-** is derived from the combination of the adjectivizing suffix -*ǐsk*- and the nominalizer -*ik*-

Alternative (Vaillant 1964 via Witkowski 1981): -*ščik*- (or rather its allomorph -*čik*-) is derived from the Turkic suffix -*čі*- and the nominalizer -*ik*-

Luschützky 2011: very little evidence for the independent nominalizer -*ik*- in OCS

Accentuation: while **-*ik*- is pre-accenting** and dominant (cf. Gouskova, Newlin-Łukowicz and Kasyanenko 2015), -*ščik*- and -*nik*- are post-accenting

The nominalizing masculine suffix -*ik*- can only be feminized by addition:
And -*nik*- also can – or is this -*ǐn*-*ik*-?

(11) a. *bolʲševík*/*bolʲševíčka* 'bolshevik', *alkogólik*/*alkogolíčka* 'alcoholic'
b. *mélʲnik*/*mélʲničixa* 'miller', *dvórnik*/*dvórničixa* 'yard caretaker'

Also **the diminutive suffix -*ik*- cannot be feminized** at all
The only counterexample I have found in Zaliznjak 1980 is *kárlik*/*kárlica* 'dwarf.M/F' (historically derived from *kárla* 'dwarf')

2.3. On the potential -*ic*- in -*nic*- and -*ščic*-

The feminizing suffix -*ic*- either forms a gendered pair with the suffix -*ič*- (8), or attaches to stems:

(12) a. *tigr*/*tigrícа* 'tiger'
b. *máster*/*masterícа* 'master'

Furthermore, when independent, *-ic-* is accented and **dominant**:
Exception: *medvéd'/medvédica* 'bear'

(13) a. *félʲdšer* 'doctor's assistant', PL: *félʲdšerɨ*, F: *felʲdšeríca*
b. *djávol* 'devil', PL: *djávolɨ*, F: *djavolíca*
c. *tígr* 'tiger', PL: *tígrɨ*, F: *tigríca*

While the shifted stress in the feminine forms in (7) and (9) shows that **-*nic*- and -*ščic*-** are accented, (14) and (15) show that they are **not dominant**: stem stress is not erased:

(14) a. *frezeróvščik/frezeróvščica* 'milling-machine operator'
b. *zaprávščik/zaprávščica* 'refueller'

(15) a. *otlíčniki/otlíčnicɨ* 'best students'
b. *západniki/západnicɨ* 'Westernizers'

Conclusion: different behavior would be expected if the independent suffix *-ic-* was added on top of *-n-* and *-sk-* (or *-či-*) to form *-nic-* and *-ščic-*

2.4. The gendered pair *-ič-/-ǔk-*

Besides its agglutinative use, the feminizer *-ǔk-* can also replace the masculine nominalizer *-ič-*:

(16) a. *šved/švédka* 'a Swede', *monáx/monáška* 'a monk/nun' addition
b. *pessimíst/pessimístka* 'pessimist', *arfíst/arfístka* 'a harper' addition
c. *torgóvec/torgóvka* 'a merchant', *némec/némka* 'a German' substitution

To make things more complicated, **the agentive suffix *-ič-* may be replaced in some cases and remain in others**:
Vinogradov 1986:117fn.: If the noun in *-ič-* is deverbal or deadjectival, its feminine counterpart will be built with the suffix *-ic-* (17a), if it is denominal, the suffix *-ǔk-* is used (17b). Nothing about (17c) and it is also non-obvious that *torgóvec* 'merchant' is denominal (cf. *torgovátʲ* 'to trade'), while *némec* 'a German' is not deadjectival (it is historically based on *nemój* 'mute'), and most ethnonyms are built on augmented stems (*amerikánec/amerikánka* 'an American', cf. *amerikánskij* 'American')

(17) a. *pevéc/pevíca* 'singer', *krasávec/krasávica* 'a beauty' substitution
b. *torgóvec/torgóvka* 'merchant', *némec/némka* 'a German' substitution
c. *kupéc/kupčíxa* 'merchant', *boréc/borčíxa* 'wrestler' addition

If the suffix *-ǔk-* is the feminine version of the deverbal agentive *-ič-*, how are they linked?

2.5. Intermediate summary

Five Russian gendered suffixal pairs exhibit the same accentual behavior: the feminine form surfaces with a left-shifted stress compared to the masculine one

The phenomenon does not seem to be due to having a shared component (*-ic-*), since outside such gendered pairs it may exhibit different behavior (accentual dominance)

While both *-ščik-* (*-čik-*) and *-nik-* historically arise from suffix stacking, with the same shared component *-ik-*, synchronically such is not the case:

- *-ik-* is pre-accenting, *-ščik-* (*-čik-*) and *-nik-* are post-accenting
- the independent feminizing suffix *-ic-* exhibits different accentual behavior from both *-nic-* and *-ščic-*
- the feminizing suffix *-ic-* is *not* the feminine counterpart of the masculine *-ik-*

Stress retraction is the property of gendered pairs

The same suffix *-ič-* may be feminized in two different ways

3. THE FEMININE *-ŬK-* AND STRESS SHIFT

Core semantic proposal: suppose **the non-segmental femininizing suffix can only be added to modifiers**

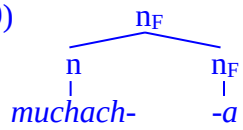
Independent evidence: obligatorily suffixal feminization

3.1. How is gender changed in Russian?

In Romance languages, feminization of a noun is done by changing its inflection class (i.e., by adding the final [a] in the nominative):

(18) a. *muchacho* 'boy'/*muchacha* 'girl' Spanish, Harris 1991
b. *sirviente*/*sirvienta* 'servant.M/F'

This reasonably corresponds to adding the feature [+ feminine] (see Percus 2011, Kramer 2009, 2015, 2016, Pesetsky 2013, etc.):

(19) 

→ *muchacha*

In contemporary Russian, null-derived deadjectival nouns can change their gender by changing their inflection:

(20) a. *zavédujuščij*/*zavédujuščaja* 'manager'
b. *rússkij*/*rússkaja* 'a Russian'

Otherwise only the few nouns in (21) and some first names (*Evgénij*/*Evgénija*, *Valérij*/*Valérija*, *Aleksándr*/*Aleksándra*…) distinguish gender by declension class:

(21) a. *vóron*/*voróna* 'raven/crow', *lis*/*lisá* 'he-fox/fox', *žiráf*/*žiráfa* 'giraffe/giraffe'
b. *kum*/*kumá* 'godparent (not in relation to the child)', *suprúg*/*suprúga* 'spouse', *rab*/*rabá* 'slave'
c. *rebʲónok* 'child' → *rebʲónka* 'female child'

Productive feminization in Russian is done by adding a suffix or by substituting one:

(22) a. *sekretárša* 'secretary', *generálʲša* 'general's wife', *blógerša* 'blogger'
b. *laborántka* 'lab assistant', *zemlʲáčka* 'compatriot'
c. *baronéssa* 'baroness', *kritikéssa* 'critic'
d. *masteríca* 'master', *tigríca* 'tigress'
e. *knʲagínʲa* 'princess', *filologínʲa* 'phololog ist'
f. *trusíxa* 'coward', *borčíxa* 'wrestler', *zajčíxa* 'hare'
g. *direktrísa* 'director', *abbatísa* 'abbess'
h. *svátʲja* 'mother of the child-in-law', *boltúnʲja* 'chatterbox'

(23) a. *piárščik*/*piárščica* 'PR administrator.M/F'
b. *animéšnik*/*animéšnica* 'animé lover.M/F'

The "Romance option" used to be available in Russian (^{O} indicates obsolete forms, see Fufaeva 2020):

(24) a. ^{O}*sudomój*/*sudomója* 'dish washer.M/F', ^{O}*vorožéj*/*vorožejá* 'magician.M/F'
b. ^{O}*guvernánt*/^{O}*guvernánta* (modern *guvernʲór*/*guvernántka*) 'tutor/governess'

None of these words are currently paired

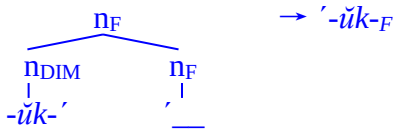
The hypothesis that the Russian feminizer can attach only to modifiers accounts for these facts

3.2. The feminizing suffix *-ŭk-* as a suffixal complex

Given that so many feminizing suffixes consist of a masculine suffix and a stress shift, it seems reasonable to assume that they are morphologically non-simplex

Basic assumption: *-ŭk-* is post-accenting
Revithiadou 1999 associates post-accentuation with a floating accent. Melvold 1990 assumes that post-accenting morphemes introduce a following left bracket, Alderete 1999, that they are unaccented… it doesn't matter now

One way of deriving the pre-accenting suffixal complex *-ŭk-*$_F$ is by making the non-segmental feminizer n$_F$ pre-accenting:

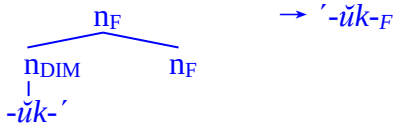
(25) 

If the non-segmental feminizer n$_F$ is pre-accenting, its accent will win over the accent of the post-accenting *-ŭk-*:

(26) **The Basic Accentuation Principle** (Kiparsky and Halle 1977):
Assign stress to the leftmost accented vowel; if there is no accented vowel, assign stress to the initial vowel.

Support (Crosswhite et al. 2003): the default stress in Russian nouns is on the last syllable of the stem

A nicer alternative: the non-segmental n$_F$ is unaccented, but in a complex structure accentuation needs to be calculated:

(27) 

Since the non-segmental n$_F$ cannot bear stress, and neither can the yer of *-ŭk-*, stress is shifted to the left (Melvold 1990) and the suffix becomes pre-accenting

4. DERIVING OTHER GENDERED PAIRS AS SUFFIXAL COMPLEXES

The **semantics of smallness** shared by diminutives, feminitives and nominalizers (cf. Jurafsky 1996) can be embodied in one shared vocabulary item

Phonologically *-ŭk-* is easily linked to *-ĭc-*, *-ic-*, and *-ik-* via the underlying representation *-ĭk-*:

Table 1: Nominalizing/feminine connections

vowel / consonant	[+back]	[–back]	
	[–ATR]		[+ATR]
velar	*-ŭk-* F/D	*-ĭk-*	*-ik-* M/D
coronal		*-ĭc-* M	*-ic-* F

Problems for this view:

- ***-ĭk-* is not attested independently**, only as part of another complex suffix forming diminutive adjectives (e.g., *krasívenʲkij* 'pretty.DIM')
- ***-ŭk-* is far more versatile** (Itkin 2007:264 lists 11 different nominalizing uses and 2 adjectivizing ones)

Gouskova et al. 2015: four diminutive allomorphs: *-ŭk-*, *-ik-*, *-ĭk-* (only appearing after velars) and *-čik-*. For our purposes their *-ĭk-* is an allophone rather than allomorph of *-ŭk-* (and for this we assume that *-ŭk-* can trigger velar mutation). Magomedova 2017 argues that they are not allomorphs

But from the point of view of phonology *-ĭk-* would seem to be a more reasonable underlying representation for all five surface forms

4.1. Proposal: complex suffix formation

The same surface suffix *-ĭc-* can corresponds to two different feminine substitutions (17):

(28) a. *pevéc/pevíca* 'singer', *krasávec/krasávica* 'a beauty'
b. *torgóvec/torgóvka* 'merchant', *némec/némka* 'a German'

The underlying representation of this suffix is *-ĭk-*, the mutation of the velar was historically motivated by the preceding high vowel, but now is purely idiosyncratic

The surface *-ĭc-* is underlyingly *-ĭk-* + a readjustment rule (probably triggered by the lexical stem and/or specific suffixes)

Two tasks: (a) the diminutive *-ŭk-* and (b) the feminizing *-ic-*

4.1.1. The link between *-ĭc-* and *-ŭk-*

The nominalizer *-ĭc-* is derived from the originally diminutive *-ĭc-*, which is well-attested:
The suffixal yer can turn into [i] in the feminine (29c-d), but doesn't have to (29e), and the position of the stress in the neuter can vary (see REF)

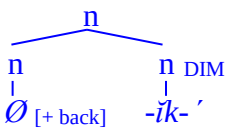
(29) a. *brat* 'brother', *brátec* DIM (GEN: *brátca*)
b. *sup* 'soup', *supéc* DIM (GEN: *supcá*)
c. *vodá* 'water', *vodíca* DIM
d. *sestrá* 'sister', *sestríca* DIM
e. *dverʲ* 'door', *dvérca* DIM
f. *vinó* 'wine', *vincó* DIM

Historically, *-ŭk-* and *-ĭc-* are probably unrelated

To link *-ĭc-* to the feminizing *-ŭk-* I propose the intermediate underlying representation *-ĭk-*

Hypothesis: the change from *-ŭk-* to *-ĭk-* is triggered by either specific roots (there is no reason why *wine* forms a diminutive only as in (29f), while *pívo* 'beer', as both *pivkó* and *pivcó*) or by the additional suffix turning it into a nominalizer

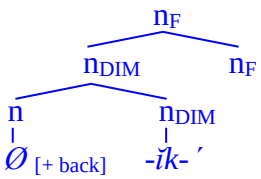
This affix is **non-segmental: it is a floating [+ back],** forcing the suffix to turn into *-ŭk-*:
Possible support: there is a masculine depalatalizing deverbal non-segmental nominalizer (e.g., *pódkup* 'a bribe', from *podkupítʲ*), which is unaccented (and also accentually dominant, as well as introducing a cyclic boundary, making the derived stem accented, but I will set this aside)

(30) 

→ *-ŭk-´* N

Because nothing is added on the right here, the accentuation of the suffixal complex remains the same (i.e., *-ŭk-* is also post-accenting)

This entails that the feminine *-ŭk-* (section 3.2) is more complex than we thought (but this is not problematic): combining (27) and (30) we get:

(31) 

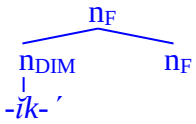
→ *´-ŭk-F*

I have tried to do this the other way around, deriving *-ǐk-* from the underlying *-ŭk-*, but it does not allow for an easy derivation of the feminizing *-ic-*

4.1.2. <u>The feminizing *-ic-* and stress-triggered tensing</u>

The structure in (31) forces the assignment of the suffixal accent to the suffixal vowel. In (31) this has resulted in pre-accentuation

The structure in (32) is simpler but this is not why a different phonological process applies

(32) 

→ *-íc-F*

→ *-ǐc-´*

The underlying front yer of Russian can turn into [i]:

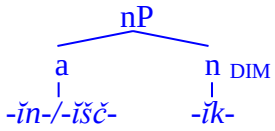
- in infinitives: the underlying *-tʲ-* turns into [ti] when the verbal root forces stress to surface on it (for the mechanism see Matushansky [to appear])
- in imperatives: the imperative suffix surfaces as [i] when stressed (*nesí* ‘carry!’) or to avoid a word-final complex coda (*kríkni* ‘give a shout!’), but otherwise triggers the palatalization of the stem-final consonant only (on variation see Es'kova 1985)

Proposal: the surface feminine *-ic-* is due to the same effect (a very OT analysis): because the yer can turn into [i], stress needs not be retracted

4.2. Derived tensing in other complex suffixes

The complex suffixes *-nik-* and *-ščik-* (*-čik-*) are historically derived from yer-initial adjectival suffixes (*-ǐn-* and *-ǐsk-*, though see Wisniewski 2009 for the latter)

Once again, we assume a complex suffix:

(33) 

→ *-ǐnik-* and *-ǐščik-* (*-ǐčik-*)

Two issues to resolve: (a) the suffixal vowel and (b) the (lack of) [k]-to-[c] change (k2c)

4.2.1. The adjectival yer

While historically the two complex suffixes began with a yer, do they contain it synchronically?

Two reasons to assume that the initial yer is there: lowering and velar mutation

The initial yer can be lowered (for *-nik-* only), but clearly not for phonological reasons:

(34) a. *utopít^{j}(s^{j}a)* 'to drown' → *utóplennik* 'drowned man'
b. *otstupít^{j}* 'to renounce' → *otstúpnik* 'renegade' (**otstúplennik*)
c. *učít^{j}(s^{j}a)* 'to learn/teach' → *učeník* 'student'
d. *luk* 'bow' → *lúčnik* 'archer'

The velar mutation (k2c) in (34d) clearly shows that the initial yer is present underlyingly
With one root velar mutation fails: *vípuskník* 'graduate'. But this [k] is odd to begin with, as it alternates with [t]

The fact that the initial yer is not lowered suggests that the yer of our hypothetical underlying suffix *-ĭk-* turns into [i] before yer-lowering

Does this mean that the suffixes *-ĭnik-* and *-ĭščik-* (*-ĭčik-*) contain the diminutive suffix *-ik-* or that the yer of our hypothetical underlying suffix *-ĭk-* turns into [i] due to the presence of *-ĭn-*/*-ĭšč-*?

4.2.2. Tensing and k2c

Both *-ĭnik-* and *-ĭščik-* (*-ĭčik-*) are post-accenting, so the tensing cannot be attributed to stress

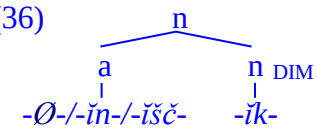
Gouskova et al. 2015:48: the diminutive *-ik-* usually combines with nouns that have final stress, but also with some that do not:
NB: The diminutive suffix *-ik-* can also be nominalizing, cf. *ženátik* 'a married man'

(35) a. *sókol* 'falcon' (gen.pl: *sókolóv*) → *sokólik* 'falcon.DIM'
b. *súdar^{j}* 'sir' (gen.pl: *súdar^{j}ej*) → *sudárik* 'sir.DIM'

The diminutive suffix ***-ik-* is pre-accenting and dominant**
Gouskova et al. 2015:fn.3 cites Gouskova and Linzen 2015 for the notion of "conditional dominance": "a suffix can lose stress dominance when another affix with a ''regularization factor'' is present in the phonological word", mentioning the Slovenian *-ec-*. I need to investigate this

A priori, the suffixes *-ĭnik-* and *-ĭščik-* (*-ĭčik-*) do not contain the diminutive suffix *-ik-*

But *-ik-* can be derived from *-ĭk-*, just like *-ŭk-*:

(36)


→ *-ik-*, *-ĭnik-* and *-ĭščik-* (*-ĭčik-*)

So **why is the suffixal yer tensed in all three cases**?
And **why is there no k2c?**

Hypothesis: there is a link between these two facts

No explanation yet for why *-ĭk-* turns into *-ik-* and not into *-ĭc-*

Let's set this aside for now and see **how we get to the feminine form ([níc]/[ščík])**

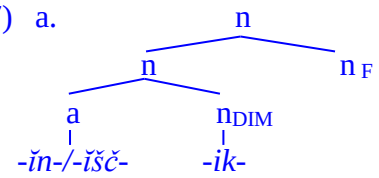
4.2.3. Velar mutation in the feminine

How do we get the k2c change? It should be prevented in the masculine, but go through in the feminine (and also in the suffix *-ič-*)

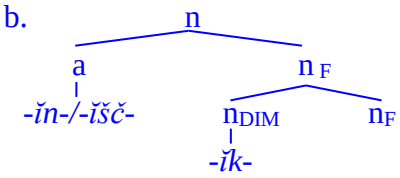
If we look at the history of Russian, the k2c change depended on the following vowel. Since the vowels in Russian case endings are mostly shared across declension classes, this would not work in contemporary Russian

Question: does n_F combine with the entire suffixal complex in (36) or just with *-ik-*, as in (32)?

(37) a.



b.



In both trees in (37) the stress shift comes from n_F forcing stress assignment

They yield the same semantic outcome because n_F is a modifier. It might be that (37b) is better, because we don't know the semantic type of the combination of *-ĭn-* or *-ĭšč-* with *-ik-* (it might be incompatible with n_F)

In the structure (37b) [c] arises as in (32): influenced by the preceding yer, in (37a) there is no explanation

In the structure (37b) the change to [i] achieved in the same way as in (32), due to the need to bear stress, and we end up with *-ĭnic-* and *-ĭščic-* (*-ičic-*), while in the structure (37a) the change to [i] requires explanation

Velar mutation and vowel change are expected in (37b)

Both structures require an explanation for why *-ic-* is not a possible feminizer for *-ik-*

4.2.4. Returning to tensing and k2c

How do we derive the masculine *-ik-*, *-ĭnik-* and *-ĭščik-* (*-ičik-*), given the derivation of *-ič-* from an underlying *-ĭk-* and the feminine *-ĭnic-* and *-ĭščic-* (*-ičic-*)?

- the unexpected [i]
- the failure to undergo k2c

Possible partial solution: make k2c dependent on the preceding front yer (yields further support for the structure (37b))

Possible auxiliary solution: force [i] in suffixal complexes
With the obvious exception of (30), where the suffixal vowel has turned into [ŭ]

What do we gain from all these readjustment rules and speculations?

5. THE MISERY AND SPLENDOR OF AFFIXAL COMPLEXES

First and foremost: affixal complexes exist independently of Russian nominalizers, feminitives and diminutives

Russian feminitives provide an argument for them, but not the only one

5.1. Russian feminizer as an affix modifier (recap)

Assuming that the Russian feminizer n_F is an affix modifier that cannot combine with a non-modifier stem solves two puzzles:

- the feminitive stress shift: rather than assume that n_F is pre-accenting, we derive it from the structure
- the lack of feminization by the change in declension class

A possible third outcome: perhaps placing the feminizer inside a complex affix can force the [feminine] feature to become interpretable?

The general assumption that the many Russian gendered pairs are affixal complexes solves two more issues:

- the clearly shared component inside *-ik-*, *-ĭnik-* and *-ĭščik-* (*-ĭčik-*), both segmentally and accentually
- the link between *-ic-* and *-ŭk-*, which can both feminize *-ĭc-*

Whether the diminutive *-ŭk-*, *-ĭc-* and *-ik-* are allomorphs of each other (Gouskova et al. 2015), separate suffixes, or share a common core is independent of the existence of affixal complexes, because **the notion of an affixal complex is needed for *-ĭnik-* and *-ĭščik-* (*-ĭčik-*)**

5.2. The suffix *-telʲn-*

Haspelmath 1995 citing Kiparsky 1975:257, Itkin and Leont'eva 2019, lots of grammars: a complex adjectivizing suffix:

(38) a. *gubítʲ* 'to ruin'
gubí-telʲ 'ruiner'

b. *pɨlʲ* 'dust'
pɨ́lʲ-n-ɨj 'dusty'

c. *gubí-telʲ-n-ɨj* 'ruinous'

(39) a. *starátʲsʲa* 'to try'
b. *starát-telʲn-ɨj* 'assiduous'

Itkin and Leont'eva 2019: this suffix did not arise from a combination of *-telʲ-* and *-ĭn-*: calques from Greek and Latin, no intermediate forms from the very beginning

Haspelmath 1995 says the intermediate form does not exist here, but this is not true:

(40) a. *starát-telʲ* 'prospector'
b. *starát-telʲ-sk-ɨj* 'having to do with prospecting'

Adjectival formation from *-telʲ-* nouns is done with the suffix *-ĭsk-*:

(41) a. *učí-telʲ-sk-ɨj* 'having to do with teachers', **učí-telʲ-n-ɨj*
b. *rodí-telʲ-sk-ɨj* 'having to do with parents', *rodí-telʲ-n-ɨj* 'genitive'

The suffixal complex ***-telʲn-* cannot be derived from successive application of its two parts to the same root**

Itkin and Leont'eva 2019: *-telʲn-* is non-agentive now:

(42) *plavatelʲnɨj bassejn* 'swimming pool'

The loss of an agentive component is very well attested in **affix telescoping**

6. AFFIX TELESCOPING

Haspelmath 1995, Stump 2019, 2022: the formation of a complex affix from two simplex ones may be accompanied by semantic bleaching of the inner affix

(43) denominal verbalizer *-nicat^{j}* 'to systematically engage in the associated activity'

a.	sapož-	nik	+	e	⇨	sapož-nič-	a-	t^{j}
	boot	AGT		VBZ		shoemaker	VBZ	INF
	'shoemaker'					'to work as/be a shoemaker'		

The verbalizing suffix *-e-* causes the mutation of the velar ([k]→[č]), which in turn causes the backing of the vowel ([e]→[a])

The suffixal combination is reanalyzed as a single affix, the agentive component is lost:

b. podxalím-niča- t^{j} (from *podxalím* 'lickspittle', already agentive)
lickspittle VBZ INF
'to toady'

c. grimás- niča- t^{j} (from *grimása* 'a grimace', there is no **grimásnik*)
grimace VBZ INF
'to grimace'

The same happens to the feminizer *-nic-*: its agentive component seems lost when it is additive: There is no special reason for choosing *-nic-* for the agentive suffix *-tel^{j}-*, in Ukrainian *-ǔk-* is used (although the suffix is non-productive)

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

Haspelmath calls such bleaching *conglutination*: the semantically overlapping contributions of the base and the affix only count once

The phenomenon is very similar to Modal Concord (Geurts and Huitink 2006, Zeijlstra 2007)

But the loss of grammatical meaning need not be conditioned by the presence of a component with the same meaning, of course (cf. diminutives)

7. DIRECTIONS FOR FUTURE RESEARCH

Two major puzzles in Russian feminitives:

- the diminutive component in feminitive suffixal complexes (conglutination?)
- the issue of substitution vs. addition

The structural and semantic links between feminitives, diminutives and nominalizers may be (and most likely are) non-related

And the whole issue of **affix telescoping** is fascinating

7.1. Substitution and addition

The issue of suffixal replacement has also been observed for Dutch feminizing suffixes (Van Marle 1985, Booij 2010, Don and Lin 2014, Don 2015)

The same feminizer can be added to a masculine human-denoting noun (derived or underived) or replace a masculine nominalizer

The feminizer -*ŭk*-:

(45) a. *šved/švédka* 'a Swede', *monáx/monáška* 'a monk/nun' addition
b. *pessimíst/pessimístka* 'pessimist', *arfíst/arfístka* 'a harper' addition
c. *torgóvec/torgóvka* 'a merchant', *némec/némka* 'a German' substitution

The same for the feminizer -*ic*-:

(46) a. *tigr/tigrícа* 'tiger', *máster/masterícа* 'master' addition
b. *pevéc/pevícа* 'a singer', *krasávec/krasávicа* 'a beauty' substitution

And for the feminizer -*nic*-:
There is no special reason for choosing -*nic*- for the agentive suffix -*telʲ*-, in Ukrainian -*ŭk*- is used (although the suffix is non-productive)

(47) a. *učítelʲ/učítelʲnicа* 'a teacher', *vodítelʲ/vodítelʲnicа* 'a driver', *voítelʲ/voítelʲnicа* 'a warrior', *rodítelʲ/rodítelʲnicа* 'a parent'

b. *učeník/učeníca* 'a student', *vɨpuskník/vɨpuskníca* 'a graduate'

And **the same agentive suffix may be replaced in some cases and remain in others**

How does this happen and why?

7.2. Diminutives

We have only just scratched the surface with Russian diminutives and nominalizers

7.2.1. Non-feminizing uses of -*ĭc*-

The suffix -*ĭc*- can act as a non-gendered diminutive:

(48) a. *brat* 'brother', *brátec* DIM (GEN: *brátca*)
b. *sup* 'soup', *supéc* DIM (GEN: *supcá*)

c. *vodá* 'water', *vodíca* DIM
d. *sestrá* 'sister', *sestríca* DIM
e. *dverʲ* 'door', *dvérca* DIM

f. *vinó* 'wine', *vincó* DIM

The suffixal yer can turn into [i] in the feminine (29c-d), but doesn't have to (29e)

The position of the stress in the neuter and in the plural is variable and (like elsewhere in the neuter after a palatalized consonant) determines the realization of the case-number ending: [o] under stress, [e] elsewhere:
The yer is lowered in (50e) and in (49b) to avoid the impossible consonant cluster

(49) a. *kruževá* 'lace', *kruževcá* DIM (but also *krúževca* DIM as a plural of (c))

b. *dérevo* 'tree', *derevcó* DIM and *dérevce* DIM
c. *krúževo* 'lace', *krúževce* DIM and *kruževcó* DIM

d. *mʲáso* 'meat', *mʲascó* DIM
e. *palʲtó* 'coat', *palʲtecó* DIM
f. *vinó* 'wine', *vincó* DIM

Stress is obligatorily final with post-accenting neuter stems
I suspect the choice between -*ŭk*- and -*ĭc*- for neuters is determined by stress: post-accenting stems require -*ĭc*-

When the suffixal yer of the feminine non-diminutive *-ič-* does not surface, the suffix is post-accenting:

(50) a. *pɨlʲ* 'dust', *pɨlʲcá* 'pollen'
b. *xitrecá* 'finesse' (from *xítrɨj* 'cunning')

The allomorph *-ic-* can also be an inanimate nominalizer, e.g., *jádrica* 'unground buckwheat', *čemerícа* 'hellebore', *bezgolósica* 'poor singing', etc.

In a few cases (*pjánica* 'drunkard', *polénica* 'bogatyr, arch.', *tupíca* 'dullard', *úmnica* 'smart person', *vólʲnica* 'self-willed person, arch.') *-ic-* acts as a nominalizer creating common gender nouns

7.3. The nominalizer *-ŭk-*

Itkin 2007:264 lists 11 different nominalizing suffixes *-ŭk-*, noting that they can be deverbal (examples (51) are from Lavitskaya 2015:74-75) or NP-based (in the feminine):
The hypothesis that the semantic base is an NP is the traditional one, the morphological base is the adjectival root

(51) a. *zakolótʲ* 'stab, pin up.INF' → *zakólka/zakólok* 'hairpin.F.SG.NOM/PL.GEN'
b. *nabrosátʲ* 'sketch.INF' → *nabrósok/nabróska* 'sketch.M.NOM/GEN'

(52) a. Leninskaja biblioteka → *Léninka*
Lenin ADJ library
the Lenin library

b. visotnoe zdanie → *vɨsótka*
highness ADJ building
a highrise

Non-productive in the masculine (Vinogradov 1986:96-98), very productive in the feminine

Itkin 2007:264 also lists 2 different adjectivizing suffixes *-ŭk-*
The non-productive adjectival suffix *-ok-* (e.g., *glubókɨj* 'deep') is likely related to this one (by lowering), but not identical to it

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